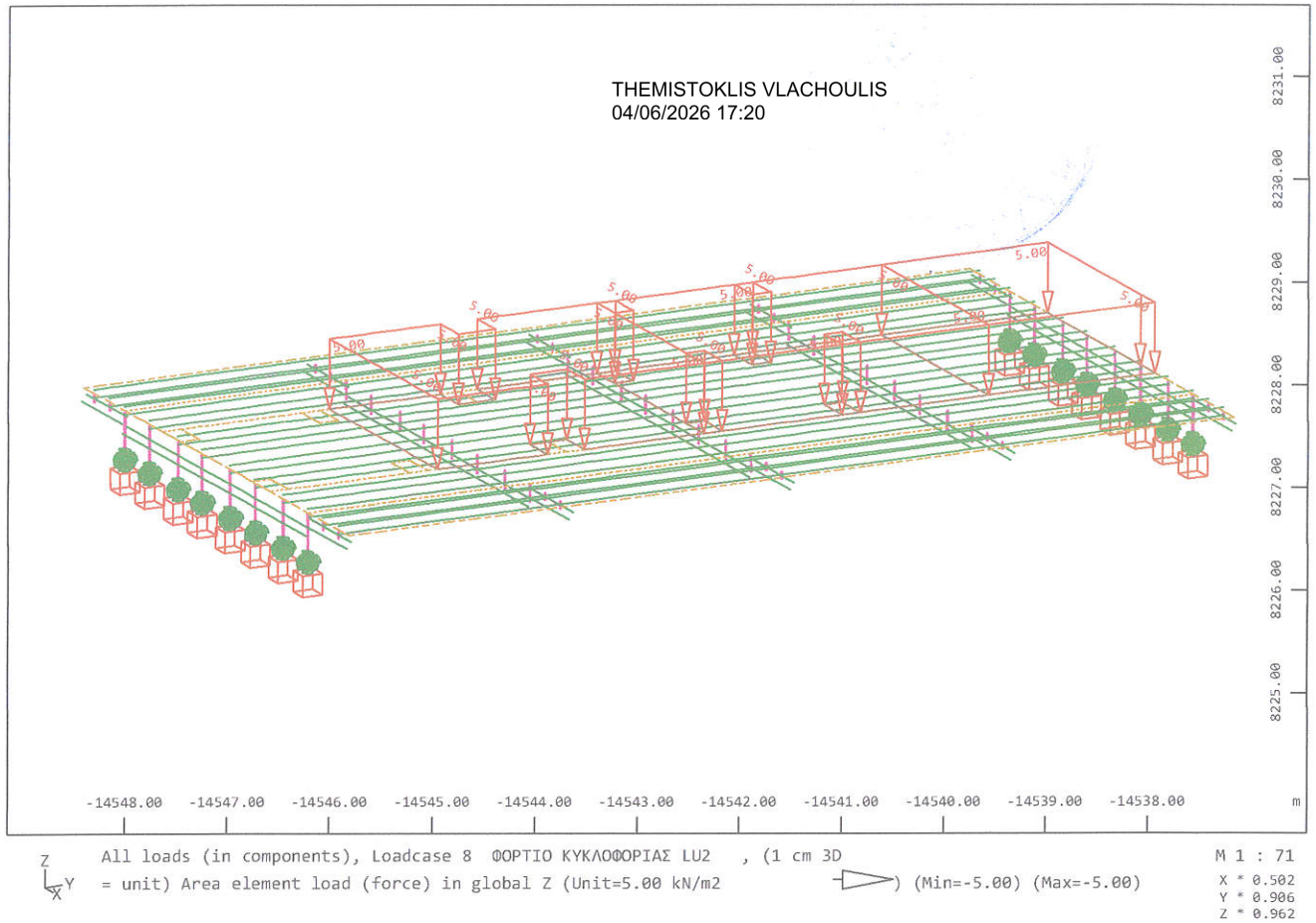


ΦΟΡΕΑΣ ΚΑΤΑΣΤΡΩΜΑΤΟΣ ΔΙΑΣΤΑΣΙΟΛΟΓΗΣΗ ΠΛΑΚΑΣ



ΦΟΡΕΑΣ ΚΑΤΑΣΤΡΩΜΑΤΟΣ ΔΙΑΣΤΑΣΙΟΛΟΓΗΣΗ ΠΛΑΚΑΣ  
ΣΥΝΔΥΑΣΜΟΙ ΦΟΡΤΙΣΕΩΝ

Actions

| type | part                    | sup  | Designation                           | $\gamma$ -u                                                   | $\gamma$ -f | $\gamma$ -a | $\psi_0$ | $\psi_1$ | $\psi_2$ | $\psi_{1inf}$ |
|------|-------------------------|------|---------------------------------------|---------------------------------------------------------------|-------------|-------------|----------|----------|----------|---------------|
| G    | G                       | perm | DEAD LOADS                            | 1.35                                                          | 1.00        | 1.00        | 1.00     | 1.00     | 1.00     | 1.00          |
| G_1  | G                       | perm | DEAD LOADS G_1                        | 1.35                                                          | 1.00        | 1.00        | 1.00     | 1.00     | 1.00     | 1.00          |
| G_2  | G                       | perm | dead load g2                          | 1.35                                                          | 1.00        | 1.00        | 1.00     | 1.00     | 1.00     | 1.00          |
| C    | P                       | perm | creep + shrinkage                     | 1.00                                                          | 1.00        | 1.00        | 1.00     | 1.00     | 1.00     | 1.00          |
| L    | Q                       | excl | live loading                          | 1.35                                                          | 0.00        | 1.00        | 0.75     | 0.75     | 0.00     | 0.80          |
| L_T  | Q                       | cond | LT                                    | 1.35                                                          | 0.00        | 1.00        | 0.75     | 0.75     | 0.00     | 0.80          |
| L_U  | Q                       | excl | Footbridge gr1                        | 1.35                                                          | 0.00        | 1.00        | 0.40     | 0.40     | 0.00     | 1.00          |
| Q    | Q                       | cond | Q Buildings                           | 1.50                                                          | 0.00        | 1.00        | 0.70     | 0.70     | 0.30     | 0.70          |
| QX   | Q                       | cond | EARTH PR. Q                           | 1.50                                                          | 0.00        | 1.00        | 0.70     | 0.70     | 0.30     | 0.70          |
| T    | Q                       | excl | TEMPERATURE                           | 1.50                                                          | 0.00        | 1.00        | 0.60     | 0.60     | 0.50     | 1.00          |
| W    | Q                       | cond | WATER PRESSURE                        | 1.35                                                          | 0.00        | 1.00        | 1.00     | 1.00     | 1.00     | 1.00          |
| X    | Q                       | cond | EARTH PRESSURE                        | 1.35                                                          | 0.00        | 1.00        | 1.00     | 1.00     | 1.00     | 1.00          |
|      |                         |      | Reliability factor                    | Kfi                                                           | 1.000       |             |          |          |          |               |
|      |                         |      | Reduction factor                      | xsi                                                           | 0.850       |             |          |          |          |               |
| type | action                  |      | $\gamma$ -u, $\gamma$ -f, $\gamma$ -a | partial safety factors for unfavourable/favourable/accidental |             |             |          |          |          |               |
| part | partition of the action |      | $\psi_0,\psi_1,\psi_2,\psi_{1inf}$    | combination coefficients                                      |             |             |          |          |          |               |
| sup  | superposition type      |      |                                       |                                                               |             |             |          |          |          |               |

Load Case 1501 ((D) ) 1.35G + 1.35(LT1+LU)

|                           |                                           |
|---------------------------|-------------------------------------------|
| Factor forces and moments | 1.000                                     |
| Factor dead weight        | DL-ZZ -1.350                              |
| Selected loads            | copied from load case 2 with factor 1.350 |
| Selected loads            | copied from load case 3 with factor 1.350 |
| Selected loads            | copied from load case 4 with factor 1.350 |
| Selected loads            | copied from load case 6 with factor 1.350 |

Load Case 1502 ((D) ) 1.35G + 1.35(LT1+LU)

|                           |                                           |
|---------------------------|-------------------------------------------|
| Factor forces and moments | 1.000                                     |
| Factor dead weight        | DL-ZZ -1.350                              |
| Selected loads            | copied from load case 2 with factor 1.350 |
| Selected loads            | copied from load case 7 with factor 1.350 |
| Selected loads            | copied from load case 8 with factor 1.350 |
| Selected loads            | copied from load case 6 with factor 1.350 |

Load Case 1503 ((D) ) 1.35G + 1.35(LT1+LU)

|                           |                                           |
|---------------------------|-------------------------------------------|
| Factor forces and moments | 1.000                                     |
| Factor dead weight        | DL-ZZ -1.350                              |
| Selected loads            | copied from load case 2 with factor 1.350 |
| Selected loads            | copied from load case 5 with factor 1.350 |

Load Case 2501 ((R) ) 1.0G + 1.0(LT1+LU)

|                           |                                           |
|---------------------------|-------------------------------------------|
| Factor forces and moments | 1.000                                     |
| Factor dead weight        | DL-ZZ -1.000                              |
| Selected loads            | copied from load case 2 with factor 1.000 |
| Selected loads            | copied from load case 3 with factor 1.000 |
| Selected loads            | copied from load case 4 with factor 1.000 |
| Selected loads            | copied from load case 6 with factor 1.000 |

Load Case 2502 ((R) ) 1.0G + 1.0(LT1+LU)

|                           |                                           |
|---------------------------|-------------------------------------------|
| Factor forces and moments | 1.000                                     |
| Factor dead weight        | DL-ZZ -1.000                              |
| Selected loads            | copied from load case 2 with factor 1.000 |
| Selected loads            | copied from load case 7 with factor 1.000 |
| Selected loads            | copied from load case 8 with factor 1.000 |
| Selected loads            | copied from load case 6 with factor 1.000 |

Load Case 2503 ((R) ) 1.0G + 1.0(LT1+LU)

|                           |              |
|---------------------------|--------------|
| Factor forces and moments | 1.000        |
| Factor dead weight        | DL-ZZ -1.000 |

ΦΟΡΕΑΣ ΚΑΤΑΣΤΡΩΜΑΤΟΣ ΔΙΑΣΤΑΣΙΟΛΟΓΗΣΗ ΠΛΑΚΑΣ  
ΣΥΝΔΥΑΣΜΟΙ ΦΟΡΤΙΣΕΩΝ

**Load Case 2503 ((R) ) 1.0G + 1.0(LT1+LU)**

|                |                       |               |       |
|----------------|-----------------------|---------------|-------|
| Selected loads | copied from load case | 2 with factor | 1.000 |
| Selected loads | copied from load case | 5 with factor | 1.000 |

**Load Case 6001 G+Ex+0.3Ey**

|                           |                       |               |       |
|---------------------------|-----------------------|---------------|-------|
| Factor forces and moments |                       | 1.000         |       |
| Factor dead weight        | DL-XX                 | 0.345         |       |
| Factor dead weight        | DL-YY                 | 0.104         |       |
| Factor dead weight        | DL-ZZ                 | -1.000        |       |
| Selected loads            | copied from load case | 2 with factor | 1.000 |
| Selected loads            | copied from load case | 3 with factor | 0.200 |
| Selected loads            | copied from load case | 4 with factor | 0.200 |

**Load Case 6002 G+Ey+0.3Ex**

|                           |                       |               |       |
|---------------------------|-----------------------|---------------|-------|
| Factor forces and moments |                       | 1.000         |       |
| Factor dead weight        | DL-XX                 | 0.104         |       |
| Factor dead weight        | DL-YY                 | 0.345         |       |
| Factor dead weight        | DL-ZZ                 | -1.000        |       |
| Selected loads            | copied from load case | 2 with factor | 1.000 |
| Selected loads            | copied from load case | 3 with factor | 0.200 |
| Selected loads            | copied from load case | 4 with factor | 0.200 |

ΦΟΡΕΑΣ ΚΑΤΑΣΤΡΩΜΑΤΟΣ ΔΙΑΣΤΑΣΙΟΛΟΓΗΣΗ ΠΛΑΚΑΣ  
ΠΕΡΙΒΑΛΛΟΥΣΕΣ ΕΝΤΑΤΙΚΩΝ ΜΕΓΕΘΩΝ

Design Code

EuroNorm Bridges: EN 1990:2002 Basis of structural design (Europe) V 2024

Combination rule Number 31

Συνολικές Περιβ. ΜΟΝ ΟΚΑ  
Resulting Load Cases type ULS fundamental combination

Load Case selection

| Number                      | Fact | Type | Designation          |
|-----------------------------|------|------|----------------------|
| 1501                        | 1.00 | AG1  | 1.35G + 1.35(LT1+LU) |
| 1502                        | 1.00 | AG1  | 1.35G + 1.35(LT1+LU) |
| 1503                        | 1.00 | AG1  | 1.35G + 1.35(LT1+LU) |
| Fact factor for load case   |      |      |                      |
| Type type of the load case  |      |      |                      |
| AG exclusive load permanent |      |      |                      |

Combination rule Number 32

Συνολικές Περιβ. ΜΟΝ ΟΚΑ-RARE  
Resulting Load Cases type SLS characteristic combination

Load Case selection

| Number                      | Fact | Type | Designation        |
|-----------------------------|------|------|--------------------|
| 2501                        | 1.00 | AG1  | 1.0G + 1.0(LT1+LU) |
| 2502                        | 1.00 | AG1  | 1.0G + 1.0(LT1+LU) |
| 2503                        | 1.00 | AG1  | 1.0G + 1.0(LT1+LU) |
| Fact factor for load case   |      |      |                    |
| Type type of the load case  |      |      |                    |
| AG exclusive load permanent |      |      |                    |

Combination rule Number 35

ΣΕΙΣΜΙΚΑ  
Resulting Load Cases type ULS fundamental combination

Load Case selection

| Number                      | Fact | Type | Designation |
|-----------------------------|------|------|-------------|
| 6001                        | 1.00 | AG1  | G+Ex+0.3Ey  |
| 6002                        | 1.00 | AG1  | G+Ey+0.3Ex  |
| Fact factor for load case   |      |      |             |
| Type type of the load case  |      |      |             |
| AG exclusive load permanent |      |      |             |

Generated Load Cases

| Number | Combination | Designation |
|--------|-------------|-------------|
| 501    | 31          | MAX-UX NODE |
| 502    | 31          | MIN-UX NODE |
| 503    | 31          | MAX-UY NODE |
| 504    | 31          | MIN-UY NODE |
| 505    | 31          | MAX-UZ NODE |
| 506    | 31          | MIN-UZ NODE |
| 511    | 31          | MAX-N BEAM  |
| 512    | 31          | MIN-N BEAM  |
| 513    | 31          | MAX-VY BEAM |
| 514    | 31          | MIN-VY BEAM |
| 515    | 31          | MAX-VZ BEAM |
| 516    | 31          | MIN-VZ BEAM |
| 517    | 31          | MAX-MT BEAM |
| 518    | 31          | MIN-MT BEAM |
| 519    | 31          | MAX-MY BEAM |
| 520    | 31          | MIN-MY BEAM |
| 521    | 31          | MAX-MZ BEAM |
| 522    | 31          | MIN-MZ BEAM |
| 523    | 31          | MAX-MB BEAM |
| 524    | 31          | MIN-MB BEAM |

ΦΟΡΕΑΣ ΚΑΤΑΣΤΡΩΜΑΤΟΣ ΔΙΑΣΤΑΣΙΟΛΟΓΗΣΗ ΠΛΑΚΑΣ  
ΠΕΡΙΒΑΛΛΟΥΣΕΣ ΕΝΤΑΤΙΚΩΝ ΜΕΓΕΘΩΝ

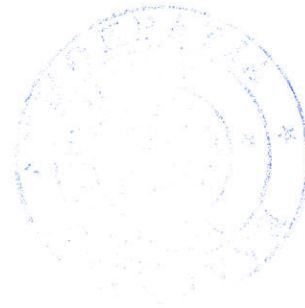
Generated Load Cases

| Number | Combination | Designation   |
|--------|-------------|---------------|
| 525    | 31          | MAX-PTX SPRI  |
| 526    | 31          | MIN-PTX SPRI  |
| 527    | 31          | MAX-PTY SPRI  |
| 528    | 31          | MIN-PTY SPRI  |
| 529    | 31          | MAX-PTZ SPRI  |
| 530    | 31          | MIN-PTZ SPRI  |
| 531    | 31          | MAX-MXX QUAD  |
| 532    | 31          | MIN-MXX QUAD  |
| 533    | 31          | MAX-MYY QUAD  |
| 534    | 31          | MIN-MYY QUAD  |
| 535    | 31          | MAX-MXY QUAD  |
| 536    | 31          | MIN-MXY QUAD  |
| 537    | 31          | MAX-NXX QUAD  |
| 538    | 31          | MIN-NXX QUAD  |
| 539    | 31          | MAX-NYY QUAD  |
| 540    | 31          | MIN-NYY QUAD  |
| 541    | 31          | MAX-NXY QUAD  |
| 542    | 31          | MIN-NXY QUAD  |
| 543    | 31          | MAX-VX QUAD   |
| 544    | 31          | MIN-VX QUAD   |
| 545    | 31          | MAX-VY QUAD   |
| 546    | 31          | MIN-VY QUAD   |
| 551    | 32          | MAXR-UX NODE  |
| 552    | 32          | MINR-UX NODE  |
| 553    | 32          | MAXR-UY NODE  |
| 554    | 32          | MINR-UY NODE  |
| 555    | 32          | MAXR-UZ NODE  |
| 556    | 32          | MINR-UZ NODE  |
| 561    | 32          | MAXR-N BEAM   |
| 562    | 32          | MINR-N BEAM   |
| 563    | 32          | MAXR-VY BEAM  |
| 564    | 32          | MINR-VY BEAM  |
| 565    | 32          | MAXR-VZ BEAM  |
| 566    | 32          | MINR-VZ BEAM  |
| 567    | 32          | MAXR-MT BEAM  |
| 568    | 32          | MINR-MT BEAM  |
| 569    | 32          | MAXR-MY BEAM  |
| 570    | 32          | MINR-MY BEAM  |
| 571    | 32          | MAXR-MZ BEAM  |
| 572    | 32          | MINR-MZ BEAM  |
| 573    | 32          | MAXR-MB BEAM  |
| 574    | 32          | MINR-MB BEAM  |
| 575    | 32          | MAXR-PTX SPRI |
| 576    | 32          | MINR-PTX SPRI |
| 577    | 32          | MAXR-PTY SPRI |
| 578    | 32          | MINR-PTY SPRI |
| 579    | 32          | MAXR-PTZ SPRI |
| 580    | 32          | MINR-PTZ SPRI |
| 581    | 32          | MAXR-MXX QUAD |
| 582    | 32          | MINR-MXX QUAD |
| 583    | 32          | MAXR-MYY QUAD |
| 584    | 32          | MINR-MYY QUAD |
| 585    | 32          | MAXR-MXY QUAD |
| 586    | 32          | MINR-MXY QUAD |
| 587    | 32          | MAXR-NXX QUAD |
| 588    | 32          | MINR-NXX QUAD |
| 589    | 32          | MAXR-NYY QUAD |
| 590    | 32          | MINR-NYY QUAD |

ΦΟΡΕΑΣ ΚΑΤΑΣΤΡΩΜΑΤΟΣ ΔΙΑΣΤΑΣΙΟΛΟΓΗΣΗ ΠΛΑΚΑΣ  
ΠΕΡΙΒΑΛΛΟΥΣΕΣ ΕΝΤΑΤΙΚΩΝ ΜΕΓΕΘΩΝ

Generated Load Cases

| Number | Combination | Designation   |
|--------|-------------|---------------|
| 591    | 32          | MAXR-NXY QUAD |
| 592    | 32          | MINR-NXY QUAD |
| 593    | 32          | MAXR-VX QUAD  |
| 594    | 32          | MINR-VX QUAD  |
| 595    | 32          | MAXR-VY QUAD  |
| 596    | 32          | MINR-VY QUAD  |
| 701    | 35          | MAX-UX NODE   |
| 702    | 35          | MIN-UX NODE   |
| 703    | 35          | MAX-UY NODE   |
| 704    | 35          | MIN-UY NODE   |
| 705    | 35          | MAX-UZ NODE   |
| 706    | 35          | MIN-UZ NODE   |
| 711    | 35          | MAX-N BEAM    |
| 712    | 35          | MIN-N BEAM    |
| 713    | 35          | MAX-VY BEAM   |
| 714    | 35          | MIN-VY BEAM   |
| 715    | 35          | MAX-VZ BEAM   |
| 716    | 35          | MIN-VZ BEAM   |
| 717    | 35          | MAX-MT BEAM   |
| 718    | 35          | MIN-MT BEAM   |
| 719    | 35          | MAX-MY BEAM   |
| 720    | 35          | MIN-MY BEAM   |
| 721    | 35          | MAX-MZ BEAM   |
| 722    | 35          | MIN-MZ BEAM   |
| 723    | 35          | MAX-MB BEAM   |
| 724    | 35          | MIN-MB BEAM   |
| 725    | 35          | MAX-PTX SPRI  |
| 726    | 35          | MIN-PTX SPRI  |
| 727    | 35          | MAX-PTY SPRI  |
| 728    | 35          | MIN-PTY SPRI  |
| 729    | 35          | MAX-PTZ SPRI  |
| 730    | 35          | MIN-PTZ SPRI  |
| 731    | 35          | MAX-MXX QUAD  |
| 732    | 35          | MIN-MXX QUAD  |
| 733    | 35          | MAX-MYY QUAD  |
| 734    | 35          | MIN-MYY QUAD  |
| 735    | 35          | MAX-MXY QUAD  |
| 736    | 35          | MIN-MXY QUAD  |
| 737    | 35          | MAX-NXX QUAD  |
| 738    | 35          | MIN-NXX QUAD  |
| 739    | 35          | MAX-NYY QUAD  |
| 740    | 35          | MIN-NYY QUAD  |
| 741    | 35          | MAX-NXY QUAD  |
| 742    | 35          | MIN-NXY QUAD  |
| 743    | 35          | MAX-VX QUAD   |
| 744    | 35          | MIN-VX QUAD   |
| 745    | 35          | MAX-VY QUAD   |
| 746    | 35          | MIN-VY QUAD   |



ΦΟΡΕΑΣ ΚΑΤΑΣΤΡΩΜΑΤΟΣ ΔΙΑΣΤΑΣΙΟΛΟΓΗΣΗ ΠΛΑΚΑΣ  
design parameter list

Reinforcementparameter two layer reinforcement

| Selection<br>Grp elem<br>no. no.                            | distance |       | bar-diameter |       | crackwidth |       | steelstress |       | min.reinf. |         |
|-------------------------------------------------------------|----------|-------|--------------|-------|------------|-------|-------------|-------|------------|---------|
|                                                             | d1-u     | 2.lay | ds-u         | 2.lay | wk-u       | 2.lay | sigsu       | 2.lay | asu        | 2.lay   |
|                                                             | d1-l     | 2.lay | ds-l         | 2.lay | wk-l       | 2.lay | sigsl       | 2.lay | asl        | 2.lay   |
|                                                             | [mm]     | [mm]  | [mm]         | [mm]  | [mm]       | [mm]  | [MPa]       | [MPa] | [cm2/m]    | [cm2/m] |
| default                                                     | 50.0     | 64.0  | 14           | 14    | 0.30       | 0.30  | -           | -     | -          | -       |
|                                                             | 50.0     | 64.0  | 14           | 14    | 0.30       | 0.30  | -           | -     | -          | -       |
| distance upper / lower distance center of bar to surface    |          |       |              |       |            |       |             |       |            |         |
| bar-diameter upper / lower bar diameter                     |          |       |              |       |            |       |             |       |            |         |
| crackwidth upper / lower required crack width               |          |       |              |       |            |       |             |       |            |         |
| steelstress upper / lower maximum steel stress in SLS check |          |       |              |       |            |       |             |       |            |         |
| min.reinf. upper / lower minimum reinforcement              |          |       |              |       |            |       |             |       |            |         |

The reinforcement directions relate to the local coordinate system of the elements and have to be plotted graphically.

With the input of a steel stress sigsu... the 'crack design according tables' uses this given stress sigsu for the corresponding layer. With this input, the check can be done for bar distances instead of bar diameters, see legend SLS control parameters.

ΦΟΡΕΑΣ ΚΑΤΑΣΤΡΩΜΑΤΟΣ ΔΙΑΣΤΑΣΙΟΛΟΓΗΣΗ ΠΛΑΚΑΣ  
ULS design

#### Design Code

EuroNorm Bridges: EN 1992-2:2005, EN 1993-2:2006, EN 1994-2:2005 (Europe) V 2024  
Design according to EuroNorm Bridges: EN 1992-2:2005 Design of concrete structures  
Loadcases have been calculated in the Ultimate Limit State  
The design uses the Baumann method.

#### Load Cases for the Design

| Loadcase | factor | Designation          |                                  |
|----------|--------|----------------------|----------------------------------|
| 501      | 1.000  | MAX-UX NODE          | Nodal reaction punching design   |
| 502      | 1.000  | MIN-UX NODE          | Nodal reaction punching design   |
| 503      | 1.000  | MAX-UY NODE          | Nodal reaction punching design   |
| 504      | 1.000  | MIN-UY NODE          | Nodal reaction punching design   |
| 505      | 1.000  | MAX-UZ NODE          | Nodal reaction punching design   |
| 506      | 1.000  | MIN-UZ NODE          | Nodal reaction punching design   |
| 531      | 1.000  | MAX-MXX QUAD         |                                  |
| 532      | 1.000  | MIN-MXX QUAD         |                                  |
| 533      | 1.000  | MAX-MYY QUAD         |                                  |
| 534      | 1.000  | MIN-MYY QUAD         |                                  |
| 535      | 1.000  | MAX-MXY QUAD         |                                  |
| 536      | 1.000  | MIN-MXY QUAD         |                                  |
| 537      | 1.000  | MAX-NXX QUAD         |                                  |
| 538      | 1.000  | MIN-NXX QUAD         |                                  |
| 539      | 1.000  | MAX-NYY QUAD         |                                  |
| 540      | 1.000  | MIN-NYY QUAD         |                                  |
| 541      | 1.000  | MAX-NXY QUAD         |                                  |
| 542      | 1.000  | MIN-NXY QUAD         |                                  |
| 543      | 1.000  | MAX-VX QUAD          |                                  |
| 544      | 1.000  | MIN-VX QUAD          |                                  |
| 545      | 1.000  | MAX-VY QUAD          |                                  |
| 546      | 1.000  | MIN-VY QUAD          |                                  |
| 701      | 1.000  | MAX-UX NODE          | Nodal reaction punching design   |
| 702      | 1.000  | MIN-UX NODE          | Nodal reaction punching design   |
| 703      | 1.000  | MAX-UY NODE          | Nodal reaction punching design   |
| 704      | 1.000  | MIN-UY NODE          | Nodal reaction punching design   |
| 705      | 1.000  | MAX-UZ NODE          | Nodal reaction punching design   |
| 706      | 1.000  | MIN-UZ NODE          | Nodal reaction punching design   |
| 731      | 1.000  | MAX-MXX QUAD         |                                  |
| 732      | 1.000  | MIN-MXX QUAD         |                                  |
| 733      | 1.000  | MAX-MYY QUAD         |                                  |
| 734      | 1.000  | MIN-MYY QUAD         |                                  |
| 735      | 1.000  | MAX-MXY QUAD         |                                  |
| 736      | 1.000  | MIN-MXY QUAD         |                                  |
| 737      | 1.000  | MAX-NXX QUAD         |                                  |
| 738      | 1.000  | MIN-NXX QUAD         |                                  |
| 739      | 1.000  | MAX-NYY QUAD         |                                  |
| 740      | 1.000  | MIN-NYY QUAD         |                                  |
| 741      | 1.000  | MAX-NXY QUAD         |                                  |
| 742      | 1.000  | MIN-NXY QUAD         |                                  |
| 743      | 1.000  | MAX-VX QUAD          |                                  |
| 744      | 1.000  | MIN-VX QUAD          |                                  |
| 745      | 1.000  | MAX-VY QUAD          |                                  |
| 746      | 1.000  | MIN-VY QUAD          |                                  |
| 1501     | 1.000  | 1.35G + 1.35(LT1+LU) | + Nodal reaction punching design |
| 1502     | 1.000  | 1.35G + 1.35(LT1+LU) | + Nodal reaction punching design |
| 1503     | 1.000  | 1.35G + 1.35(LT1+LU) | + Nodal reaction punching design |

ΦΟΡΕΑΣ ΚΑΤΑΣΤΡΩΜΑΤΟΣ ΔΙΑΣΤΑΣΙΟΛΟΓΗΣΗ ΠΛΑΚΑΣ  
ULS design

Material (EuroNorm Bridges: EN 1992-2:2005 Design of concrete structures)

| MAT | fck<br>[MPa] | fc<br>[MPa] | fctm<br>[MPa] | fy<br>[MPa] | ft<br>[MPa] | eps,ud<br>[o/oo] | minT | Type |
|-----|--------------|-------------|---------------|-------------|-------------|------------------|------|------|
| 2   | 30.00        | 25.50       | 2.90          |             |             |                  | 0.00 |      |
| 3   |              |             |               | 500.00      | 518.10      | 20.0             |      |      |
| 4   | 20.00        | 17.00       | 2.21          |             |             |                  | 0.00 |      |

MAT material number  
 fck nominal strength of the concrete  
 fc strength of the concrete  
 fctm tensile strength of the concrete  
 fy yield stress reinforcing steel  
 ft tensile stress reinforcing steel  
 eps,ud maximum strain - limited to max. 0.9\*50 o/oo  
 minT minimum transverse reinforcement  
 Type character of the loading

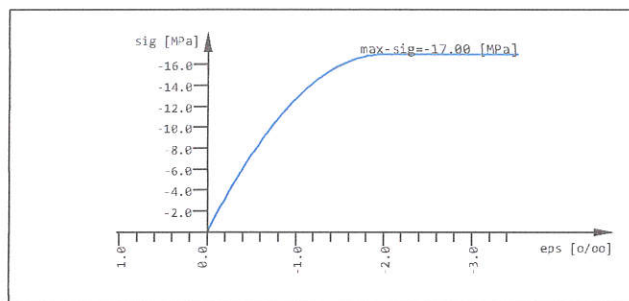
Reduction of concrete compression strength in case of transvers tension = 25.0 [o/o]

Material-safety-factors:

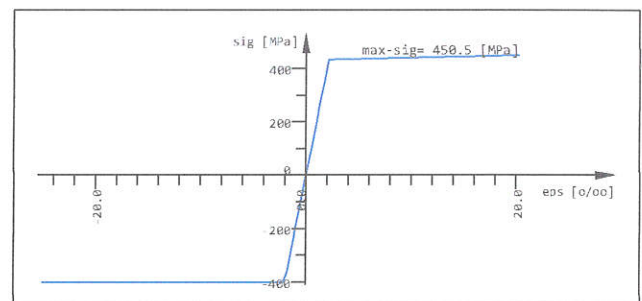
| MAT | concr SC1 | SC2  | steel SS1 | SS2  |
|-----|-----------|------|-----------|------|
| 2   | 1.50      | 1.50 |           |      |
| 3   |           |      | 1.15      | 1.15 |
| 4   | 1.50      | 1.50 |           |      |

MAT material number  
 concr SC1 material safety SC1/SC2 = bending/compression  
 steel SS1 material safety steel bending/compression

At direct supports the shear force is linear reduced from 1.0\*d up to the face of the support to 70%.  
The maximum shear capacity is checked at the face of the support without reduction.  
For punching design, the longitudinal reinforcement will be increased up to 1.50%  
to avoid shear reinforcement [input PUNC...RO\_V].  
Outside the punching area, the normal slab shear design may increase the  
longitudinal reinforcement up to 0.20% [input CTRL...RO\_V].



Used work law Mno: 2 (first concrete)



Used work law Mno: 3 (first steel)

Reinforcementparameter two layer reinforcement

| Selection | distance   | bar-diameter | crackwidth | steelstress | min.reinf. |
|-----------|------------|--------------|------------|-------------|------------|
| Grp elem  | d1-u 2.lay | ds-u 2.lay   | wk-u 2.lay | sigsu 2.lay | asu 2.lay  |
| no. no.   | d1-l 2.lay | ds-l 2.lay   | wk-l 2.lay | sigs1 2.lay | asl 2.lay  |
|           | [mm]       | [mm]         | [mm]       | [MPa]       | [cm2/m]    |
| default   | 50.0 64.0  | 14 14        | - -        | - -         | - -        |
|           | 50.0 64.0  | 14 14        | - -        | - -         | - -        |

distance upper / lower distance center of bar to surface  
 bar-diameter upper / lower bar diameter  
 crackwidth upper / lower required crack width  
 steelstress upper / lower maximum steel stress in SLS check  
 min.reinf. upper / lower minimum reinforcement

The reinforcement directions relate to the local coordinate system of the elements and have to be plotted graphically.

The design takes a uniform element thickness of 0.240 [m].

Over columns a greater element height is taken into account

The reinforcement is saved in the data base as reinforcement distribution number 1

ΦΟΡΕΑΣ ΚΑΤΑΣΤΡΩΜΑΤΟΣ ΔΙΑΣΤΑΣΙΟΛΟΓΗΣΗ ΠΛΑΚΑΣ  
ULS design

Required Reinforcement EuroNorm Bridges: EN 1992-2:2005 Design of concrete structures

| Grp     | Element                                                                                                         | t<br>[m] | asu<br>[cm2/m] | asu2<br>[cm2/m] | asu3<br>[cm2/m] | asl<br>[cm2/m]                       | asl2<br>[cm2/m] | asl3<br>[cm2/m] | supp<br>[-] | shear<br>[-] | ass<br>[cm2/m2] |
|---------|-----------------------------------------------------------------------------------------------------------------|----------|----------------|-----------------|-----------------|--------------------------------------|-----------------|-----------------|-------------|--------------|-----------------|
| 1       | 900127                                                                                                          | 0.240    | 0.03           |                 |                 | 0.04                                 | 5.90            |                 | 0.00        | 1            |                 |
| 2       | 1800013                                                                                                         | 0.240    | 5.78           | 0.49            |                 |                                      |                 |                 | 0.76        | 2m           | 8.76            |
|         | 1800021                                                                                                         | 0.240    | 16.15          | 5.00            |                 |                                      |                 |                 | 0.00        | 1            |                 |
| 3       | 2700212                                                                                                         | 0.240    | 0.04           |                 |                 | 4.61                                 | 1.00            |                 | 0.00        | 1            |                 |
| Grp     | primary group number                                                                                            |          |                |                 | asu3            | Third reinforcements                 |                 |                 | Top         |              |                 |
| Element | element number                                                                                                  |          |                |                 | asl             | Principal reinforcements (1st layer) |                 |                 | Bottom      |              |                 |
| t       | plate thickness                                                                                                 |          |                |                 | asl2            | Cross reinforcements (2nd layer)     |                 |                 | Bottom      |              |                 |
| asu     | Principal reinforcements (1st layer) Top                                                                        |          |                |                 | asl3            | Third reinforcements                 |                 |                 | Bottom      |              |                 |
| asu2    | Cross reinforcements (2nd layer) Top                                                                            |          |                |                 |                 |                                      |                 |                 |             |              |                 |
| supp    | reduction factor for the shear force near supports, punc=point in punching zone -> punching shear design        |          |                |                 |                 |                                      |                 |                 |             |              |                 |
| shear   | shear zone: 1=0k, punc=punching area, 1s=asu/l increased for shear, 1d=for punching, 2=required ass, 2m=minimum |          |                |                 |                 |                                      |                 |                 |             |              |                 |
|         | shear reinf., 3=                                                                                                |          |                |                 |                 |                                      |                 |                 |             |              |                 |
| ass     | Shear reinforcement                                                                                             |          |                |                 |                 |                                      |                 |                 |             |              |                 |
|         | Elements with maximum values are printed. You can select an element with ELEM.                                  |          |                |                 |                 |                                      |                 |                 |             |              |                 |

ΦΟΡΕΑΣ ΚΑΤΑΣΤΡΩΜΑΤΟΣ ΔΙΑΣΤΑΣΙΟΛΟΓΗΣΗ ΠΛΑΚΑΣ  
SLS design

**Maximum of reinforcement-distributions**

The maximum reinforcement is build of the actual design and the previous distribution 1 and stored as new reinforcement-distribution 2 .  
For the SLS stress results only the result of the actual desing is stored, not the maximum.  
For a maximum of SLS stresses please use a pure superposition run without design.

**Design Code**

EuroNorm Bridges: EN 1992-2:2005, EN 1993-2:2006, EN 1994-2:2005 (Europe) V 2024  
Design according to EuroNorm Bridges: EN 1992-2:2005 Design of concrete structures  
Loadcases have been calculated in the Serviceability State  
The design uses the Baumann method.

**Load Cases for the Design**

| Loadcase | factor | Designation        |
|----------|--------|--------------------|
| 551      | 1.000  | MAXR-UX NODE       |
| 552      | 1.000  | MINR-UX NODE       |
| 553      | 1.000  | MAXR-UY NODE       |
| 554      | 1.000  | MINR-UY NODE       |
| 555      | 1.000  | MAXR-UZ NODE       |
| 556      | 1.000  | MINR-UZ NODE       |
| 581      | 1.000  | MAXR-MXX QUAD      |
| 582      | 1.000  | MINR-MXX QUAD      |
| 583      | 1.000  | MAXR-MYY QUAD      |
| 584      | 1.000  | MINR-MYY QUAD      |
| 585      | 1.000  | MAXR-MXY QUAD      |
| 586      | 1.000  | MINR-MXY QUAD      |
| 587      | 1.000  | MAXR-NXX QUAD      |
| 588      | 1.000  | MINR-NXX QUAD      |
| 589      | 1.000  | MAXR-NYY QUAD      |
| 590      | 1.000  | MINR-NYY QUAD      |
| 591      | 1.000  | MAXR-NXY QUAD      |
| 592      | 1.000  | MINR-NXY QUAD      |
| 593      | 1.000  | MAXR-VX QUAD       |
| 594      | 1.000  | MINR-VX QUAD       |
| 595      | 1.000  | MAXR-VY QUAD       |
| 596      | 1.000  | MINR-VY QUAD       |
| 2501     | 1.000  | 1.0G + 1.0(LT1+LU) |
| 2502     | 1.000  | 1.0G + 1.0(LT1+LU) |
| 2503     | 1.000  | 1.0G + 1.0(LT1+LU) |

**Material (EuroNorm Bridges: EN 1992-2:2005 Design of concrete structures)**

| MAT  | fck                              | fc    | fctm  | fy     | ft                                           | eps,ud | minT | Type |
|------|----------------------------------|-------|-------|--------|----------------------------------------------|--------|------|------|
|      | [MPa]                            | [MPa] | [MPa] | [MPa]  | [MPa]                                        | [o/oo] |      |      |
| 2    | 30.00                            | 25.50 | 2.90  |        |                                              |        | 0.00 |      |
| 3    |                                  |       |       | 500.00 | 518.10                                       | 20.0   |      |      |
| 4    | 20.00                            | 17.00 | 2.21  |        |                                              |        | 0.00 |      |
| MAT  | material number                  |       |       | ft     | tensile stress reinforcing steel             |        |      |      |
| fck  | nominal strength of the concrete |       |       | eps,ud | maximum strain - limited to max. 0.9*50 o/oo |        |      |      |
| fc   | strength of the concrete         |       |       | minT   | minimum transverse reinforcement             |        |      |      |
| fctm | tensile strength of the concrete |       |       | Type   | character of the loading                     |        |      |      |
| fy   | yield stress reinforcing steel   |       |       |        |                                              |        |      |      |

A robustness minimum reinforcement has not been requested and has to be checked separately.

A minimum reinforcement has not been requested and has to be checked separately.

| Selection    | distance                                        |       | bar-diameter |       | crackwidth |       | steelstress |       | min.reinf. |         |
|--------------|-------------------------------------------------|-------|--------------|-------|------------|-------|-------------|-------|------------|---------|
| Grp elem     | d1-u                                            | 2.lay | ds-u         | 2.lay | wk-u       | 2.lay | sigsu       | 2.lay | asu        | 2.lay   |
| no. no.      | d1-l                                            | 2.lay | ds-l         | 2.lay | wk-l       | 2.lay | sigsl       | 2.lay | asl        | 2.lay   |
|              | [mm]                                            | [mm]  | [mm]         | [mm]  | [mm]       | [mm]  | [MPa]       | [MPa] | [cm2/m]    | [cm2/m] |
| default      | 50.0                                            | 64.0  | 14           | 14    | 0.30       | 0.30  | -           | -     | -          | -       |
|              | 50.0                                            | 64.0  | 14           | 14    | 0.30       | 0.30  | -           | -     | -          | -       |
| distance     | upper / lower distance center of bar to surface |       |              |       |            |       |             |       |            |         |
| bar-diameter | upper / lower bar diameter                      |       |              |       |            |       |             |       |            |         |
| crackwidth   | upper / lower required crack width              |       |              |       |            |       |             |       |            |         |
| steelstress  | upper / lower maximum steel stress in SLS check |       |              |       |            |       |             |       |            |         |
| min.reinf.   | upper / lower minimum reinforcement             |       |              |       |            |       |             |       |            |         |

| No                                                                                                                                                                                                | Code    | dNW [mm] |                                                |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|----------|------------------------------------------------|
| 1                                                                                                                                                                                                 | EN-1992 | ->para   | diameter check acc. EN 1992 7.3.3 <sup>1</sup> |
| Reinforcement has been increased by SLS design -> WINGRAF: Decisive design check✓                                                                                                                 |         |          |                                                |
| <sup>1</sup> with national annex                                                                                                                                                                  |         |          |                                                |
| dNW Check diameter in crack width design: ->para = values from design parameter definition<br>3802 elements/nodes were designed with the bar diameter in the crack check (table EN 1992-1-1 7.2N) |         |          |                                                |

[illegible]

ΦΟΡΕΑΣ ΚΑΤΑΣΤΡΩΜΑΤΟΣ ΔΙΑΣΤΑΣΙΟΛΟΓΗΣΗ ΠΛΑΚΑΣ  
SLS design

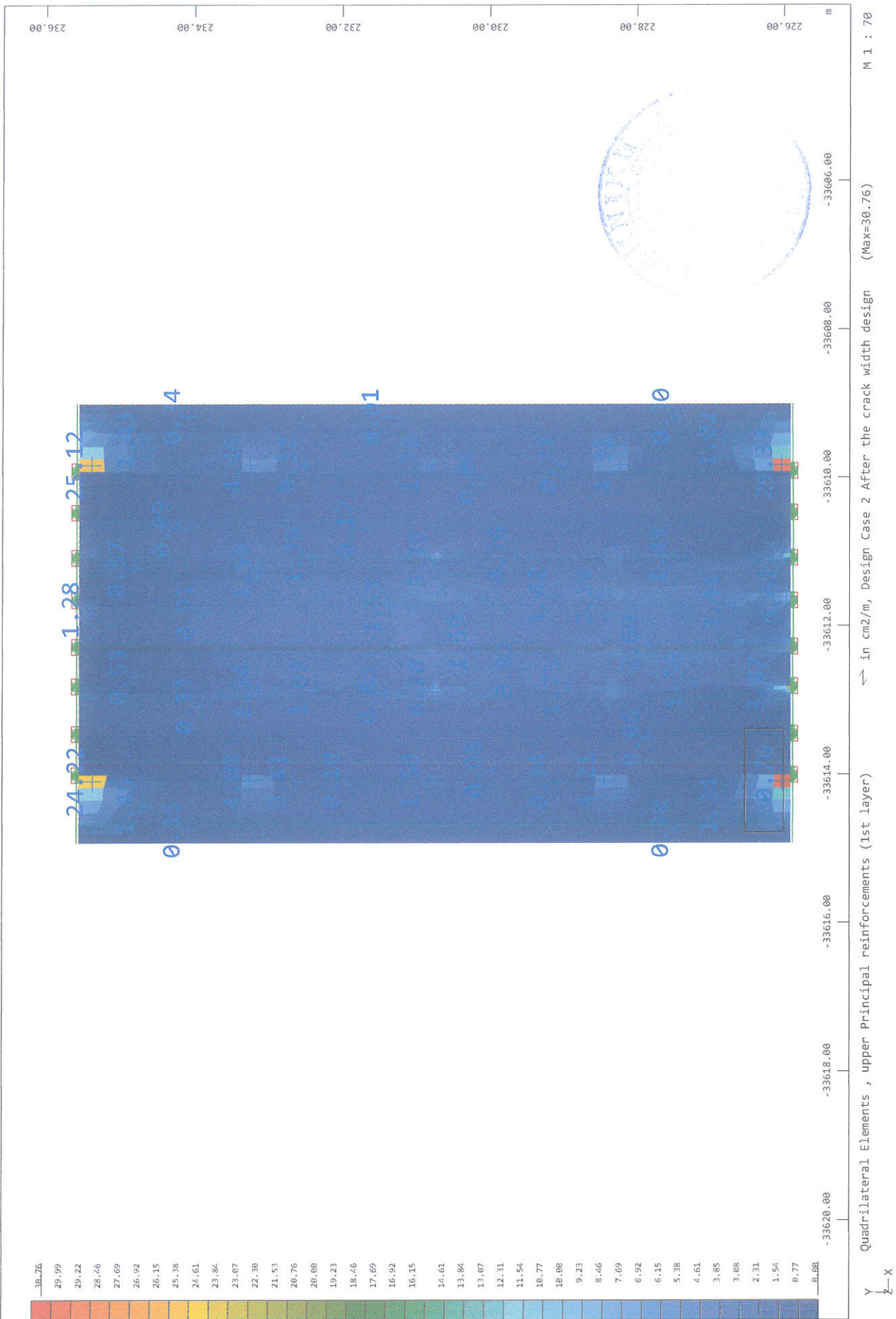
Serviceability load results according to EN 1992-1-1

| ELEM<br>No | LC<br>No   | x<br>[m] | wk<br>[mm] | as1  | as2  | as3 | d1<br>[mm] | d2<br>[mm] | d3<br>[mm] | wk+<br>[mm] | as1+<br>[mm] | as2+<br>[mm] | as3+<br>[mm] |
|------------|------------|----------|------------|------|------|-----|------------|------------|------------|-------------|--------------|--------------|--------------|
| 900127     | 581 L      |          | >0.30      | 0.04 | 5.90 |     | 14         | 14         |            | 0.30        | 0.04         | 5.96         |              |
|            | 582 L      |          | >0.30      | 0.04 | 5.90 |     | 14         | 14         |            | 0.30        | 0.04         | 12.9         |              |
| 900150     | 581 L      |          | >0.30      | 0.31 | 0.59 |     | 14         | 14         |            | 0.30        | 0.63         | 1.20         |              |
|            | *****<br>L |          | >0.30      | 3.06 | 0.16 |     | 14         | 14         |            | 0.30        | 5.39         | 0.16         |              |
| *****      | 582 L      |          | >0.30      | 3.06 | 0.16 |     | 14         | 14         |            | 0.30        | 6.08         | 0.16         |              |
|            | 581 U      |          | >0.30      | 5.78 | 0.49 |     | 14         | 14         |            | 0.30        | 8.88         | 0.49         |              |
| *****      | 582 U      |          | >0.30      | 5.78 | 0.49 |     | 14         | 14         |            | 0.30        | 11.5         | 1.05         |              |
|            | 581 U      |          | >0.30      | 12.6 | 3.09 |     | 14         | 14         |            | 0.30        | 21.4         | 5.10         |              |
| *****      | 582 U      |          | >0.30      | 12.6 | 3.09 |     | 14         | 14         |            | 0.30        | 24.2         | 6.28         |              |
|            | 581 U      |          | >0.30      | 16.1 | 5.00 |     | 14         | 14         |            | 0.30        | 26.3         | 8.16         |              |
| *****      | 582 U      |          | >0.30      | 16.1 | 5.00 |     | 14         | 14         |            | 0.30        | 30.8         | 10.2         |              |

x height of compression zone  
wk crack width before increase of reinforcement  
as1 reinforcement 1. layer before increase of reinforcement  
as2 reinforcement 2. layer before increase of reinforcement  
as3 reinforcement 3. layer before increase of reinforcement  
d1 reinforcement diameter layer 1-3  
wk+ crack width after increase of reinforcement - interim -> ECHO REIN EXTR  
as1+ reinforcement after increase of reinforcement layer 1-3  
Elements with maximum values are printed. You can select an element with ELEM.

ΦΟΡΕΑΣ ΚΑΤΑΣΤΡΩΜΑΤΟΣ ΔΙΑΣΤΑΣΙΟΛΟΓΗΣΗ ΠΛΑΚΑΣ  
Interactive Graphics

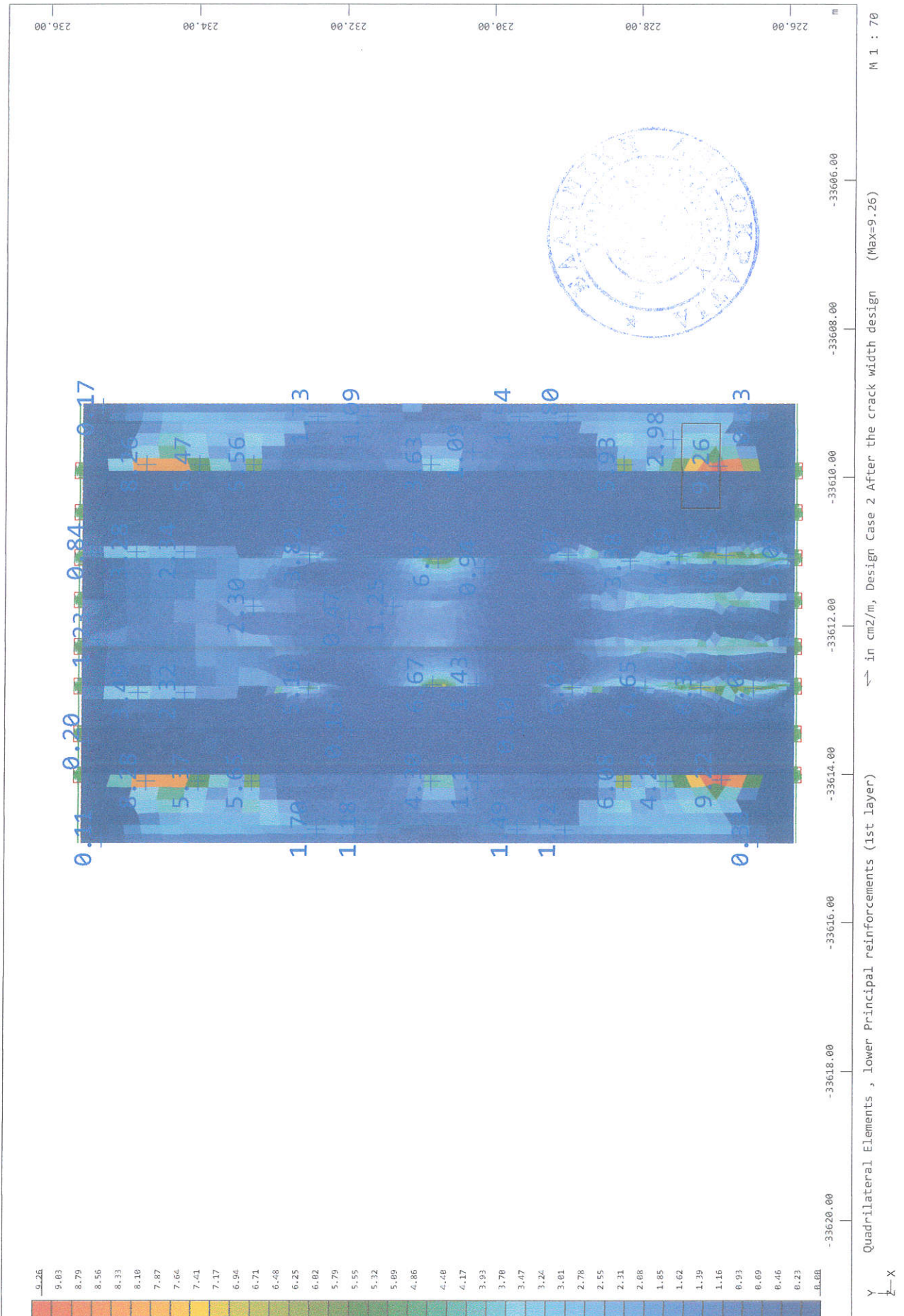
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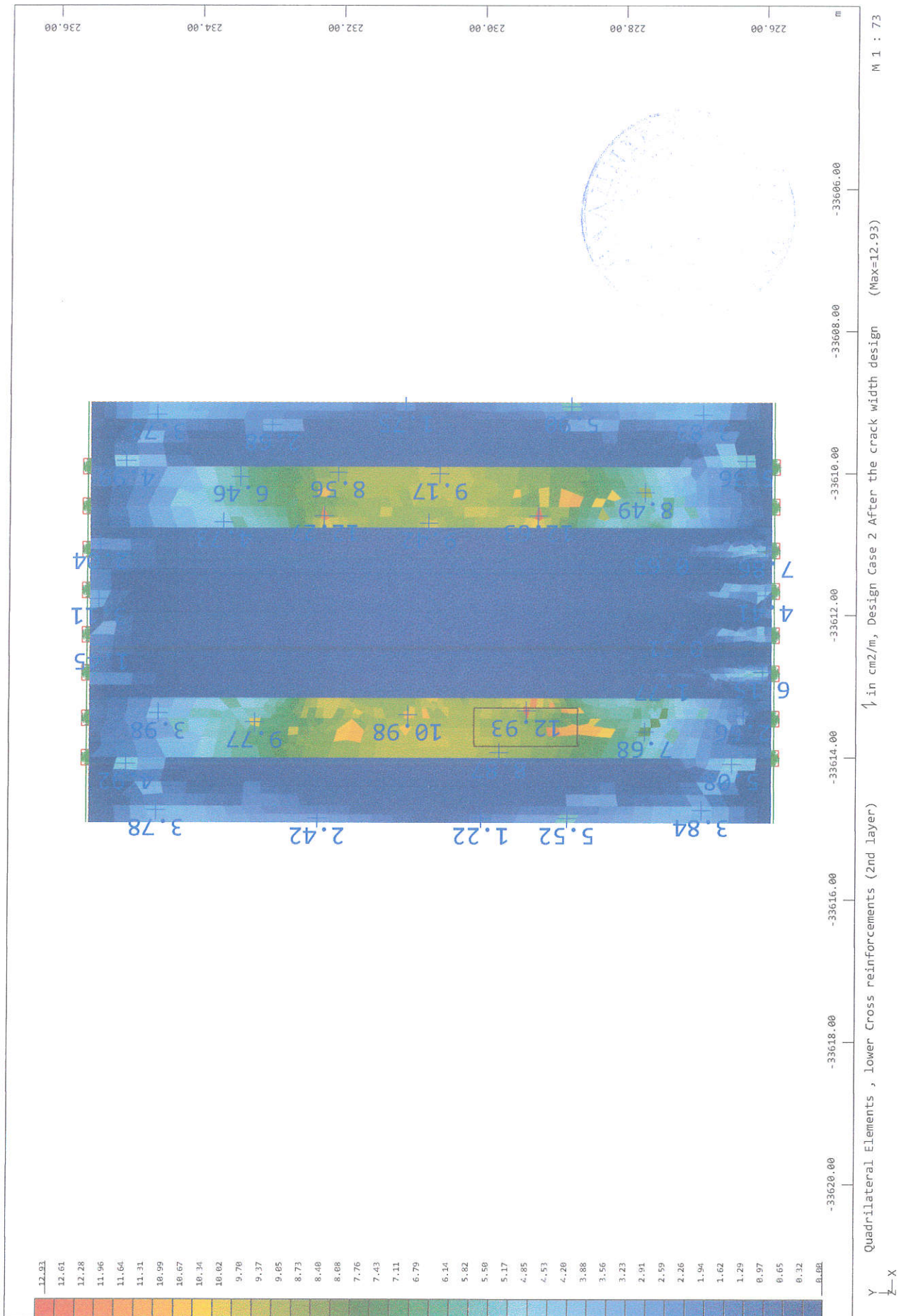
ΦΟΡΕΑΣ ΚΑΤΑΣΤΡΩΜΑΤΟΣ ΔΙΑΣΤΑΣΙΟΛΟΓΗΣΗ ΠΛΑΚΑΣ  
Interactive Graphics

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ΦΟΡΕΑΣ ΚΑΤΑΣΤΡΩΜΑΤΟΣ ΔΙΑΣΤΑΣΙΟΛΟΓΗΣΗ ΠΛΑΚΑΣ  
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ΦΟΡΕΑΣ ΚΑΤΑΣΤΡΩΜΑΤΟΣ ΔΙΑΣΤΑΣΙΟΛΟΓΗΣΗ ΠΛΑΚΑΣ  
Eigenvalues Easy

System- and Control Information

Control Information

QUAD-elements with higher non conforming modes 3  
QUAD-elements with all rotational degrees of freedom  
Number of unknowns 23358  
unknowns per node 6  
Number eigenvalues 6

Groups

| Grp        | Option | CS                              | Factor | Rayleigh-A<br>[1/sec] | Rayleigh-B<br>[sec] | $\xi$<br>[o/o]                       | Wind |
|------------|--------|---------------------------------|--------|-----------------------|---------------------|--------------------------------------|------|
| 0          | FULL   |                                 | 1.000  | 0.000000              | 0.000000            | 0.00                                 |      |
| 1          | FULL   |                                 | 1.000  | 0.000000              | 0.000000            | 0.00                                 |      |
| 2          | FULL   |                                 | 1.000  | 0.000000              | 0.000000            | 0.00                                 |      |
| 3          | FULL   |                                 | 1.000  | 0.000000              | 0.000000            | 0.00                                 |      |
| 11         | FULL   |                                 | 1.000  | 0.000000              | 0.000000            | 0.00                                 |      |
| 12         | FULL   |                                 | 1.000  | 0.000000              | 0.000000            | 0.00                                 |      |
| 13         | FULL   |                                 | 1.000  | 0.000000              | 0.000000            | 0.00                                 |      |
| 14         | FULL   |                                 | 1.000  | 0.000000              | 0.000000            | 0.00                                 |      |
| 21         | FULL   |                                 | 1.000  | 0.000000              | 0.000000            | 0.00                                 |      |
| 22         | FULL   |                                 | 1.000  | 0.000000              | 0.000000            | 0.00                                 |      |
| 23         | FULL   |                                 | 1.000  | 0.000000              | 0.000000            | 0.00                                 |      |
| 24         | FULL   |                                 | 1.000  | 0.000000              | 0.000000            | 0.00                                 |      |
| 30         | FULL   |                                 | 1.000  | 0.000000              | 0.000000            | 0.00                                 |      |
| CS         |        | construction stage              |        | Rayleigh-B            |                     | stiffness proportional damping ratio |      |
| Factor     |        | Factor on stiffness             |        | $\xi$                 |                     | modal damping ratio                  |      |
| Rayleigh-A |        | mass proportional damping ratio |        | Wind                  |                     | options for dynamic wind loading     |      |

Beam Elements

Finite beam elements without intermediate sections  
Shear deformations accounted for with nonconforming SOFiSTiK-Timoshenko beam

Sum of masses and mass moments of inertia

| Node                                                             | TM                |         |        | RM                 |            |            | RMB<br>[tm2] |
|------------------------------------------------------------------|-------------------|---------|--------|--------------------|------------|------------|--------------|
|                                                                  | X[t]              | Y[t]    | Z[t]   | X[tm2]             | Y[tm2]     | Z[tm2]     |              |
| total <sup>1</sup>                                               | 48.056            | 48.056  | 48.056 | 8.705E-01          | 9.330E-01  | 6.925E-02  | -            |
|                                                                  | S[m] <sup>2</sup> |         |        | RM(S) <sup>3</sup> |            |            |              |
|                                                                  | -33611.960        | 230.731 | -0.003 | 3.759E+02          | -5.343E-02 | -5.492E-04 |              |
|                                                                  |                   |         |        | -5.343E-02         | 5.603E+02  | -3.312E-05 |              |
|                                                                  |                   |         |        | -5.492E-04         | -3.312E-05 | 9.356E+02  |              |
| active <sup>1</sup>                                              | 48.056            | 48.056  | 48.056 | 8.705E-01          | 9.330E-01  | 6.925E-02  | -            |
|                                                                  | S[m] <sup>2</sup> |         |        | RM(S) <sup>3</sup> |            |            |              |
|                                                                  | -33611.960        | 230.731 | -0.003 | 3.759E+02          | -5.343E-02 | -5.492E-04 |              |
|                                                                  |                   |         |        | -5.343E-02         | 5.603E+02  | -3.312E-05 |              |
|                                                                  |                   |         |        | -5.492E-04         | -3.312E-05 | 9.356E+02  |              |
| <sup>1</sup> sum of the total and the active nodal masses        |                   |         |        |                    |            |            |              |
| <sup>2</sup> coordinates of the center of gravity                |                   |         |        |                    |            |            |              |
| <sup>3</sup> 3x3 rotational mass matrix at the center of gravity |                   |         |        |                    |            |            |              |
| TM translational masses in X-, Y- and Z-direction                |                   |         |        |                    |            |            |              |
| RM rotational masses about X-, Y- and Z-axis                     |                   |         |        |                    |            |            |              |
| RMB warping mass                                                 |                   |         |        |                    |            |            |              |

Processing

Parameter of System of Equations

Number of unknowns 23358 (Direct sparse Gauss-Solver)  
Total entries 555246  
Total entries after fill in 3612474  
Mass matrix 84682 (consistent), incl. rotational masses

Control Information

|                      |    |
|----------------------|----|
| Using Lanczos Method |    |
| Iteration vectors    | 12 |

ΦΟΡΕΑΣ ΚΑΤΑΣΤΡΩΜΑΤΟΣ ΔΙΑΣΤΑΣΙΟΛΟΓΗΣΗ ΠΛΑΚΑΣ  
Eigenvalues Easy

Eigenvalues

| No. | LC   | $\lambda$                             | error   | $\omega$  | f       | T     | $\xi$          | Meff  |       |      | participation |       |      |
|-----|------|---------------------------------------|---------|-----------|---------|-------|----------------|-------|-------|------|---------------|-------|------|
|     |      | [rad <sup>2</sup> /sec <sup>2</sup> ] | [-]     | [rad/sec] | [Hz]    | [sec] | [%]            | X[%]  | Y[%]  | Z[%] | X[%]          | Y[%]  | Z[%] |
| 1   | 2001 | 6.5834E+02                            | 0.0E+00 | 25.658    | 4.084   | 0.245 | 0.000          | 100.0 | 0.0   | 0.0  | 100.0         | 0.0   | 0.0  |
| 2   | 2002 | 6.6418E+02                            | 0.0E+00 | 25.772    | 4.102   | 0.244 | 0.000          | 0.0   | 100.0 | 0.0  | 0.0           | 100.0 | 0.0  |
| 3   | 2003 | 1.5663E+03                            | 0.0E+00 | 39.576    | 6.299   | 0.159 | 0.000          | 0.0   | 0.0   | 0.0  | 0.0           | 0.0   | 0.0  |
| 4   | 2004 | 5.8151E+03                            | 3.1E-10 | 76.257    | 12.137  | 0.082 | 0.000          | 0.0   | 0.0   | 86.0 | 0.0           | 0.0   | 86.0 |
| 5   | 2005 | 6.5140E+03                            | 6.7E-09 | 80.709    | 12.845  | 0.078 | 0.000          | 0.0   | 0.0   | 0.0  | 0.0           | 0.0   | 0.0  |
| 6   | 2006 | 4.1837E+04                            | 1.9E-02 | 204.540   | 32.554  | 0.031 | 0.000          | 0.0   | 0.0   | 0.0  | 0.0           | 0.0   | 0.0  |
| 7   |      | 4.8328E+04                            | 4.9E-03 | 219.837   | 34.988  | 0.029 | $\Sigma(\%)^1$ | 100.0 | 100.0 | 86.0 | 100.0         | 100.0 | 86.0 |
| 8   |      | 1.0078E+05                            | 1.5E-01 | 317.456   | 50.525  | 0.020 |                |       |       |      |               |       |      |
| 9   |      | 1.2448E+05                            | 2.2E-01 | 352.824   | 56.154  | 0.018 |                |       |       |      |               |       |      |
| 10  |      | 2.4184E+05                            | 3.0E-01 | 491.772   | 78.268  | 0.013 |                |       |       |      |               |       |      |
| 11  |      | 9.4655E+05                            | 1.1E+00 | 972.910   | 154.843 | 0.006 |                |       |       |      |               |       |      |
| 12  |      | 2.1942E+07                            | 5.0E+00 | 4684.233  | 745.519 | 0.001 |                |       |       |      |               |       |      |

<sup>1</sup> Total effective mass / participation factors of activated masses in X-, Y- and Z-direction.

|           |                           |               |                                                 |
|-----------|---------------------------|---------------|-------------------------------------------------|
| No.       | eigenmode number          | f             | eigenfrequency                                  |
| LC        | load case                 | T             | eigenperiod                                     |
| $\lambda$ | eigenvalue                | $\xi$         | modal damping ratio                             |
| error     | relative eigenvalue error | Meff          | effective modal mass in X-, Y- and Z-direction  |
| $\omega$  | circular eigenfrequency   | participation | participation factors in X-, Y- and Z-direction |

ΤΕΥΧΟΣ ΣΤΑΤΙΚΩΝ ΥΠΟΛΟΓΙΣΜΩΝ

ΕΛΕΓΧΟΣ ΜΕΣΟΒΑΘΡΩΝ



ΕΛΕΓΧΟΙ ΜΕΣΟΒΑΘΡΩΝ  
Materials

Default design code is EuroNorm 1994-2:2005 Composite Structures (Europe) V 2020  
Structure and Tab.7.1N: C (Footbridges)  
Snow load zone : 1

National Defined Parameters

| Reference of parameter in design code                                            | Value              |
|----------------------------------------------------------------------------------|--------------------|
| long term reduction concrete compressive strength $\alpha$ -cc EN 1992-2 3.1.6   | 0.850 <sup>1</sup> |
| long term reduction concrete tensile strength $\alpha$ -ct EN 1992-1-1 3.1.6 (2) | 1.000 <sup>1</sup> |
| safety coefficient $\gamma$ -c for concrete EN 1992-1-1 2.4.2.4                  | 1.500 <sup>1</sup> |
| safety coefficient $\gamma$ -CE for concrete elasticity EN 1992-1-1 5.8.6 (3)    | 1.200 <sup>1</sup> |
| safety coefficient $\gamma$ -s for reinforcing steel EN 1992-1-1 2.4.2.4         | 1.150 <sup>1</sup> |
| safety coefficient $\gamma$ -M0 for structural steel EN 1993-1-1 6.1             | 1.000 <sup>1</sup> |
| safety coefficient $\gamma$ -M1 for structural steel EN 1993-2 6.1               | 1.100 <sup>1</sup> |
| safety coefficient $\gamma$ -M2 for structural steel EN 1993-1-1 6.1             | 1.250 <sup>1</sup> |

<sup>1</sup> national defined parameter taken from the INI-files

Materials

Mat Classification

- 1 S 235 (EN 1993)
- 2 C 30/37 (EN 1992)
- 3 B 500 C (EN 1992)
- 4 rigit
- 5 LITHODOMI
- 6 base

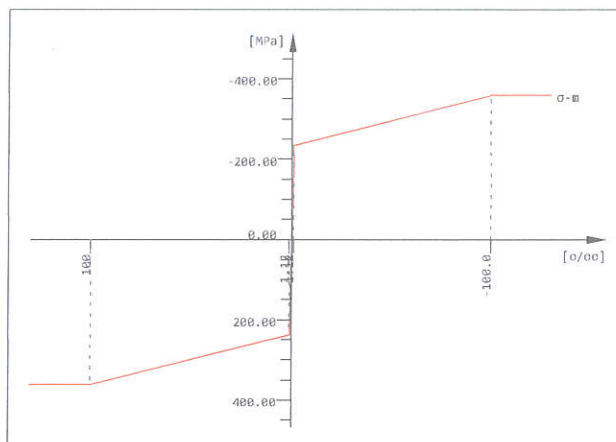
Mat 1 S 235 (EN 1993)

|                         |              |                             |                      |                          |
|-------------------------|--------------|-----------------------------|----------------------|--------------------------|
| Young's modulus         | E            | 210000 [N/mm <sup>2</sup> ] | Safetyfactor         | 1.10 [-]                 |
| Poisson's ratio         | $\mu$        | 0.30 [-]                    | Yield stress         | fy 235.00 [MPa]          |
| Shear modulus           | G            | 80769 [N/mm <sup>2</sup> ]  | Compressive yield    | fyc 235.00 [MPa]         |
| Compression modulus     | K            | 175000 [N/mm <sup>2</sup> ] | Tensile strength     | ft 360.00 [MPa]          |
| Nominal Weight          | $\gamma$     | 78.5 [kN/m <sup>3</sup> ]   | Compressive strength | fc 360.00 [MPa]          |
| Mean density            | $\rho$       | 7850.0 [kg/m <sup>3</sup> ] | Ultimate strain      | 100.00 [o/oo]            |
| Elongation coefficient  | $\alpha$     | 1.20E-05 [1/K]              | relative bond coeff. | 0.00 [-]                 |
| max. thickness          | t-max        | 40.00 [mm]                  | EN 1992 bond coeff.  | k1 0.00 [-]              |
| Safety sectional design | $\gamma$ -M0 | 1.00 [-]                    | Hardening modulus    | Eh 0.00 [MPa]            |
| Safety stability design | $\gamma$ -M1 | 1.10 [-]                    | Proportional limit   | fp 235.00 [MPa]          |
| Safety rupture          | $\gamma$ -M2 | 1.25 [-]                    | Dynamic allowance    | $\sigma$ -dyn 0.00 [MPa] |

| Stress-Strain for serviceability | $\epsilon$ [o/oo] | $\sigma$ -m[MPa] | E-t[N/mm <sup>2</sup> ] |
|----------------------------------|-------------------|------------------|-------------------------|
| Is also extended beyond the      | 1000.000          | 360.00           | 0                       |
| defined stress range             | 100.000           | 360.00           | 0                       |
|                                  | 1.119             | 235.00           | 1264                    |
|                                  | 0.000             | 0.00             | 210000                  |
|                                  | -1.119            | -235.00          | 1264                    |
|                                  | -100.000          | -360.00          | 0                       |
|                                  | -1000.000         | -360.00          | 0                       |
| Safetyfactor                     |                   |                  | 1.00                    |

| Stress-Strain for ultimate load | $\epsilon$ [o/oo] | $\sigma$ -u[MPa] | E-t[N/mm <sup>2</sup> ] |
|---------------------------------|-------------------|------------------|-------------------------|
| Is also extended beyond the     | 1000.000          | 360.00           | 0                       |
| defined stress range            | 100.000           | 360.00           | 0                       |
|                                 | 1.119             | 235.00           | 1264                    |
|                                 | 0.000             | 0.00             | 210000                  |
|                                 | -1.119            | -235.00          | 1264                    |
|                                 | -100.000          | -360.00          | 0                       |
|                                 | -1000.000         | -360.00          | 0                       |
| Safetyfactor                    |                   |                  | 1.10                    |

ΕΛΕΓΧΟΙ ΜΕΣΟΒΑΘΡΩΝ  
Materials



S 235 (EN 1993)

Mat 2 C 30/37 (EN 1992)

|                        |   |                             |                        |                                 |
|------------------------|---|-----------------------------|------------------------|---------------------------------|
| Young's modulus        | E | 32837 [N/mm <sup>2</sup> ]  | Safetyfactor           | 1.50 [-]                        |
| Poisson's ratio        | μ | 0.20 [-]                    | Strength               | f <sub>c</sub> 25.50 [MPa]      |
| Shear modulus          | G | 13682 [N/mm <sup>2</sup> ]  | Nominal strength       | f <sub>ck</sub> 30.00 [MPa]     |
| Compression modulus    | K | 18243 [N/mm <sup>2</sup> ]  | Tensile strength       | f <sub>ctm</sub> 2.90 [MPa]     |
| Nominal Weight         | γ | 25.0 [kN/m <sup>3</sup> ]   | Tensile strength       | f <sub>ctk,05</sub> 2.03 [MPa]  |
| Mean density           | ρ | 2400.0 [kg/m <sup>3</sup> ] | Tensile strength       | f <sub>ctk,95</sub> 3.77 [MPa]  |
| Elongation coefficient | α | 1.00E-05 [1/K]              | Bond strength          | f <sub>bd</sub> 3.04 [MPa]      |
|                        |   |                             | Service strength       | f <sub>cm</sub> 38.00 [MPa]     |
|                        |   |                             | Fatigue strength       | f <sub>cd,fat</sub> 14.96 [MPa] |
|                        |   |                             | Tensile strength       | f <sub>ctd</sub> 1.35 [MPa]     |
|                        |   |                             | Tensile failure energy | G <sub>f</sub> 0.14 [N/mm]      |

Stress-Strain for serviceability

Is only valid within the defined stress range

| ε[‰]         | σ-m[MPa] | E-t[N/mm <sup>2</sup> ] |
|--------------|----------|-------------------------|
| 0.000        | 0.00     | 34478                   |
| -0.540       | -16.42   | 26234                   |
| -1.081       | -28.31   | 17746                   |
| -1.621       | -35.55   | 9005                    |
| -2.162       | -38.00   | 0                       |
| -3.500       | -22.47   | -23499                  |
| Safetyfactor |          | 1.50                    |

Stress-Strain for ultimate load

Is only valid within the defined stress range

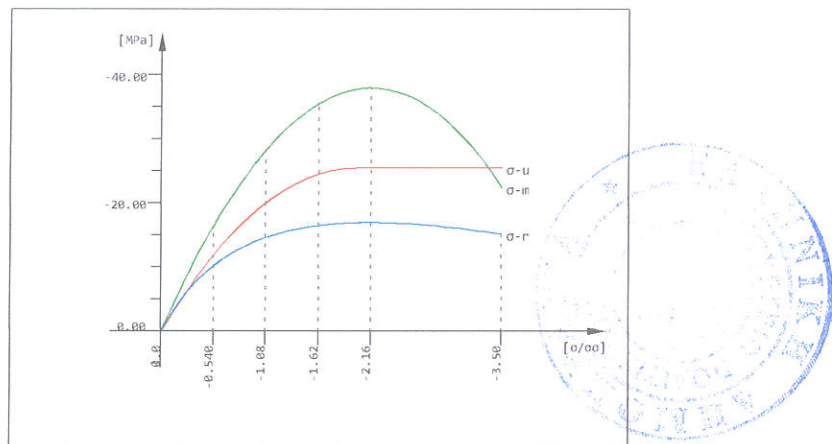
| ε[‰]         | σ-u[MPa] | E-t[N/mm <sup>2</sup> ] |
|--------------|----------|-------------------------|
| 0.000        | 0.00     | 25500                   |
| -2.000       | -25.50   | 0                       |
| -3.500       | -25.50   | 0                       |
| Safetyfactor |          | 1.50                    |

Stress-Strain of calc. mean values

Is only valid within the defined stress range

| ε[‰]         | σ-r[MPa] | E-t[N/mm <sup>2</sup> ] |
|--------------|----------|-------------------------|
| 0.000        | 0.00     | 28732                   |
| -0.540       | -10.23   | 12007                   |
| -1.081       | -14.67   | 5278                    |
| -1.621       | -16.53   | 1917                    |
| -2.162       | -17.00   | 0                       |
| -3.500       | -15.23   | -2279                   |
| Safetyfactor |          | ( 1.50)                 |

ΕΛΕΓΧΟΙ ΜΕΣΟΒΑΘΡΩΝ  
Materials



C 30/37 (EN 1992)

Mat 3 B 500 C (EN 1992)

|                        |       |                             |                      |                              |
|------------------------|-------|-----------------------------|----------------------|------------------------------|
| Young's modulus        | E     | 200000 [N/mm <sup>2</sup> ] | Safetyfactor         | 1.15 [-]                     |
| Poisson's ratio        | μ     | 0.30 [-]                    | Yield stress         | f <sub>y</sub> 500.00 [MPa]  |
| Shear modulus          | G     | 76923 [N/mm <sup>2</sup> ]  | Compressive yield    | f <sub>yc</sub> 500.00 [MPa] |
| Compression modulus    | K     | 166667 [N/mm <sup>2</sup> ] | Tensile strength     | f <sub>t</sub> 575.00 [MPa]  |
| Nominal Weight         | γ     | 78.5 [kN/m <sup>3</sup> ]   | Compressive strength | f <sub>c</sub> 575.00 [MPa]  |
| Mean density           | ρ     | 7850.0 [kg/m <sup>3</sup> ] | Ultimate strain      | 75.00 [‰]                    |
| Elongation coefficient | α     | 1.20E-05 [1/K]              | relative bond coeff. | 1.00 [-]                     |
| max. thickness         | t-max | 32.00 [mm]                  | EN 1992 bond coeff.  | k <sub>1</sub> 0.80 [-]      |
|                        |       |                             | Hardening modulus    | E <sub>h</sub> 0.00 [MPa]    |
|                        |       |                             | Proportional limit   | f <sub>p</sub> 500.00 [MPa]  |
|                        |       |                             | Dynamic allowance    | σ-dyn 152.17 [MPa]           |

Stress-Strain for serviceability

Is also extended beyond the defined stress range

| ε[‰]         | σ-m[MPa] | E-t[N/mm <sup>2</sup> ] |
|--------------|----------|-------------------------|
| 1000.000     | 575.00   | 0                       |
| 75.000       | 575.00   | 0                       |
| 2.500        | 500.00   | 1034                    |
| 0.000        | 0.00     | 200000                  |
| -2.500       | -500.00  | 1034                    |
| -75.000      | -575.00  | 0                       |
| -1000.000    | -575.00  | 0                       |
| Safetyfactor |          | 1.15                    |

Stress-Strain for ultimate load

Is also extended beyond the defined stress range

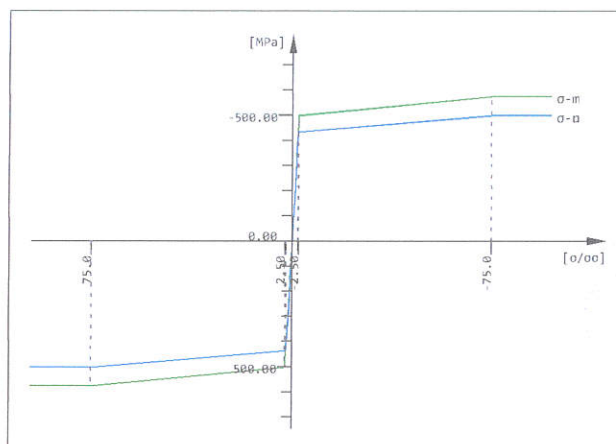
| ε[‰]         | σ-u[MPa] | E-t[N/mm <sup>2</sup> ] |
|--------------|----------|-------------------------|
| 1000.000     | 500.00   | 0                       |
| 75.000       | 500.00   | 0                       |
| 2.174        | 434.78   | 896                     |
| 0.000        | 0.00     | 200000                  |
| -2.174       | -434.78  | 896                     |
| -75.000      | -500.00  | 0                       |
| -1000.000    | -500.00  | 0                       |
| Safetyfactor |          | ( 1.15)                 |

Stress-Strain of calc. mean values

Is also extended beyond the defined stress range

| ε[‰]         | σ-r[MPa] | E-t[N/mm <sup>2</sup> ] |
|--------------|----------|-------------------------|
| 1000.000     | 500.00   | 0                       |
| 75.000       | 500.00   | 0                       |
| 2.174        | 434.78   | 896                     |
| 0.000        | 0.00     | 200000                  |
| -2.174       | -434.78  | 896                     |
| -75.000      | -500.00  | 0                       |
| -1000.000    | -500.00  | 0                       |
| Safetyfactor |          | ( 1.15)                 |

ΕΛΕΓΧΟΙ ΜΕΣΟΒΑΘΡΩΝ  
Materials



B 500 C (EN 1992)

#### Mat 4 rigit

|                        |   |                  |                        |          |             |
|------------------------|---|------------------|------------------------|----------|-------------|
| Young's modulus        | E | 29962000 [N/mm2] | Safetyfactor           | 1.50 [-] |             |
| Poisson's ratio        | μ | 0.20 [-]         | Strength               | fc       | 17.00 [MPa] |
| Shear modulus          | G | 12484167 [N/mm2] | Nominal strength       | fck      | 20.00 [MPa] |
| Compression modulus    | K | 16645556 [N/mm2] | Tensile strength       | fctm     | 2.21 [MPa]  |
| Nominal Weight         | γ | 2.0 [kN/m3]      | Tensile strength       | fctk,05  | 1.55 [MPa]  |
| Mean density           | ρ | 20.0 [kg/m3]     | Tensile strength       | fctk,95  | 2.87 [MPa]  |
| Elongation coefficient | α | 1.00E-05 [1/K]   | Bond strength          | fbd      | 2.32 [MPa]  |
|                        |   |                  | Service strength       | fc       | 28.00 [MPa] |
|                        |   |                  | Fatigue strength       | fcd,fat  | 10.43 [MPa] |
|                        |   |                  | Tensile strength       | fctd     | 1.03 [MPa]  |
|                        |   |                  | Tensile failure energy | Gf       | 0.13 [N/mm] |

#### Stress-Strain for serviceability

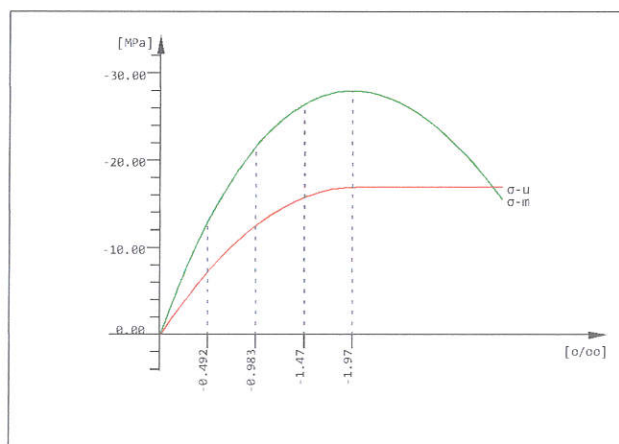
Is only valid within the defined stress range

| ε[‰]         | σ-m[MPa] | E-t[N/mm <sup>2</sup> ] |
|--------------|----------|-------------------------|
| 0.000        | 0.00     | 31460                   |
| -0.492       | -13.03   | 21809                   |
| -0.983       | -21.66   | 13498                   |
| -1.475       | -26.49   | 6291                    |
| -1.967       | -28.00   | 0                       |
| -3.500       | -15.60   | -15208                  |
| Safetyfactor |          | 1.50                    |

#### Stress-Strain for ultimate load

Is only valid within the defined stress range

| ε[‰]         | σ-u[MPa] | E-t[N/mm <sup>2</sup> ] |
|--------------|----------|-------------------------|
| 0.000        | 0.00     | 17000                   |
| -2.000       | -17.00   | 0                       |
| -3.500       | -17.00   | 0                       |
| Safetyfactor |          | 1.50                    |



rigit

# ΕΛΕΓΧΟΙ ΜΕΣΟΒΑΘΡΩΝ

## Materials

### Mat 5 LITHODOMI

|                        |    |                |              |          |
|------------------------|----|----------------|--------------|----------|
| Young's modulus        | E  | 650000 [N/mm2] | Safetyfactor | 1.00 [-] |
| Poisson's ratio        | μ  | 0.20 [-]       |              |          |
| Shear modulus          | G  | 270833 [N/mm2] |              |          |
| Compression modulus    | K  | 361111 [N/mm2] |              |          |
| Nominal Weight         | γ  | 15.0 [kN/m3]   |              |          |
| Weight buoyancy        | γa | 5.0 [kN/m3]    |              |          |
| Elongation coefficient | α  | 1.00E-05 [1/K] |              |          |

### Mat 6 base

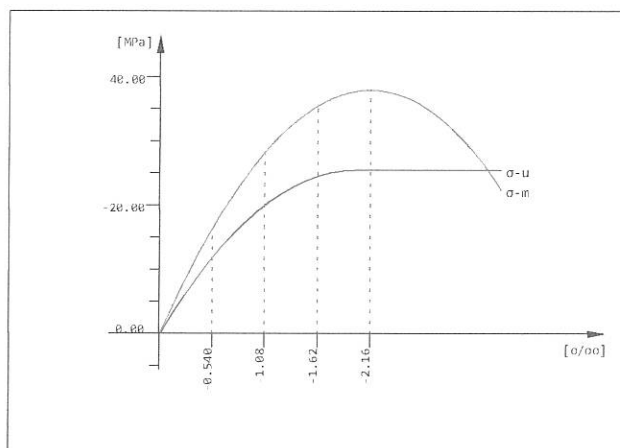
|                        |   |                 |                        |          |             |
|------------------------|---|-----------------|------------------------|----------|-------------|
| Young's modulus        | E | 3280037 [N/mm2] | Safetyfactor           | 1.50 [-] |             |
| Poisson's ratio        | μ | 0.20 [-]        | Strength               | fc       | 25.50 [MPa] |
| Shear modulus          | G | 1366682 [N/mm2] | Nominal strength       | fck      | 30.00 [MPa] |
| Compression modulus    | K | 1822243 [N/mm2] | Tensile strength       | fctm     | 2.90 [MPa]  |
| Nominal Weight         | γ | 2.0 [kN/m3]     | Tensile strength       | fctk,05  | 2.03 [MPa]  |
| Mean density           | ρ | 20.0 [kg/m3]    | Tensile strength       | fctk,95  | 3.77 [MPa]  |
| Elongation coefficient | α | 1.00E-05 [1/K]  | Bond strength          | fbd      | 3.04 [MPa]  |
|                        |   |                 | Service strength       | fcm      | 38.00 [MPa] |
|                        |   |                 | Fatigue strength       | fcd,fat  | 14.96 [MPa] |
|                        |   |                 | Tensile strength       | fctd     | 1.35 [MPa]  |
|                        |   |                 | Tensile failure energy | Gf       | 0.14 [N/mm] |

**Stress-Strain for serviceability**  
Is only valid within the defined stress range

| ε[ο/οο]      | σ-m[MPa] | E-t[N/mm2] |
|--------------|----------|------------|
| 0.000        | 0.00     | 34478      |
| -0.540       | -16.42   | 26234      |
| -1.081       | -28.31   | 17746      |
| -1.621       | -35.55   | 9005       |
| -2.162       | -38.00   | 0          |
| -3.500       | -22.47   | -23499     |
| Safetyfactor |          | 1.50       |

**Stress-Strain for ultimate load**  
Is only valid within the defined stress range

| ε[ο/οο]      | σ-u[MPa] | E-t[N/mm2] |
|--------------|----------|------------|
| 0.000        | 0.00     | 25500      |
| -2.000       | -25.50   | 0          |
| -3.500       | -25.50   | 0          |
| Safetyfactor |          | 1.50       |



base

## Elastic bedding

| Mat       | Cs[kN/m3]               | Ct[kN/m3]  | ft[MPa] | fy[MPa]                      | tan[-] | c[MPa] | dil[-] | w[t/m2] |
|-----------|-------------------------|------------|---------|------------------------------|--------|--------|--------|---------|
| 6         | 1.2000E+04              | 1.0000E+03 | 0.00    | 0.00                         | 0.00   | 0.00   | 0.00   | 0.000   |
| Cs[kN/m3] | normal bedding          |            | tan[-]  | Friction coefficient at wall |        |        |        |         |
| Ct[kN/m3] | transverse bedding      |            | c[MPa]  | Cohesion                     |        |        |        |         |
| ft[MPa]   | maximum tensile bedding |            | dil[-]  | Dilatancy coefficient        |        |        |        |         |
| fy[MPa]   | Maximum pressure        |            | w[t/m2] | Nominal Weight               |        |        |        |         |

ΕΛΕΓΧΟΙ ΜΕΣΟΒΑΘΡΩΝ

Materials

Thermal material constants

| Mat   | T[°C]           | S[kJ/K/m3]                       | Kxx[W/K/m]        | Kyy[W/K/m] | Kzz[W/K/m] |                   |
|-------|-----------------|----------------------------------|-------------------|------------|------------|-------------------|
| 1     | AUTO            | 3.45E+03                         | 5.333E+01         |            |            | S 235 (EN 1993)   |
| 2     | AUTO            | 2.16E+03                         | 1.951E+00         |            |            | C 30/37 (EN 1992) |
| 3     | AUTO            | 3.45E+03                         | 5.333E+01         |            |            | B 500 C (EN 1992) |
| 4     | AUTO            | 2.16E+03                         | 1.951E+00         |            |            | rigit             |
| 6     | AUTO            | 2.16E+03                         | 1.951E+00         |            |            | base              |
| Mat   | material number | S[kJ/K/m3]                       | Heat capacity     |            |            |                   |
| T[°C] | Temperature     | Kxx[W/K/m],Kyy[W/K/m],Kzz[W/K/m] | Heat conductivity |            |            |                   |

[illegible]

# ΕΛΕΓΧΟΙ ΜΕΣΟΒΑΘΡΩΝ

## Sections

### Additional static properties of cross section

| $\alpha\text{-T}[1/K]$ | ymin[mm] | zmin[mm] | hymin[mm] | AK[m2]    | MRs | 1/WT[1/m3]  | 1/WVy[1/m2] |
|------------------------|----------|----------|-----------|-----------|-----|-------------|-------------|
|                        | ymax[mm] | zmax[mm] | hzmin[mm] | AB[m2]    |     | 1/WT2[1/m3] | 1/WVz[1/m2] |
| 1.2E-05                | -150.0   | -200.0   | 196.0     | 9.995E-03 |     | 9.862E+03   | 1.179E+02   |
|                        | 150.0    | 200.0    | 357.0     |           |     | 6.320E+02   | 2.075E+02   |

$\alpha\text{-T}[1/K]$  Elongation coefficient  
ymin[mm], zmin[mm], ymax[mm], zmax[mm] extreme coordinates relative to centroid  
hymin[mm], hzmin[mm] minimum value for internal lever  
AK[m2] torsional equivalent area (Bredt)  
MRs transverse reinforcements material number  
1/WT[1/m3], 1/WT2[1/m3] torsional resistance  
1/WVy[1/m2], 1/WVz[1/m2] shear force resistance  
AB[m2] gross concrete area

### Section values for warping

| Wmin[m2] | Wmax[m2] | CM[m6]    | CMS[m4] | ASwyy[m6] | ASwzz[m6] | ry[mm] | rz[mm] |
|----------|----------|-----------|---------|-----------|-----------|--------|--------|
| -0.0297  | 0.0297   | 3.751E-06 | 0.000   | 5.354E-16 | 2.610E-15 | 0.0    | 0.0    |

Wmin[m2], Wmax[m2] unit warping  
CM[m6] warping resistance  
CMS[m4] warping shear resistance  
ASwyy[m6], ASwzz[m6] warping sectional value  
ry[mm], rz[mm] sectional distance

### Design forces and moments

|                 | N[kN]  | Vy[kN]  | Vz[kN] | Mt[kNm] | Mt2[kNm] | Mb[kNm2] | My[kNm] | Mz[kNm] | y[mm] | z[mm] | BUCK    |
|-----------------|--------|---------|--------|---------|----------|----------|---------|---------|-------|-------|---------|
| P <sup>12</sup> | 4648.0 | 1953.75 | 949.44 | 30.55   | 367.31   | 47.71    | 759.48  | 259.45  | 0.0   | 200.0 | -, a, b |
| E <sup>32</sup> | 4648.0 | 1150.94 | 653.83 | 13.76   | 214.68   | 29.73    | 677.77  | 169.50  | 0.0   | 200.0 |         |

<sup>1</sup> P = plastic design values (ultimate bearing capacity)

<sup>2</sup> Material safety  $\gamma\text{-M0}$  for structural steel = 1.00

<sup>3</sup> E = elastic design values (stress limit reached)

N[kN] normal force  
Vy[kN], Vz[kN] shear force  
Mt[kNm] primary torsional moment  
Mt2[kNm] secondary torsional moment  
Mb[kNm2] warping moment  
My[kNm], Mz[kNm] bending moment  
y[mm], z[mm] ordinate of plastic centre  
BUCK buckling curve (LTB, y-y, z-z)

### Additional design data

| Mat | periphery-0/-I | deff   | t-min | t-max | thet-p   | thet-y   | thet-z   | thet-yz  | yg    | zg   |       |
|-----|----------------|--------|-------|-------|----------|----------|----------|----------|-------|------|-------|
|     | [m2/m]         | [m2/m] | [mm]  | [mm]  | [kgm2/m] | [kgm2/m] | [kgm2/m] | [kgm2/m] | [mm]  | [mm] |       |
|     | 1.927          |        | 20.5  | 13.5  | 24.0     | 5.377    | 4.528    | 0.849    | 0.000 | 0.0  | 200.0 |

Mat material number  
periphery-0/-I peripheral area per length  
deff effective depth  
t-min, t-max thickness  
thet-p, thet-y, thet-z, thet-yz rotational mass  
yg, zg ordinate of the mass centre

### Rolled steel

| Rolled steel        | D[mm] | B[mm]                               | s[mm] | t[mm] | r[mm] | yr[mm] | zr[mm] | [grd] |
|---------------------|-------|-------------------------------------|-------|-------|-------|--------|--------|-------|
| HEB 400             | 400.0 | 300.0                               | 13.5  | 24.0  | 27.0  |        |        |       |
| D[mm] height        |       | t[mm] flange thickness              |       |       |       |        |        |       |
| B[mm] width         |       | r[mm] fillet radius                 |       |       |       |        |        |       |
| s[mm] web thickness |       | yr[mm], zr[mm] sectional coordinate |       |       |       |        |        |       |

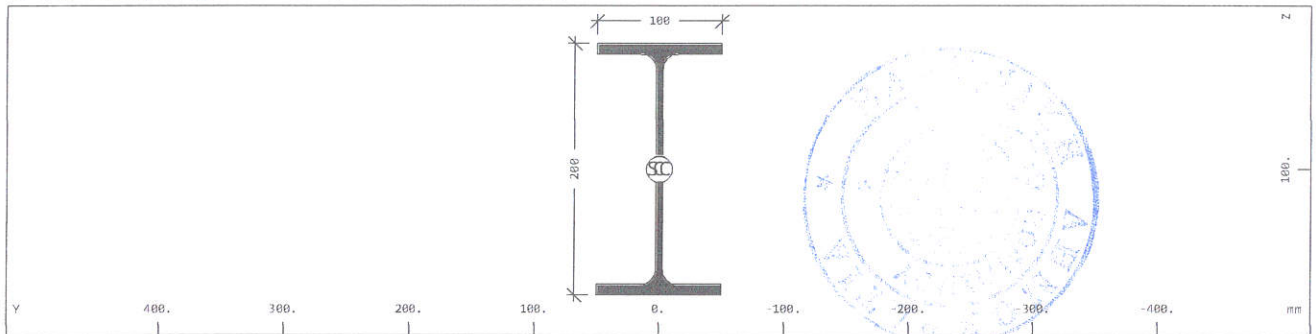
### Hydrodynamic coefficients for wind and wave loading

| $\alpha[^\circ]$ | cw-y[-] | cw-z[-] | cw-t[-] | ref | c-m[-] | c-lat[-] | Strouhal |
|------------------|---------|---------|---------|-----|--------|----------|----------|
| -180.00          | -1.810  | 0.000   | 0.000   | BH  | 2.000  | 0.962    | 0.111    |
| -135.00          | -1.647  | -1.500  | 0.000   | BH  | 2.000  | 0.962    | 0.111    |
| -90.00           | 0.000   | -1.774  | 0.000   | BH  | 2.000  | 0.962    | 0.111    |
| -45.00           | 1.647   | -1.500  | 0.000   | BH  | 2.000  | 0.962    | 0.111    |
| 0.00             | 1.810   | 0.000   | 0.000   | BH  | 2.000  | 0.962    | 0.111    |
| 45.00            | 1.647   | 1.500   | 0.000   | BH  | 2.000  | 0.962    | 0.111    |
| 90.00            | 0.000   | 1.774   | 0.000   | BH  | 2.000  | 0.962    | 0.111    |
| 135.00           | -1.647  | 1.500   | 0.000   | BH  | 2.000  | 0.962    | 0.111    |
| 180.00           | -1.810  | 0.000   | 0.000   | BH  | 2.000  | 0.962    | 0.111    |

$\alpha[^\circ]$  angle of attack  
cw-y[-] drag coefficient  
cw-z[-] lift coefficient  
cw-t[-] moment coefficient  
ref reference for force coefficients  
c-m[-] hydrodynamic coefficient  
c-lat[-] lateral coefficient  
Strouhal Strouhal number

ΕΛΕΓΧΟΙ ΜΕΣΟΒΑΘΡΩΝ  
Sections

Cross section No. 2 - IPE 200 (EN 10365)



Cross section No. 2 - IPE 200 (EN 10365)

Static properties of cross section

| Mat                   | A[m2]                                                        | Ay[m2]    | Iy[m4]    | yc[mm]          | ysc[mm] | E[N/mm2]                     | g[kg/m] | I-1[m4] |
|-----------------------|--------------------------------------------------------------|-----------|-----------|-----------------|---------|------------------------------|---------|---------|
| MRf                   | It[m4]                                                       | Az[m2]    | Iz[m4]    | zc[mm]          | zsc[mm] | G[N/mm2]                     |         | I-2[m4] |
|                       |                                                              | Ayz[m2]   | Iyz[m4]   |                 |         |                              |         | α[°]    |
| 1                     | 2.8491E-03                                                   | 1.588E-03 | 1.944E-05 | 0.0             | 0.0     | 210000                       | 22.4    |         |
|                       | 6.867E-08                                                    | 1.097E-03 | 1.424E-06 | 100.0           | 100.0   | 80769                        | (BEAM)  |         |
| Mat                   | material number                                              |           |           | yc[mm],zc[mm]   |         | ordinate of elastic centroid |         |         |
| A[m2]                 | sectional area                                               |           |           | ysc[mm],zsc[mm] |         | ordinate of shear centre     |         |         |
| Ay[m2],Az[m2],Ayz[m2] | transverse shear deformation area                            |           |           | E[N/mm2]        |         | Young's modulus              |         |         |
| Iy[m4],Iz[m4],Iyz[m4] | bending moment of inertia                                    |           |           | g[kg/m]         |         | weight per length            |         |         |
| I-1[m4],I-2[m4],α[°]  | principal moments of inertia and angle of the principal axes |           |           |                 |         |                              |         |         |
| MRf                   | reinforcement material number                                |           |           |                 |         |                              |         |         |
| It[m4]                | torsional moment of inertia                                  |           |           |                 |         |                              |         |         |
| G[N/mm2]              | Shear modulus                                                |           |           |                 |         |                              |         |         |

Additional static properties of cross section

| α-T[1/K]                                          | ymin[mm]                                  | zmin[mm] | hymin[mm] | AK[m <sup>2</sup> ] | Mrs | 1/WT[1/m <sup>3</sup> ]  | 1/WVy[1/m <sup>2</sup> ] |
|---------------------------------------------------|-------------------------------------------|----------|-----------|---------------------|-----|--------------------------|--------------------------|
|                                                   | ymax[mm]                                  | zmax[mm] | hzmin[mm] | AB[m <sup>2</sup> ] |     | 1/WT2[1/m <sup>3</sup> ] | 1/WVz[1/m <sup>2</sup> ] |
| 1.2E-05                                           | -50.0                                     | -100.0   | 63.8      | 1.438E-03           |     | 2.003E+05                | 9.345E+02                |
|                                                   | 50.0                                      | 100.0    | 176.1     |                     |     | 9.866E+03                | 1.014E+03                |
| α-T[1/K]                                          | Elongation coefficient                    |          |           |                     |     |                          |                          |
| ymin[mm],zmin[mm],ymax[mm],zmax[mm]               | extreme coordinates relative to centroid  |          |           |                     |     |                          |                          |
| hymin[mm],hzmin[mm]                               | minimum value for internal lever          |          |           |                     |     |                          |                          |
| AK[m <sup>2</sup> ]                               | torsional equivalent area (Bredt)         |          |           |                     |     |                          |                          |
| Mrs                                               | transverse reinforcements material number |          |           |                     |     |                          |                          |
| 1/WT[1/m <sup>3</sup> ],1/WT2[1/m <sup>3</sup> ]  | torsional resistance                      |          |           |                     |     |                          |                          |
| 1/WVy[1/m <sup>2</sup> ],1/WVz[1/m <sup>2</sup> ] | shear force resistance                    |          |           |                     |     |                          |                          |
| AB[m <sup>2</sup> ]                               | gross concrete area                       |          |           |                     |     |                          |                          |

Section values for warping

| Wmin[m2]          | Wmax[m2]                 | CM[m6]    | CMS[m4]             | ASwyy[m6]  | ASwzz[m6]               | ry[mm] | rz[mm] |
|-------------------|--------------------------|-----------|---------------------|------------|-------------------------|--------|--------|
| -0.0049           | 0.0049                   | 1.275E-08 | 0.000               | -4.236E-18 | -3.514E-18              | 0.0    | 0.0    |
| Wmin[m2],Wmax[m2] | unit warping             |           | ASwyy[m6],ASwzz[m6] |            | warping sectional value |        |        |
| CM[m6]            | warping resistance       |           | ry[mm],rz[mm]       |            | sectional distance      |        |        |
| CMS[m4]           | warping shear resistance |           |                     |            |                         |        |        |

Design forces and moments

|                 | N[kN] | Vy[kN] | Vz[kN] | Mt[kNm] | Mt2[kNm] | Mb[kNm <sup>2</sup> ] | My[kNm] | Mz[kNm] | y[mm] | z[mm] | BUCK    |
|-----------------|-------|--------|--------|---------|----------|-----------------------|---------|---------|-------|-------|---------|
| P <sup>12</sup> | 669.5 | 230.65 | 189.95 | 1.59    | 22.08    | 0.96                  | 51.86   | 10.49   | 0.0   | 100.0 | -, a, b |
| E <sup>32</sup> | 669.5 | 143.91 | 133.83 | 0.68    | 13.63    | 0.61                  | 45.68   | 6.69    | 0.0   | 100.0 |         |

<sup>1</sup> P = plastic design values (ultimate bearing capacity)

<sup>2</sup> Material safety γ-M0 for structural steel = 1.00

<sup>3</sup> E = elastic design values (stress limit reached)

|               |                            |                       |                                |
|---------------|----------------------------|-----------------------|--------------------------------|
| N[kN]         | normal force               | Mb[kNm <sup>2</sup> ] | warping moment                 |
| Vy[kN],Vz[kN] | shear force                | My[kNm],Mz[kNm]       | bending moment                 |
| Mt[kNm]       | primary torsional moment   | y[mm],z[mm]           | ordinate of plastic centre     |
| Mt2[kNm]      | secondary torsional moment | BUCK                  | buckling curve (LTB, y-y, z-z) |

Additional design data

| Mat            | periphery-0/-I             | deff | t-min                        | t-max | thet-p                      | thet-y                | thet-z                | thet-yz               | yg   | zg    |
|----------------|----------------------------|------|------------------------------|-------|-----------------------------|-----------------------|-----------------------|-----------------------|------|-------|
|                | [m <sup>2</sup> /m]        | [mm] | [mm]                         | [mm]  | [kgm <sup>2</sup> /m]       | [kgm <sup>2</sup> /m] | [kgm <sup>2</sup> /m] | [kgm <sup>2</sup> /m] | [mm] | [mm]  |
|                | 0.769                      | 7.4  | 5.6                          | 8.5   | 0.164                       | 0.153                 | 0.011                 | 0.000                 | 0.0  | 100.0 |
| Mat            | material number            |      | t-min,t-max                  |       | thickness                   |                       |                       |                       |      |       |
| periphery-0/-I | peripheral area per length |      | thet-p,thet-y,thet-z,thet-yz |       | rotational mass             |                       |                       |                       |      |       |
| deff           | effective depth            |      | yg,zg                        |       | ordinate of the mass centre |                       |                       |                       |      |       |

## ΕΛΕΓΧΟΙ ΜΕΣΟΒΑΘΡΩΝ

## Sections

## Rolled steel

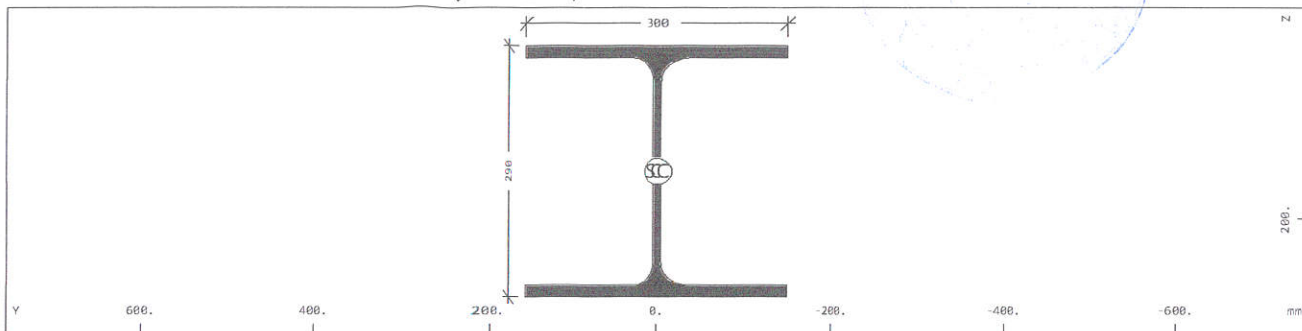
| Rolled steel |               | D[mm]          | B[mm]                | s[mm] | t[mm] | r[mm] | yr[mm] | zr[mm] | [grd] |
|--------------|---------------|----------------|----------------------|-------|-------|-------|--------|--------|-------|
| IPE          | 200           | 200.0          | 100.0                | 5.6   | 8.5   | 12.0  |        |        |       |
| D[mm]        | height        | t[mm]          | flange thickness     |       |       |       |        |        |       |
| B[mm]        | width         | r[mm]          | fillet radius        |       |       |       |        |        |       |
| s[mm]        | web thickness | yr[mm], zr[mm] | sectional coordinate |       |       |       |        |        |       |

## Hydrodynamic coefficients for wind and wave loading

| $\alpha$ [°] | cw-y[-] | cw-z[-] | cw-t[-] | ref | c-m[-] | c-lat[-] | Strouhal |
|--------------|---------|---------|---------|-----|--------|----------|----------|
| -180.00      | -2.000  | 0.000   | 0.000   | BH  | 2.000  | 0.800    | 0.110    |
| -135.00      | -1.800  | -1.200  | 0.000   | BH  | 2.000  | 0.800    | 0.110    |
| -90.00       | 0.000   | -1.600  | 0.000   | BH  | 2.000  | 0.800    | 0.110    |
| -45.00       | 1.800   | -1.200  | 0.000   | BH  | 2.000  | 0.800    | 0.110    |
| 0.00         | 2.000   | 0.000   | 0.000   | BH  | 2.000  | 0.800    | 0.110    |
| 45.00        | 1.800   | 1.200   | 0.000   | BH  | 2.000  | 0.800    | 0.110    |
| 90.00        | 0.000   | 1.600   | 0.000   | BH  | 2.000  | 0.800    | 0.110    |
| 135.00       | -1.800  | 1.200   | 0.000   | BH  | 2.000  | 0.800    | 0.110    |
| 180.00       | -2.000  | 0.000   | 0.000   | BH  | 2.000  | 0.800    | 0.110    |

$\alpha$ [°] angle of attack  
cw-y[-] drag coefficient  
cw-z[-] lift coefficient  
cw-t[-] moment coefficient  
ref reference for force coefficients  
c-m[-] hydrodynamic coefficient  
c-lat[-] lateral coefficient  
Strouhal Strouhal number

## Cross section No. 3 - HE 300 A (EN 10365)



Cross section No. 3 - HE 300 A (EN 10365)

## Static properties of cross section

| Mat | A[m2]      | Ay[m2]    | Iy[m4]    | yc[mm] | ysc[mm] | E[N/mm2] | g[kg/m] | I-1[m4]      |
|-----|------------|-----------|-----------|--------|---------|----------|---------|--------------|
| MRf | It[m4]     | Az[m2]    | Iz[m4]    | zc[mm] | zsc[mm] | G[N/mm2] |         | I-2[m4]      |
|     |            | Ayz[m2]   | Iyz[m4]   |        |         |          |         | $\alpha$ [°] |
| 1   | 1.1254E-02 | 7.665E-03 | 1.826E-04 | 0.0    | 0.0     | 210000   | 88.3    |              |
|     | 8.450E-07  | 2.432E-03 | 6.310E-05 | 145.0  | 145.0   | 80769    | (BEAM)  |              |

Mat material number  
A[m2] sectional area  
Ay[m2], Az[m2], Ayz[m2] transverse shear deformation area  
Iy[m4], Iz[m4], Iyz[m4] bending moment of inertia  
I-1[m4], I-2[m4],  $\alpha$ [°] principal moments of inertia and angle of the principal axes  
MRf reinforcement material number  
It[m4] torsional moment of inertia  
G[N/mm2] Shear modulus  
yc[mm], zc[mm] ordinate of elastic centroid  
ysc[mm], zsc[mm] ordinate of shear centre  
E[N/mm2] Young's modulus  
g[kg/m] weight per length

## Additional static properties of cross section

| $\alpha$ -T[1/K] | ymin[mm] | zmin[mm] | hymin[mm] | AK[m2]    | MRs | 1/WT[1/m3]  | 1/WVy[1/m2] |
|------------------|----------|----------|-----------|-----------|-----|-------------|-------------|
|                  | ymax[mm] | zmax[mm] | hzmin[mm] | AB[m2]    |     | 1/WT2[1/m3] | 1/WVz[1/m2] |
| 1.2E-05          | -150.0   | -145.0   | 196.8     | 5.670E-03 |     | 3.097E+04   | 1.913E+02   |
|                  | 150.0    | 145.0    | 264.1     |           |     | 1.399E+03   | 4.455E+02   |

$\alpha$ -T[1/K] Elongation coefficient  
ymin[mm], zmin[mm], ymax[mm], zmax[mm] extreme coordinates relative to centroid  
hymin[mm], hzmin[mm] minimum value for internal lever  
AK[m2] torsional equivalent area (Bredt)  
MRs transverse reinforcements material number  
1/WT[1/m3], 1/WT2[1/m3] torsional resistance  
1/WVy[1/m2], 1/WVz[1/m2] shear force resistance  
AB[m2] gross concrete area

# ΕΛΕΓΧΟΙ ΜΕΣΟΒΑΘΡΩΝ

## Sections

### Section values for warping

| Wmin[m2]           | Wmax[m2]                 | CM[m6]    | CMS[m4]              | ASwyy[m6]  | ASwzz[m6]               | ry[mm] | rz[mm] |
|--------------------|--------------------------|-----------|----------------------|------------|-------------------------|--------|--------|
| -0.0215            | 0.0215                   | 1.175E-06 | 0.000                | -1.110E-16 | 6.813E-16               | 0.0    | 0.0    |
| Wmin[m2], Wmax[m2] | unit warping             |           | ASwyy[m6], ASwzz[m6] |            | warping sectional value |        |        |
| CM[m6]             | warping resistance       |           | ry[mm], rz[mm]       |            | sectional distance      |        |        |
| CMS[m4]            | warping shear resistance |           |                      |            |                         |        |        |

### Design forces and moments

|                 | N[kN]  | Vy[kN]  | Vz[kN] | Mt[kNm] | Mt2[kNm] | Mb[kNm2] | My[kNm] | Mz[kNm] | y[mm] | z[mm] | BUCK    |
|-----------------|--------|---------|--------|---------|----------|----------|---------|---------|-------|-------|---------|
| P <sup>12</sup> | 2644.6 | 1139.69 | 505.77 | 11.05   | 157.28   | 20.43    | 325.09  | 150.68  | 0.0   | 145.0 | -, b, c |
| E <sup>32</sup> | 2644.6 | 701.89  | 304.53 | 4.38    | 95.97    | 12.82    | 296.01  | 98.85   | 0.0   | 145.0 |         |

<sup>1</sup> P = plastic design values (ultimate bearing capacity)

<sup>2</sup> Material safety γ-M0 for structural steel = 1.00

<sup>3</sup> E = elastic design values (stress limit reached)

|                |                            |                  |                                |
|----------------|----------------------------|------------------|--------------------------------|
| N[kN]          | normal force               | Mb[kNm2]         | warping moment                 |
| Vy[kN], Vz[kN] | shear force                | My[kNm], Mz[kNm] | bending moment                 |
| Mt[kNm]        | primary torsional moment   | y[mm], z[mm]     | ordinate of plastic centre     |
| Mt2[kNm]       | secondary torsional moment | BUCK             | buckling curve (LTB, y-y, z-z) |

### Additional design data

| Mat            | periphery-O/-I             | deff   | t-min                        | t-max | thet-p                      | thet-y   | thet-z   | thet-yz  | yg    | zg   |       |
|----------------|----------------------------|--------|------------------------------|-------|-----------------------------|----------|----------|----------|-------|------|-------|
|                | [m2/m]                     | [m2/m] | [mm]                         | [mm]  | [kgm2/m]                    | [kgm2/m] | [kgm2/m] | [kgm2/m] | [mm]  | [mm] |       |
|                | 1.717                      |        | 13.1                         | 8.5   | 14.0                        | 1.929    | 1.434    | 0.495    | 0.000 | 0.0  | 145.0 |
| Mat            | material number            |        | t-min,t-max                  |       | thickness                   |          |          |          |       |      |       |
| periphery-O/-I | peripheral area per length |        | thet-p,thet-y,thet-z,thet-yz |       | rotational mass             |          |          |          |       |      |       |
| deff           | effective depth            |        | yg,zg                        |       | ordinate of the mass centre |          |          |          |       |      |       |

### Rolled steel

| Rolled steel |               | D[mm]          | B[mm]                | s[mm] | t[mm] | r[mm] | yr[mm] | zr[mm] | [grd] |
|--------------|---------------|----------------|----------------------|-------|-------|-------|--------|--------|-------|
| HEA          | 300           | 290.0          | 300.0                | 8.5   | 14.0  | 27.0  |        |        |       |
| D[mm]        | height        | t[mm]          | flange thickness     |       |       |       |        |        |       |
| B[mm]        | width         | r[mm]          | fillet radius        |       |       |       |        |        |       |
| s[mm]        | web thickness | yr[mm], zr[mm] | sectional coordinate |       |       |       |        |        |       |

### Hydrodynamic coefficients for wind and wave loading

| α[°]    | cw-y[-] | cw-z[-] | cw-t[-] | ref | c-m[-] | c-lat[-] | Strouhal |
|---------|---------|---------|---------|-----|--------|----------|----------|
| -180.00 | -1.700  | 0.000   | 0.000   | BH  | 2.000  | 0.300    | 0.140    |
| -135.00 | -1.500  | -1.500  | 0.000   | BH  | 2.000  | 0.300    | 0.140    |
| -90.00  | 0.000   | -1.700  | 0.000   | BH  | 2.000  | 0.300    | 0.140    |
| -45.00  | 1.500   | -1.500  | 0.000   | BH  | 2.000  | 0.300    | 0.140    |
| 0.00    | 1.700   | 0.000   | 0.000   | BH  | 2.000  | 0.300    | 0.140    |
| 45.00   | 1.500   | 1.500   | 0.000   | BH  | 2.000  | 0.300    | 0.140    |
| 90.00   | 0.000   | 1.700   | 0.000   | BH  | 2.000  | 0.300    | 0.140    |
| 135.00  | -1.500  | 1.500   | 0.000   | BH  | 2.000  | 0.300    | 0.140    |
| 180.00  | -1.700  | 0.000   | 0.000   | BH  | 2.000  | 0.300    | 0.140    |

|         |                    |          |                                  |
|---------|--------------------|----------|----------------------------------|
| α[°]    | angle of attack    | ref      | reference for force coefficients |
| cw-y[-] | drag coefficient   | c-m[-]   | hydrodynamic coefficient         |
| cw-z[-] | lift coefficient   | c-lat[-] | lateral coefficient              |
| cw-t[-] | moment coefficient | Strouhal | Strouhal number                  |

ΕΛΕΓΧΟΙ ΜΕΣΟΒΑΘΡΩΝ

Actions

Actions

| type               | part | sup  | Designation       | $\gamma-u$ | $\gamma-f$ | $\gamma-a$ | $\psi_0$ | $\psi_1$ | $\psi_2$ | $\psi_{1inf}$ |
|--------------------|------|------|-------------------|------------|------------|------------|----------|----------|----------|---------------|
| G                  | G    | perm | DEAD LOADS        | 1.35       | 1.00       | 1.00       | 1.00     | 1.00     | 1.00     | 1.00          |
| G_1                | G    | perm | DEAD LOADS G_1    | 1.35       | 1.00       | 1.00       | 1.00     | 1.00     | 1.00     | 1.00          |
| G_2                | G    | perm | dead load g2      | 1.35       | 1.00       | 1.00       | 1.00     | 1.00     | 1.00     | 1.00          |
| C                  | P    | perm | creep + shrinkage | 1.00       | 1.00       | 1.00       | 1.00     | 1.00     | 1.00     | 1.00          |
| L                  | Q    | excl | live loading      | 1.35       | 0.00       | 1.00       | 0.75     | 0.75     | 0.00     | 0.80          |
| L_T                | Q    | cond | LT                | 1.35       | 0.00       | 1.00       | 0.75     | 0.75     | 0.00     | 0.80          |
| L_U                | Q    | excl | Footbridge gr1    | 1.35       | 0.00       | 1.00       | 0.40     | 0.40     | 0.00     | 1.00          |
| Q                  | Q    | cond | Q Buildings       | 1.50       | 0.00       | 1.00       | 0.70     | 0.70     | 0.30     | 0.70          |
| QX                 | Q    | cond | EARTH PR. Q       | 1.50       | 0.00       | 1.00       | 0.70     | 0.70     | 0.30     | 0.70          |
| T                  | Q    | excl | TEMPERATURE       | 1.50       | 0.00       | 1.00       | 0.60     | 0.60     | 0.50     | 1.00          |
| W                  | Q    | cond | WATER PRESSURE    | 1.35       | 0.00       | 1.00       | 1.00     | 1.00     | 1.00     | 1.00          |
| X                  | Q    | cond | EARTH PRESSURE    | 1.35       | 0.00       | 1.00       | 1.00     | 1.00     | 1.00     | 1.00          |
| Reliability factor |      |      |                   | Kfi        | 1.000      |            |          |          |          |               |
| Reduction factor   |      |      |                   | xsi        | 0.850      |            |          |          |          |               |

type action  $\gamma-u, \gamma-f, \gamma-a$  partial safety factors for unfavourable/favourable/accidental  
part partition of the action  $\psi_0, \psi_1, \psi_2, \psi_{1inf}$  combination coefficients  
sup superposition type

ΕΛΕΓΧΟΙ ΜΕΣΟΒΑΘΡΩΝ  
ΠΕΡΙΓΡΑΦΗ ΒΑΣΙΚΩΝ ΦΟΡΤΙΣΕΩΝ

### Actions

| type | part | sup  | Designation       | $\gamma-u$ | $\gamma-f$ | $\gamma-a$ | $\psi_0$ | $\psi_1$ | $\psi_2$ | $\psi_{1inf}$ |
|------|------|------|-------------------|------------|------------|------------|----------|----------|----------|---------------|
| G    | G    | perm | DEAD LOADS        | 1.35       | 1.00       | 1.00       | 1.00     | 1.00     | 1.00     | 1.00          |
| G_1  | G    | perm | DEAD LOADS G_1    | 1.35       | 1.00       | 1.00       | 1.00     | 1.00     | 1.00     | 1.00          |
| G_2  | G    | perm | dead load g2      | 1.35       | 1.00       | 1.00       | 1.00     | 1.00     | 1.00     | 1.00          |
| C    | P    | perm | creep + shrinkage | 1.00       | 1.00       | 1.00       | 1.00     | 1.00     | 1.00     | 1.00          |
| L    | Q    | excl | live loading      | 1.35       | 0.00       | 1.00       | 0.75     | 0.75     | 0.00     | 0.80          |
| L_T  | Q    | cond | LT                | 1.35       | 0.00       | 1.00       | 0.75     | 0.75     | 0.00     | 0.80          |
| L_U  | Q    | excl | Footbridge gr1    | 1.35       | 0.00       | 1.00       | 0.40     | 0.40     | 0.00     | 1.00          |
| Q    | Q    | cond | Q Buildings       | 1.50       | 0.00       | 1.00       | 0.70     | 0.70     | 0.30     | 0.70          |
| QX   | Q    | cond | EARTH PR. Q       | 1.50       | 0.00       | 1.00       | 0.70     | 0.70     | 0.30     | 0.70          |
| T    | Q    | excl | TEMPERATURE       | 1.50       | 0.00       | 1.00       | 0.60     | 0.60     | 0.50     | 1.00          |
| W    | Q    | cond | WATER PRESSURE    | 1.35       | 0.00       | 1.00       | 1.00     | 1.00     | 1.00     | 1.00          |
| X    | Q    | cond | EARTH PRESSURE    | 1.35       | 0.00       | 1.00       | 1.00     | 1.00     | 1.00     | 1.00          |

Reliability factor Kfi 1.000

Reduction factor xsi 0.850

type action  $\gamma-u, \gamma-f, \gamma-a$  partial safety factors for unfavourable/favourable/accidental  
part partition of the action  $\psi_0, \psi_1, \psi_2, \psi_{1inf}$  combination coefficients  
sup superposition type

### Load Case 1 (G ) I.B. (G)

|                                    |               |                    |
|------------------------------------|---------------|--------------------|
| Factor forces and moments          |               | 1.000              |
| Factor dead weight                 | DL-ZZ         | -1.100             |
| unfavourable partial safety factor |               | 1.350              |
| favourable partial safety factor   |               | 1.000              |
| Combination coefficient            | $\psi_0$      | 1.000 (rare)       |
| Combination coefficient            | $\psi_{1inf}$ | 1.000 (infrequent) |
| Combination coefficient            | $\psi_1$      | 1.000 (frequent)   |
| Combination coefficient            | $\psi_2$      | 1.000 (permanent)  |

### Load Case 2 (G\_1 ) ΠΡΟΣΘΕΤΑ ΜΟΝΙΜΑ (G1)

|                                    |               |                    |
|------------------------------------|---------------|--------------------|
| Factor forces and moments          |               | 1.000              |
| unfavourable partial safety factor |               | 1.350              |
| favourable partial safety factor   |               | 1.000              |
| Combination coefficient            | $\psi_0$      | 1.000 (rare)       |
| Combination coefficient            | $\psi_{1inf}$ | 1.000 (infrequent) |
| Combination coefficient            | $\psi_1$      | 1.000 (frequent)   |
| Combination coefficient            | $\psi_2$      | 1.000 (permanent)  |

### Loads

| Kind | Reference to | Projection Designation | Coordinates         | Type      | Load value     |
|------|--------------|------------------------|---------------------|-----------|----------------|
|      |              |                        | W[m] X[m] Y[m] Z[m] |           |                |
| Area | QGRP 1       |                        |                     | PG        | 2.90 [kN/m2]   |
|      |              |                        |                     | activated | 100.00 percent |
| Area | QGRP 2       |                        |                     | PG        | 2.90 [kN/m2]   |
|      |              |                        |                     | activated | 100.00 percent |
| Area | QGRP 3       |                        |                     | PG        | 2.90 [kN/m2]   |
|      |              |                        |                     | activated | 100.00 percent |
| Area | QGRP 11      |                        |                     | PG        | 2.90 [kN/m2]   |
|      |              |                        |                     | activated | 100.00 percent |
| Area | QGRP 12      |                        |                     | PG        | 2.90 [kN/m2]   |
|      |              |                        |                     | activated | 100.00 percent |
| Area | QGRP 13      |                        |                     | PG        | 2.90 [kN/m2]   |
|      |              |                        |                     | activated | 100.00 percent |
| Area | QGRP 14      |                        |                     | PG        | 2.90 [kN/m2]   |
|      |              |                        |                     | activated | 100.00 percent |
| Area | QGRP 21      |                        |                     | PG        | 2.90 [kN/m2]   |
|      |              |                        |                     | activated | 100.00 percent |
| Area | QGRP 22      |                        |                     | PG        | 2.90 [kN/m2]   |
|      |              |                        |                     | activated | 100.00 percent |
| Area | QGRP 23      |                        |                     | PG        | 2.90 [kN/m2]   |



ΕΛΕΓΧΟΙ ΜΕΣΟΒΑΘΡΩΝ  
ΠΕΡΙΓΡΑΦΗ ΒΑΣΙΚΩΝ ΦΟΡΤΙΣΕΩΝ

Loads

| Kind | Reference to | Projection Designation | W[m] | Coordinates X[m] Y[m] Z[m] | Type      | Load value     |
|------|--------------|------------------------|------|----------------------------|-----------|----------------|
| Area | QGRP         | 24                     |      |                            | activated | 100.00 percent |
|      |              |                        |      |                            | PG        | 2.90 [kN/m2]   |
|      |              |                        |      |                            | activated | 100.00 percent |

Load Case 3 (L\_T ) ΦΟΡΤΙΟ ΚΥΚΛΟΦΟΡΙΑΣ LT1

|                                    |               |                    |
|------------------------------------|---------------|--------------------|
| Factor forces and moments          |               | 1.000              |
| unfavourable partial safety factor |               | 1.350              |
| favourable partial safety factor   |               | 0.000              |
| Combination coefficient            | $\psi_0$      | 0.750 (rare)       |
| Combination coefficient            | $\psi_{1inf}$ | 0.800 (infrequent) |
| Combination coefficient            | $\psi_1$      | 0.750 (frequent)   |
| Combination coefficient            | $\psi_2$      | 0.000 (permanent)  |

Loads

| Kind | Reference to | Projection Designation | W[m] | Coordinates X[m] Y[m] Z[m] | Type      | Load value     |
|------|--------------|------------------------|------|----------------------------|-----------|----------------|
| Area | QGRP         | 21                     |      |                            | PG        | 625.00 [kN/m2] |
|      |              |                        |      |                            | activated | 100.00 percent |
| Area | QGRP         | 22                     |      |                            | PG        | 625.00 [kN/m2] |
|      |              |                        |      |                            | activated | 100.00 percent |

Load Case 4 (L\_U ) ΦΟΡΤΙΟ ΚΥΚΛΟΦΟΡΙΑΣ LU

|                                    |               |                    |
|------------------------------------|---------------|--------------------|
| Factor forces and moments          |               | 1.000              |
| unfavourable partial safety factor |               | 1.350              |
| favourable partial safety factor   |               | 0.000              |
| Combination coefficient            | $\psi_0$      | 0.400 (rare)       |
| Combination coefficient            | $\psi_{1inf}$ | 1.000 (infrequent) |
| Combination coefficient            | $\psi_1$      | 0.400 (frequent)   |
| Combination coefficient            | $\psi_2$      | 0.000 (permanent)  |

Loads

| Kind | Reference to | Projection Designation | W[m] | Coordinates X[m] Y[m] Z[m] | Type      | Load value     |
|------|--------------|------------------------|------|----------------------------|-----------|----------------|
| Area | QGRP         | 11                     |      |                            | PG        | 5.00 [kN/m2]   |
|      |              |                        |      |                            | activated | 100.00 percent |
| Area | QGRP         | 13                     |      |                            | PG        | 5.00 [kN/m2]   |
|      |              |                        |      |                            | activated | 100.00 percent |
| Area | QGRP         | 14                     |      |                            | PG        | 5.00 [kN/m2]   |
|      |              |                        |      |                            | activated | 100.00 percent |
| Area | QGRP         | 24                     |      |                            | PG        | 5.00 [kN/m2]   |
|      |              |                        |      |                            | activated | 100.00 percent |

Load Case 5 (L\_T ) ΦΟΡΤΙΟ ΑΝΘΡΩΠΟΣΥΝΟΣΤΙΣΜΟΥ

|                                    |               |                    |
|------------------------------------|---------------|--------------------|
| Factor forces and moments          |               | 1.000              |
| unfavourable partial safety factor |               | 1.350              |
| favourable partial safety factor   |               | 0.000              |
| Combination coefficient            | $\psi_0$      | 0.750 (rare)       |
| Combination coefficient            | $\psi_{1inf}$ | 0.800 (infrequent) |
| Combination coefficient            | $\psi_1$      | 0.750 (frequent)   |
| Combination coefficient            | $\psi_2$      | 0.000 (permanent)  |

Loads

| Kind | Reference to | Projection Designation | W[m] | Coordinates X[m] Y[m] Z[m] | Type      | Load value     |
|------|--------------|------------------------|------|----------------------------|-----------|----------------|
| Area | QGRP         | 1                      |      |                            | PG        | 5.00 [kN/m2]   |
|      |              |                        |      |                            | activated | 100.00 percent |
| Area | QGRP         | 2                      |      |                            | PG        | 5.00 [kN/m2]   |

ΕΛΕΓΧΟΙ ΜΕΣΟΒΑΘΡΩΝ  
ΠΕΡΙΓΡΑΦΗ ΒΑΣΙΚΩΝ ΦΟΡΤΙΣΕΩΝ

**Loads**

| Kind | Reference to | Projection Designation | W[m] | Coordinates X[m] Y[m] | Z[m]      | Type | Load value     |
|------|--------------|------------------------|------|-----------------------|-----------|------|----------------|
|      |              |                        |      |                       | activated |      | 100.00 percent |
| Area | QGRP 3       |                        |      |                       |           | PG   | 5.00 [kN/m2]   |
|      |              |                        |      |                       | activated |      | 100.00 percent |
| Area | QGRP 11      |                        |      |                       |           | PG   | 5.00 [kN/m2]   |
|      |              |                        |      |                       | activated |      | 100.00 percent |
| Area | QGRP 12      |                        |      |                       |           | PG   | 5.00 [kN/m2]   |
|      |              |                        |      |                       | activated |      | 100.00 percent |
| Area | QGRP 13      |                        |      |                       |           | PG   | 5.00 [kN/m2]   |
|      |              |                        |      |                       | activated |      | 100.00 percent |
| Area | QGRP 14      |                        |      |                       |           | PG   | 5.00 [kN/m2]   |
|      |              |                        |      |                       | activated |      | 100.00 percent |
| Area | QGRP 21      |                        |      |                       |           | PG   | 5.00 [kN/m2]   |
|      |              |                        |      |                       | activated |      | 100.00 percent |
| Area | QGRP 22      |                        |      |                       |           | PG   | 5.00 [kN/m2]   |
|      |              |                        |      |                       | activated |      | 100.00 percent |
| Area | QGRP 23      |                        |      |                       |           | PG   | 5.00 [kN/m2]   |
|      |              |                        |      |                       | activated |      | 100.00 percent |
| Area | QGRP 24      |                        |      |                       |           | PG   | 5.00 [kN/m2]   |
|      |              |                        |      |                       | activated |      | 100.00 percent |

**Load Case 6 (L\_T ) ΦΟΡΤΙΟ ΠΕΖΟΔΡΟΜΙΟΥ**

|                                    |               |                    |
|------------------------------------|---------------|--------------------|
| Factor forces and moments          |               | 1.000              |
| unfavourable partial safety factor |               | 1.350              |
| favourable partial safety factor   |               | 0.000              |
| Combination coefficient            | $\psi_0$      | 0.750 (rare)       |
| Combination coefficient            | $\psi_{1inf}$ | 0.800 (infrequent) |
| Combination coefficient            | $\psi_1$      | 0.750 (frequent)   |
| Combination coefficient            | $\psi_2$      | 0.000 (permanent)  |

**Loads**

| Kind | Reference to | Projection Designation | W[m] | Coordinates X[m] Y[m] | Z[m]      | Type | Load value     |
|------|--------------|------------------------|------|-----------------------|-----------|------|----------------|
| Area | QGRP 2       |                        |      |                       |           | PG   | 5.00 [kN/m2]   |
|      |              |                        |      |                       | activated |      | 100.00 percent |
| Area | QGRP 3       |                        |      |                       |           | PG   | 5.00 [kN/m2]   |
|      |              |                        |      |                       | activated |      | 100.00 percent |

**Load Case 7 (L\_T ) ΦΟΡΤΙΟ ΚΥΚΛΟΦΟΡΙΑΣ LT1\_2**

|                                    |               |                    |
|------------------------------------|---------------|--------------------|
| Factor forces and moments          |               | 1.000              |
| unfavourable partial safety factor |               | 1.350              |
| favourable partial safety factor   |               | 0.000              |
| Combination coefficient            | $\psi_0$      | 0.750 (rare)       |
| Combination coefficient            | $\psi_{1inf}$ | 0.800 (infrequent) |
| Combination coefficient            | $\psi_1$      | 0.750 (frequent)   |
| Combination coefficient            | $\psi_2$      | 0.000 (permanent)  |

**Loads**

| Kind | Reference to | Projection Designation | W[m] | Coordinates X[m] Y[m] | Z[m]      | Type | Load value     |
|------|--------------|------------------------|------|-----------------------|-----------|------|----------------|
| Area | QGRP 23      |                        |      |                       |           | PG   | 625.00 [kN/m2] |
|      |              |                        |      |                       | activated |      | 100.00 percent |
| Area | QGRP 24      |                        |      |                       |           | PG   | 625.00 [kN/m2] |
|      |              |                        |      |                       | activated |      | 100.00 percent |

ΕΛΕΓΧΟΙ ΜΕΣΟΒΑΘΡΩΝ  
ΠΕΡΙΓΡΑΦΗ ΒΑΣΙΚΩΝ ΦΟΡΤΙΣΕΩΝ

**Load Case 8 (L\_U ) ΦΟΡΤΙΟ ΚΥΚΛΟΦΟΡΙΑΣ LU2**

|                                    |               |                    |
|------------------------------------|---------------|--------------------|
| Factor forces and moments          |               | 1.000              |
| unfavourable partial safety factor |               | 1.350              |
| favourable partial safety factor   |               | 0.000              |
| Combination coefficient            | $\psi_0$      | 0.400 (rare)       |
| Combination coefficient            | $\psi_{1inf}$ | 1.000 (infrequent) |
| Combination coefficient            | $\psi_1$      | 0.400 (frequent)   |
| Combination coefficient            | $\psi_2$      | 0.000 (permanent)  |

**Loads**

| Kind | Reference to | Projection Designation | W[m] | Coordinates X[m] Y[m] Z[m] | Type      | Load value     |
|------|--------------|------------------------|------|----------------------------|-----------|----------------|
| Area | QGRP 11      |                        |      |                            | PG        | 5.00 [kN/m2]   |
|      |              |                        |      |                            | activated | 100.00 percent |
| Area | QGRP 12      |                        |      |                            | PG        | 5.00 [kN/m2]   |
|      |              |                        |      |                            | activated | 100.00 percent |
| Area | QGRP 13      |                        |      |                            | PG        | 5.00 [kN/m2]   |
|      |              |                        |      |                            | activated | 100.00 percent |
| Area | QGRP 21      |                        |      |                            | PG        | 5.00 [kN/m2]   |
|      |              |                        |      |                            | activated | 100.00 percent |

**Load Case 9 (T ) ΣΥΣΤΟΛΗ ΞΗΡΑΝΣΗΣ**

|                                    |               |                    |
|------------------------------------|---------------|--------------------|
| Factor forces and moments          |               | 1.000              |
| unfavourable partial safety factor |               | 1.500              |
| favourable partial safety factor   |               | 0.000              |
| Combination coefficient            | $\psi_0$      | 0.600 (rare)       |
| Combination coefficient            | $\psi_{1inf}$ | 1.000 (infrequent) |
| Combination coefficient            | $\psi_1$      | 0.600 (frequent)   |
| Combination coefficient            | $\psi_2$      | 0.500 (permanent)  |

**Loads acting on Beam elements**

| Number | Type | a[m]  | l[m]  | Load value | Load value Unit | ya[mm] | za[mm] | ye[mm] | ze[mm] | Ref |
|--------|------|-------|-------|------------|-----------------|--------|--------|--------|--------|-----|
| 900001 | dTz  | 0.000 | 0.125 | 25.30      | [°C]            |        |        |        |        |     |
| 900002 | dTz  | 0.000 | 0.125 | 25.30      | [°C]            |        |        |        |        |     |
| 900003 | dTz  | 0.000 | 0.140 | 25.30      | [°C]            |        |        |        |        |     |
| 900004 | dTz  | 0.000 | 0.141 | 25.30      | [°C]            |        |        |        |        |     |
| 900005 | dTz  | 0.000 | 0.159 | 25.30      | [°C]            |        |        |        |        |     |
| 900006 | dTz  | 0.000 | 0.159 | 25.30      | [°C]            |        |        |        |        |     |
| 900007 | dTz  | 0.000 | 0.173 | 25.30      | [°C]            |        |        |        |        |     |
| 900008 | dTz  | 0.000 | 0.173 | 25.30      | [°C]            |        |        |        |        |     |
| 900009 | dTz  | 0.000 | 0.110 | 25.30      | [°C]            |        |        |        |        |     |
| 900010 | dTz  | 0.000 | 0.179 | 25.30      | [°C]            |        |        |        |        |     |
| 900011 | dTz  | 0.000 | 0.131 | 25.30      | [°C]            |        |        |        |        |     |
| 900012 | dTz  | 0.000 | 0.131 | 25.30      | [°C]            |        |        |        |        |     |
| 900013 | dTz  | 0.000 | 0.150 | 25.30      | [°C]            |        |        |        |        |     |
| 900014 | dTz  | 0.000 | 0.150 | 25.30      | [°C]            |        |        |        |        |     |
| 900015 | dTz  | 0.000 | 0.181 | 25.30      | [°C]            |        |        |        |        |     |
| 900016 | dTz  | 0.000 | 0.181 | 25.30      | [°C]            |        |        |        |        |     |
| 900017 | dTz  | 0.000 | 0.159 | 25.30      | [°C]            |        |        |        |        |     |
| 900018 | dTz  | 0.000 | 0.159 | 25.30      | [°C]            |        |        |        |        |     |
| 900019 | dTz  | 0.000 | 0.151 | 25.30      | [°C]            |        |        |        |        |     |
| 900020 | dTz  | 0.000 | 0.153 | 25.30      | [°C]            |        |        |        |        |     |
| 900021 | dTz  | 0.000 | 0.145 | 25.30      | [°C]            |        |        |        |        |     |
| 900022 | dTz  | 0.000 | 0.145 | 25.30      | [°C]            |        |        |        |        |     |
| 900023 | dTz  | 0.000 | 0.139 | 25.30      | [°C]            |        |        |        |        |     |
| 900024 | dTz  | 0.000 | 0.139 | 25.30      | [°C]            |        |        |        |        |     |
| 900025 | dTz  | 0.000 | 0.133 | 25.30      | [°C]            |        |        |        |        |     |
| 900026 | dTz  | 0.000 | 0.133 | 25.30      | [°C]            |        |        |        |        |     |
| 900027 | dTz  | 0.000 | 0.127 | 25.30      | [°C]            |        |        |        |        |     |
| 900028 | dTz  | 0.000 | 0.127 | 25.30      | [°C]            |        |        |        |        |     |

ΕΛΕΓΧΟΙ ΜΕΣΟΒΑΘΡΩΝ  
ΠΕΡΙΓΡΑΦΗ ΒΑΣΙΚΩΝ ΦΟΡΤΙΣΕΩΝ

Loads acting on Beam elements

| Number | Type | a[m]  | l[m]  | Load value | Load value | Unit | ya[mm] | za[mm] | ye[mm] | ze[mm] | Ref |
|--------|------|-------|-------|------------|------------|------|--------|--------|--------|--------|-----|
| 900029 | dTz  | 0.000 | 0.121 | 25.30      |            | [°C] |        |        |        |        |     |
| 900030 | dTz  | 0.000 | 0.121 | 25.30      |            | [°C] |        |        |        |        |     |
| 900031 | dTz  | 0.000 | 0.118 | 25.30      |            | [°C] |        |        |        |        |     |
| 900032 | dTz  | 0.000 | 0.114 | 25.30      |            | [°C] |        |        |        |        |     |
| 900033 | dTz  | 0.000 | 0.111 | 25.30      |            | [°C] |        |        |        |        |     |
| 900034 | dTz  | 0.000 | 0.111 | 25.30      |            | [°C] |        |        |        |        |     |
| 900035 | dTz  | 0.000 | 0.115 | 25.30      |            | [°C] |        |        |        |        |     |
| 900036 | dTz  | 0.000 | 0.115 | 25.30      |            | [°C] |        |        |        |        |     |
| 900037 | dTz  | 0.000 | 0.108 | 25.30      |            | [°C] |        |        |        |        |     |
| 900038 | dTz  | 0.000 | 0.139 | 25.30      |            | [°C] |        |        |        |        |     |
| 900039 | dTz  | 0.000 | 0.133 | 25.30      |            | [°C] |        |        |        |        |     |
| 900040 | dTz  | 0.000 | 0.133 | 25.30      |            | [°C] |        |        |        |        |     |
| 900041 | dTz  | 0.000 | 0.143 | 25.30      |            | [°C] |        |        |        |        |     |
| 900042 | dTz  | 0.000 | 0.143 | 25.30      |            | [°C] |        |        |        |        |     |
| 900043 | dTz  | 0.000 | 0.154 | 25.30      |            | [°C] |        |        |        |        |     |
| 900044 | dTz  | 0.000 | 0.154 | 25.30      |            | [°C] |        |        |        |        |     |
| 900045 | dTz  | 0.000 | 0.166 | 25.30      |            | [°C] |        |        |        |        |     |
| 900046 | dTz  | 0.000 | 0.165 | 25.30      |            | [°C] |        |        |        |        |     |
| 900047 | dTz  | 0.000 | 0.178 | 25.30      |            | [°C] |        |        |        |        |     |
| 900048 | dTz  | 0.000 | 0.178 | 25.30      |            | [°C] |        |        |        |        |     |
| 900049 | dTz  | 0.000 | 0.203 | 25.30      |            | [°C] |        |        |        |        |     |
| 900050 | dTz  | 0.000 | 0.180 | 25.30      |            | [°C] |        |        |        |        |     |
| 900051 | dTz  | 0.000 | 0.163 | 25.30      |            | [°C] |        |        |        |        |     |
| 900052 | dTz  | 0.000 | 0.163 | 25.30      |            | [°C] |        |        |        |        |     |
| 900053 | dTz  | 0.000 | 0.197 | 25.30      |            | [°C] |        |        |        |        |     |
| 900054 | dTz  | 0.000 | 0.197 | 25.30      |            | [°C] |        |        |        |        |     |
| 900055 | dTz  | 0.000 | 0.244 | 25.30      |            | [°C] |        |        |        |        |     |
| 900056 | dTz  | 0.000 | 0.244 | 25.30      |            | [°C] |        |        |        |        |     |
| 900057 | dTz  | 0.000 | 0.231 | 25.30      |            | [°C] |        |        |        |        |     |
| 900058 | dTz  | 0.000 | 0.231 | 25.30      |            | [°C] |        |        |        |        |     |
| 900059 | dTz  | 0.000 | 0.199 | 25.30      |            | [°C] |        |        |        |        |     |
| 900060 | dTz  | 0.000 | 0.199 | 25.30      |            | [°C] |        |        |        |        |     |
| 900061 | dTz  | 0.000 | 0.170 | 25.30      |            | [°C] |        |        |        |        |     |
| 900062 | dTz  | 0.000 | 0.170 | 25.30      |            | [°C] |        |        |        |        |     |
| 900063 | dTz  | 0.000 | 0.100 | 25.30      |            | [°C] |        |        |        |        |     |
| 900064 | dTz  | 0.000 | 0.100 | 25.30      |            | [°C] |        |        |        |        |     |
| 900065 | dTz  | 0.000 | 0.057 | 25.30      |            | [°C] |        |        |        |        |     |
| 900066 | dTz  | 0.000 | 0.057 | 25.30      |            | [°C] |        |        |        |        |     |
| 900067 | dTz  | 0.000 | 0.071 | 25.30      |            | [°C] |        |        |        |        |     |
| 900068 | dTz  | 0.000 | 0.071 | 25.30      |            | [°C] |        |        |        |        |     |
| 900069 | dTz  | 0.000 | 0.089 | 25.30      |            | [°C] |        |        |        |        |     |
| 900070 | dTz  | 0.000 | 0.089 | 25.30      |            | [°C] |        |        |        |        |     |
| 900071 | dTz  | 0.000 | 0.106 | 25.30      |            | [°C] |        |        |        |        |     |
| 900072 | dTz  | 0.000 | 0.116 | 25.30      |            | [°C] |        |        |        |        |     |
| 900073 | dTz  | 0.000 | 0.111 | 25.30      |            | [°C] |        |        |        |        |     |
| 900074 | dTz  | 0.000 | 0.111 | 25.30      |            | [°C] |        |        |        |        |     |
| 900075 | dTz  | 0.000 | 0.098 | 25.30      |            | [°C] |        |        |        |        |     |
| 900076 | dTz  | 0.000 | 0.080 | 25.30      |            | [°C] |        |        |        |        |     |
| 900077 | dTz  | 0.000 | 0.071 | 25.30      |            | [°C] |        |        |        |        |     |
| 900078 | dTz  | 0.000 | 0.071 | 25.30      |            | [°C] |        |        |        |        |     |
| 900079 | dTz  | 0.000 | 0.057 | 25.30      |            | [°C] |        |        |        |        |     |
| 900080 | dTz  | 0.000 | 0.057 | 25.30      |            | [°C] |        |        |        |        |     |
| 900081 | dTz  | 0.000 | 0.100 | 25.30      |            | [°C] |        |        |        |        |     |
| 900082 | dTz  | 0.000 | 0.100 | 25.30      |            | [°C] |        |        |        |        |     |
| 900083 | dTz  | 0.000 | 0.050 | 25.30      |            | [°C] |        |        |        |        |     |
| 900084 | dTz  | 0.000 | 0.050 | 25.30      |            | [°C] |        |        |        |        |     |
| 900085 | dTz  | 0.000 | 0.075 | 25.30      |            | [°C] |        |        |        |        |     |
| 900086 | dTz  | 0.000 | 0.075 | 25.30      |            | [°C] |        |        |        |        |     |

ΕΛΕΓΧΟΙ ΜΕΣΟΒΑΘΡΩΝ  
ΠΕΡΙΓΡΑΦΗ ΒΑΣΙΚΩΝ ΦΟΡΤΙΣΕΩΝ

Loads acting on Beam elements

| Number | Type | a[m]  | l[m]  | Load value | Load value Unit | ya[mm] | za[mm] | ye[mm] | ze[mm] | Ref |
|--------|------|-------|-------|------------|-----------------|--------|--------|--------|--------|-----|
| 900087 | dTz  | 0.000 | 0.097 | 25.30      | [°C]            |        |        |        |        |     |
| 900088 | dTz  | 0.000 | 0.097 | 25.30      | [°C]            |        |        |        |        |     |
| 900089 | dTz  | 0.000 | 0.125 | 25.30      | [°C]            |        |        |        |        |     |
| 900090 | dTz  | 0.000 | 0.125 | 25.30      | [°C]            |        |        |        |        |     |
| 900091 | dTz  | 0.000 | 0.128 | 25.30      | [°C]            |        |        |        |        |     |
| 900092 | dTz  | 0.000 | 0.128 | 25.30      | [°C]            |        |        |        |        |     |
| 900093 | dTz  | 0.000 | 0.099 | 25.30      | [°C]            |        |        |        |        |     |
| 900094 | dTz  | 0.000 | 0.099 | 25.30      | [°C]            |        |        |        |        |     |
| 900095 | dTz  | 0.000 | 0.076 | 25.30      | [°C]            |        |        |        |        |     |
| 900096 | dTz  | 0.000 | 0.076 | 25.30      | [°C]            |        |        |        |        |     |
| 900097 | dTz  | 0.000 | 0.100 | 25.30      | [°C]            |        |        |        |        |     |
| 900098 | dTz  | 0.000 | 0.100 | 25.30      | [°C]            |        |        |        |        |     |
| 900099 | dTz  | 0.000 | 0.100 | 25.30      | [°C]            |        |        |        |        |     |
| 900100 | dTz  | 0.000 | 0.100 | 25.30      | [°C]            |        |        |        |        |     |
| 900101 | dTz  | 0.000 | 0.056 | 25.30      | [°C]            |        |        |        |        |     |
| 900102 | dTz  | 0.000 | 0.056 | 25.30      | [°C]            |        |        |        |        |     |
| 900103 | dTz  | 0.000 | 0.071 | 25.30      | [°C]            |        |        |        |        |     |
| 900104 | dTz  | 0.000 | 0.071 | 25.30      | [°C]            |        |        |        |        |     |
| 900105 | dTz  | 0.000 | 0.088 | 25.30      | [°C]            |        |        |        |        |     |
| 900106 | dTz  | 0.000 | 0.088 | 25.30      | [°C]            |        |        |        |        |     |
| 900107 | dTz  | 0.000 | 0.109 | 25.30      | [°C]            |        |        |        |        |     |
| 900108 | dTz  | 0.000 | 0.109 | 25.30      | [°C]            |        |        |        |        |     |
| 900109 | dTz  | 0.000 | 0.109 | 25.30      | [°C]            |        |        |        |        |     |
| 900110 | dTz  | 0.000 | 0.109 | 25.30      | [°C]            |        |        |        |        |     |
| 900111 | dTz  | 0.000 | 0.093 | 25.30      | [°C]            |        |        |        |        |     |
| 900112 | dTz  | 0.000 | 0.083 | 25.30      | [°C]            |        |        |        |        |     |
| 900113 | dTz  | 0.000 | 0.071 | 25.30      | [°C]            |        |        |        |        |     |
| 900114 | dTz  | 0.000 | 0.071 | 25.30      | [°C]            |        |        |        |        |     |
| 900115 | dTz  | 0.000 | 0.056 | 25.30      | [°C]            |        |        |        |        |     |
| 900116 | dTz  | 0.000 | 0.056 | 25.30      | [°C]            |        |        |        |        |     |
| 900117 | dTz  | 0.000 | 0.050 | 25.30      | [°C]            |        |        |        |        |     |
| 900118 | dTz  | 0.000 | 0.050 | 25.30      | [°C]            |        |        |        |        |     |
| 900119 | dTz  | 0.000 | 0.050 | 25.30      | [°C]            |        |        |        |        |     |
| 900120 | dTz  | 0.000 | 0.050 | 25.30      | [°C]            |        |        |        |        |     |
| 900121 | dTz  | 0.000 | 0.057 | 25.30      | [°C]            |        |        |        |        |     |
| 900122 | dTz  | 0.000 | 0.057 | 25.30      | [°C]            |        |        |        |        |     |
| 900123 | dTz  | 0.000 | 0.073 | 25.30      | [°C]            |        |        |        |        |     |
| 900124 | dTz  | 0.000 | 0.073 | 25.30      | [°C]            |        |        |        |        |     |
| 900125 | dTz  | 0.000 | 0.091 | 25.30      | [°C]            |        |        |        |        |     |
| 900126 | dTz  | 0.000 | 0.091 | 25.30      | [°C]            |        |        |        |        |     |
| 900127 | dTz  | 0.000 | 0.110 | 25.30      | [°C]            |        |        |        |        |     |
| 900128 | dTz  | 0.000 | 0.110 | 25.30      | [°C]            |        |        |        |        |     |
| 900129 | dTz  | 0.000 | 0.106 | 25.30      | [°C]            |        |        |        |        |     |
| 900130 | dTz  | 0.000 | 0.108 | 25.30      | [°C]            |        |        |        |        |     |
| 900131 | dTz  | 0.000 | 0.086 | 25.30      | [°C]            |        |        |        |        |     |
| 900132 | dTz  | 0.000 | 0.086 | 25.30      | [°C]            |        |        |        |        |     |
| 900133 | dTz  | 0.000 | 0.070 | 25.30      | [°C]            |        |        |        |        |     |
| 900134 | dTz  | 0.000 | 0.070 | 25.30      | [°C]            |        |        |        |        |     |
| 900135 | dTz  | 0.000 | 0.056 | 25.30      | [°C]            |        |        |        |        |     |
| 900136 | dTz  | 0.000 | 0.056 | 25.30      | [°C]            |        |        |        |        |     |
| 900137 | dTz  | 0.000 | 0.100 | 25.30      | [°C]            |        |        |        |        |     |
| 900138 | dTz  | 0.000 | 0.100 | 25.30      | [°C]            |        |        |        |        |     |
| 900139 | dTz  | 0.000 | 0.067 | 25.30      | [°C]            |        |        |        |        |     |
| 900140 | dTz  | 0.000 | 0.067 | 25.30      | [°C]            |        |        |        |        |     |
| 900141 | dTz  | 0.000 | 0.086 | 25.30      | [°C]            |        |        |        |        |     |
| 900142 | dTz  | 0.000 | 0.086 | 25.30      | [°C]            |        |        |        |        |     |
| 900143 | dTz  | 0.000 | 0.100 | 25.30      | [°C]            |        |        |        |        |     |
| 900144 | dTz  | 0.000 | 0.120 | 25.30      | [°C]            |        |        |        |        |     |

ΕΛΕΓΧΟΙ ΜΕΣΟΒΑΘΡΩΝ  
ΠΕΡΙΓΡΑΦΗ ΒΑΣΙΚΩΝ ΦΟΡΤΙΣΕΩΝ

Loads acting on Beam elements

| Number | Type | a[m]  | l[m]  | Load value | Load value Unit | ya[mm] | za[mm] | ye[mm] | ze[mm] | Ref |
|--------|------|-------|-------|------------|-----------------|--------|--------|--------|--------|-----|
| 900145 | dTz  | 0.000 | 0.118 | 25.30      | [°C]            |        |        |        |        |     |
| 900146 | dTz  | 0.000 | 0.162 | 25.30      | [°C]            |        |        |        |        |     |
| 900147 | dTz  | 0.000 | 0.296 | 25.30      | [°C]            |        |        |        |        |     |
| 900148 | dTz  | 0.000 | 0.296 | 25.30      | [°C]            |        |        |        |        |     |
| 900149 | dTz  | 0.000 | 0.302 | 25.30      | [°C]            |        |        |        |        |     |
| 900150 | dTz  | 0.000 | 0.302 | 25.30      | [°C]            |        |        |        |        |     |
| 900151 | dTz  | 0.000 | 0.321 | 25.30      | [°C]            |        |        |        |        |     |
| 900152 | dTz  | 0.000 | 0.321 | 25.30      | [°C]            |        |        |        |        |     |
| 900153 | dTz  | 0.000 | 0.285 | 25.30      | [°C]            |        |        |        |        |     |
| 900154 | dTz  | 0.000 | 0.285 | 25.30      | [°C]            |        |        |        |        |     |
| 900155 | dTz  | 0.000 | 0.100 | 25.30      | [°C]            |        |        |        |        |     |
| 900156 | dTz  | 0.000 | 0.100 | 25.30      | [°C]            |        |        |        |        |     |
| 900157 | dTz  | 0.000 | 0.128 | 25.30      | [°C]            |        |        |        |        |     |
| 900158 | dTz  | 0.000 | 0.128 | 25.30      | [°C]            |        |        |        |        |     |
| 900159 | dTz  | 0.000 | 0.146 | 25.30      | [°C]            |        |        |        |        |     |
| 900160 | dTz  | 0.000 | 0.146 | 25.30      | [°C]            |        |        |        |        |     |
| 900161 | dTz  | 0.000 | 0.192 | 25.30      | [°C]            |        |        |        |        |     |
| 900162 | dTz  | 0.000 | 0.117 | 25.30      | [°C]            |        |        |        |        |     |
| 900163 | dTz  | 0.000 | 0.133 | 25.30      | [°C]            |        |        |        |        |     |
| 900164 | dTz  | 0.000 | 0.133 | 25.30      | [°C]            |        |        |        |        |     |
| 900165 | dTz  | 0.000 | 0.114 | 25.30      | [°C]            |        |        |        |        |     |
| 900166 | dTz  | 0.000 | 0.105 | 25.30      | [°C]            |        |        |        |        |     |
| 900167 | dTz  | 0.000 | 0.086 | 25.30      | [°C]            |        |        |        |        |     |
| 900168 | dTz  | 0.000 | 0.086 | 25.30      | [°C]            |        |        |        |        |     |
| 900169 | dTz  | 0.000 | 0.050 | 25.30      | [°C]            |        |        |        |        |     |
| 900170 | dTz  | 0.000 | 0.050 | 25.30      | [°C]            |        |        |        |        |     |
| 900171 | dTz  | 0.000 | 0.076 | 25.30      | [°C]            |        |        |        |        |     |
| 900172 | dTz  | 0.000 | 0.076 | 25.30      | [°C]            |        |        |        |        |     |
| 900173 | dTz  | 0.000 | 0.096 | 25.30      | [°C]            |        |        |        |        |     |
| 900174 | dTz  | 0.000 | 0.096 | 25.30      | [°C]            |        |        |        |        |     |
| 900175 | dTz  | 0.000 | 0.124 | 25.30      | [°C]            |        |        |        |        |     |
| 900176 | dTz  | 0.000 | 0.124 | 25.30      | [°C]            |        |        |        |        |     |
| 900177 | dTz  | 0.000 | 0.177 | 25.30      | [°C]            |        |        |        |        |     |
| 900178 | dTz  | 0.000 | 0.177 | 25.30      | [°C]            |        |        |        |        |     |
| 900179 | dTz  | 0.000 | 0.166 | 25.30      | [°C]            |        |        |        |        |     |
| 900180 | dTz  | 0.000 | 0.169 | 25.30      | [°C]            |        |        |        |        |     |
| 900181 | dTz  | 0.000 | 0.159 | 25.30      | [°C]            |        |        |        |        |     |
| 900182 | dTz  | 0.000 | 0.159 | 25.30      | [°C]            |        |        |        |        |     |
| 900183 | dTz  | 0.000 | 0.144 | 25.30      | [°C]            |        |        |        |        |     |
| 900184 | dTz  | 0.000 | 0.144 | 25.30      | [°C]            |        |        |        |        |     |
| 900185 | dTz  | 0.000 | 0.151 | 25.30      | [°C]            |        |        |        |        |     |
| 900186 | dTz  | 0.000 | 0.151 | 25.30      | [°C]            |        |        |        |        |     |
| 900187 | dTz  | 0.000 | 0.147 | 25.30      | [°C]            |        |        |        |        |     |
| 900188 | dTz  | 0.000 | 0.147 | 25.30      | [°C]            |        |        |        |        |     |
| 900189 | dTz  | 0.000 | 0.118 | 25.30      | [°C]            |        |        |        |        |     |
| 900190 | dTz  | 0.000 | 0.118 | 25.30      | [°C]            |        |        |        |        |     |
| 900191 | dTz  | 0.000 | 0.090 | 25.30      | [°C]            |        |        |        |        |     |
| 900192 | dTz  | 0.000 | 0.090 | 25.30      | [°C]            |        |        |        |        |     |
| 900193 | dTz  | 0.000 | 0.050 | 25.30      | [°C]            |        |        |        |        |     |
| 900194 | dTz  | 0.000 | 0.050 | 25.30      | [°C]            |        |        |        |        |     |
| 900195 | dTz  | 0.000 | 0.050 | 25.30      | [°C]            |        |        |        |        |     |
| 900196 | dTz  | 0.000 | 0.050 | 25.30      | [°C]            |        |        |        |        |     |
| 900197 | dTz  | 0.000 | 0.093 | 25.30      | [°C]            |        |        |        |        |     |
| 900198 | dTz  | 0.000 | 0.093 | 25.30      | [°C]            |        |        |        |        |     |
| 900199 | dTz  | 0.000 | 0.121 | 25.30      | [°C]            |        |        |        |        |     |
| 900200 | dTz  | 0.000 | 0.121 | 25.30      | [°C]            |        |        |        |        |     |
| 900201 | dTz  | 0.000 | 0.148 | 25.30      | [°C]            |        |        |        |        |     |
| 900202 | dTz  | 0.000 | 0.148 | 25.30      | [°C]            |        |        |        |        |     |



ΕΛΕΓΧΟΙ ΜΕΣΟΒΑΘΡΩΝ  
ΠΕΡΙΓΡΑΦΗ ΒΑΣΙΚΩΝ ΦΟΡΤΙΣΕΩΝ

Loads acting on Beam elements

| Number | Type | a[m]  | l[m]  | Load value | Load value Unit | ya[mm] | za[mm] | ye[mm] | ze[mm] | Ref |
|--------|------|-------|-------|------------|-----------------|--------|--------|--------|--------|-----|
| 900203 | dTz  | 0.000 | 0.149 | 25.30      | [°C]            |        |        |        |        |     |
| 900204 | dTz  | 0.000 | 0.149 | 25.30      | [°C]            |        |        |        |        |     |
| 900205 | dTz  | 0.000 | 0.125 | 25.30      | [°C]            |        |        |        |        |     |
| 900206 | dTz  | 0.000 | 0.125 | 25.30      | [°C]            |        |        |        |        |     |
| 900207 | dTz  | 0.000 | 0.113 | 25.30      | [°C]            |        |        |        |        |     |
| 900208 | dTz  | 0.000 | 0.113 | 25.30      | [°C]            |        |        |        |        |     |
| 900209 | dTz  | 0.000 | 0.175 | 25.30      | [°C]            |        |        |        |        |     |
| 900210 | dTz  | 0.000 | 0.175 | 25.30      | [°C]            |        |        |        |        |     |
| 900211 | dTz  | 0.000 | 0.229 | 25.30      | [°C]            |        |        |        |        |     |
| 900212 | dTz  | 0.000 | 0.229 | 25.30      | [°C]            |        |        |        |        |     |
| 900213 | dTz  | 0.000 | 0.296 | 25.30      | [°C]            |        |        |        |        |     |
| 900214 | dTz  | 0.000 | 0.296 | 25.30      | [°C]            |        |        |        |        |     |
| 900215 | dTz  | 0.000 | 0.263 | 25.30      | [°C]            |        |        |        |        |     |
| 900216 | dTz  | 0.000 | 0.263 | 25.30      | [°C]            |        |        |        |        |     |
| 900217 | dTz  | 0.000 | 0.324 | 25.30      | [°C]            |        |        |        |        |     |
| 900218 | dTz  | 0.000 | 0.324 | 25.30      | [°C]            |        |        |        |        |     |
| 900219 | dTz  | 0.000 | 0.321 | 25.30      | [°C]            |        |        |        |        |     |
| 900220 | dTz  | 0.000 | 0.321 | 25.30      | [°C]            |        |        |        |        |     |
| 900221 | dTz  | 0.000 | 0.100 | 25.30      | [°C]            |        |        |        |        |     |
| 900222 | dTz  | 0.000 | 0.100 | 25.30      | [°C]            |        |        |        |        |     |
| 900223 | dTz  | 0.000 | 0.075 | 25.30      | [°C]            |        |        |        |        |     |
| 900224 | dTz  | 0.000 | 0.075 | 25.30      | [°C]            |        |        |        |        |     |
| 900225 | dTz  | 0.000 | 0.088 | 25.30      | [°C]            |        |        |        |        |     |
| 900226 | dTz  | 0.000 | 0.088 | 25.30      | [°C]            |        |        |        |        |     |
| 900227 | dTz  | 0.000 | 0.135 | 25.30      | [°C]            |        |        |        |        |     |
| 900228 | dTz  | 0.000 | 0.135 | 25.30      | [°C]            |        |        |        |        |     |
| 900229 | dTz  | 0.000 | 0.138 | 25.30      | [°C]            |        |        |        |        |     |
| 900230 | dTz  | 0.000 | 0.138 | 25.30      | [°C]            |        |        |        |        |     |
| 900231 | dTz  | 0.000 | 0.122 | 25.30      | [°C]            |        |        |        |        |     |
| 900232 | dTz  | 0.000 | 0.122 | 25.30      | [°C]            |        |        |        |        |     |
| 900233 | dTz  | 0.000 | 0.110 | 25.30      | [°C]            |        |        |        |        |     |
| 900234 | dTz  | 0.000 | 0.110 | 25.30      | [°C]            |        |        |        |        |     |
| 900235 | dTz  | 0.000 | 0.091 | 25.30      | [°C]            |        |        |        |        |     |
| 900236 | dTz  | 0.000 | 0.091 | 25.30      | [°C]            |        |        |        |        |     |
| 900237 | dTz  | 0.000 | 0.050 | 25.30      | [°C]            |        |        |        |        |     |
| 900238 | dTz  | 0.000 | 0.050 | 25.30      | [°C]            |        |        |        |        |     |
| 900239 | dTz  | 0.000 | 0.077 | 25.30      | [°C]            |        |        |        |        |     |
| 900240 | dTz  | 0.000 | 0.077 | 25.30      | [°C]            |        |        |        |        |     |
| 900241 | dTz  | 0.000 | 0.096 | 25.30      | [°C]            |        |        |        |        |     |
| 900242 | dTz  | 0.000 | 0.096 | 25.30      | [°C]            |        |        |        |        |     |
| 900243 | dTz  | 0.000 | 0.123 | 25.30      | [°C]            |        |        |        |        |     |
| 900244 | dTz  | 0.000 | 0.123 | 25.30      | [°C]            |        |        |        |        |     |
| 900245 | dTz  | 0.000 | 0.155 | 25.30      | [°C]            |        |        |        |        |     |
| 900246 | dTz  | 0.000 | 0.155 | 25.30      | [°C]            |        |        |        |        |     |
| 900247 | dTz  | 0.000 | 0.134 | 25.30      | [°C]            |        |        |        |        |     |
| 900248 | dTz  | 0.000 | 0.134 | 25.30      | [°C]            |        |        |        |        |     |
| 900249 | dTz  | 0.000 | 0.117 | 25.30      | [°C]            |        |        |        |        |     |
| 900250 | dTz  | 0.000 | 0.114 | 25.30      | [°C]            |        |        |        |        |     |
| 900251 | dTz  | 0.000 | 0.100 | 25.30      | [°C]            |        |        |        |        |     |
| 900252 | dTz  | 0.000 | 0.100 | 25.30      | [°C]            |        |        |        |        |     |
| 900253 | dTz  | 0.000 | 0.084 | 25.30      | [°C]            |        |        |        |        |     |
| 900254 | dTz  | 0.000 | 0.084 | 25.30      | [°C]            |        |        |        |        |     |
| 900255 | dTz  | 0.000 | 0.100 | 25.30      | [°C]            |        |        |        |        |     |
| 900256 | dTz  | 0.000 | 0.100 | 25.30      | [°C]            |        |        |        |        |     |
| 900257 | dTz  | 0.000 | 0.134 | 25.30      | [°C]            |        |        |        |        |     |
| 900258 | dTz  | 0.000 | 0.134 | 25.30      | [°C]            |        |        |        |        |     |
| 900259 | dTz  | 0.000 | 0.136 | 25.30      | [°C]            |        |        |        |        |     |
| 900260 | dTz  | 0.000 | 0.136 | 25.30      | [°C]            |        |        |        |        |     |



ΕΛΕΓΧΟΙ ΜΕΣΟΒΑΘΡΩΝ  
ΠΕΡΙΓΡΑΦΗ ΒΑΣΙΚΩΝ ΦΟΡΤΙΣΕΩΝ

Loads acting on Beam elements

| Number | Type | a[m]  | l[m]  | Load value | Load value | Unit | ya[mm] | za[mm] | ye[mm] | ze[mm] | Ref |
|--------|------|-------|-------|------------|------------|------|--------|--------|--------|--------|-----|
| 900261 | dTz  | 0.000 | 0.111 | 25.30      |            | [°C] |        |        |        |        |     |
| 900262 | dTz  | 0.000 | 0.111 | 25.30      |            | [°C] |        |        |        |        |     |
| 900263 | dTz  | 0.000 | 0.086 | 25.30      |            | [°C] |        |        |        |        |     |
| 900264 | dTz  | 0.000 | 0.086 | 25.30      |            | [°C] |        |        |        |        |     |
| 900265 | dTz  | 0.000 | 0.050 | 25.30      |            | [°C] |        |        |        |        |     |
| 900266 | dTz  | 0.000 | 0.050 | 25.30      |            | [°C] |        |        |        |        |     |
| 900267 | dTz  | 0.000 | 0.050 | 25.30      |            | [°C] |        |        |        |        |     |
| 900268 | dTz  | 0.000 | 0.050 | 25.30      |            | [°C] |        |        |        |        |     |
| 900269 | dTz  | 0.000 | 0.088 | 25.30      |            | [°C] |        |        |        |        |     |
| 900270 | dTz  | 0.000 | 0.088 | 25.30      |            | [°C] |        |        |        |        |     |
| 900271 | dTz  | 0.000 | 0.111 | 25.30      |            | [°C] |        |        |        |        |     |
| 900272 | dTz  | 0.000 | 0.111 | 25.30      |            | [°C] |        |        |        |        |     |
| 900273 | dTz  | 0.000 | 0.130 | 25.30      |            | [°C] |        |        |        |        |     |
| 900274 | dTz  | 0.000 | 0.130 | 25.30      |            | [°C] |        |        |        |        |     |
| 900275 | dTz  | 0.000 | 0.114 | 25.30      |            | [°C] |        |        |        |        |     |
| 900276 | dTz  | 0.000 | 0.114 | 25.30      |            | [°C] |        |        |        |        |     |
| 900277 | dTz  | 0.000 | 0.090 | 25.30      |            | [°C] |        |        |        |        |     |
| 900278 | dTz  | 0.000 | 0.090 | 25.30      |            | [°C] |        |        |        |        |     |
| 900279 | dTz  | 0.000 | 0.110 | 25.30      |            | [°C] |        |        |        |        |     |
| 900280 | dTz  | 0.000 | 0.110 | 25.30      |            | [°C] |        |        |        |        |     |
| 900281 | dTz  | 0.000 | 0.108 | 25.30      |            | [°C] |        |        |        |        |     |
| 900282 | dTz  | 0.000 | 0.108 | 25.30      |            | [°C] |        |        |        |        |     |
| 900283 | dTz  | 0.000 | 0.107 | 25.30      |            | [°C] |        |        |        |        |     |
| 900284 | dTz  | 0.000 | 0.107 | 25.30      |            | [°C] |        |        |        |        |     |
| 900285 | dTz  | 0.000 | 0.133 | 25.30      |            | [°C] |        |        |        |        |     |
| 900286 | dTz  | 0.000 | 0.133 | 25.30      |            | [°C] |        |        |        |        |     |
| 900287 | dTz  | 0.000 | 0.164 | 25.30      |            | [°C] |        |        |        |        |     |
| 900288 | dTz  | 0.000 | 0.164 | 25.30      |            | [°C] |        |        |        |        |     |
| 900289 | dTz  | 0.000 | 0.296 | 25.30      |            | [°C] |        |        |        |        |     |
| 900290 | dTz  | 0.000 | 0.296 | 25.30      |            | [°C] |        |        |        |        |     |
| 900291 | dTz  | 0.000 | 0.263 | 25.30      |            | [°C] |        |        |        |        |     |
| 900292 | dTz  | 0.000 | 0.263 | 25.30      |            | [°C] |        |        |        |        |     |
| 900293 | dTz  | 0.000 | 0.324 | 25.30      |            | [°C] |        |        |        |        |     |
| 900294 | dTz  | 0.000 | 0.324 | 25.30      |            | [°C] |        |        |        |        |     |
| 900295 | dTz  | 0.000 | 0.263 | 25.30      |            | [°C] |        |        |        |        |     |
| 900296 | dTz  | 0.000 | 0.378 | 25.30      |            | [°C] |        |        |        |        |     |
| 900297 | dTz  | 0.000 | 0.050 | 25.30      |            | [°C] |        |        |        |        |     |
| 900298 | dTz  | 0.000 | 0.050 | 25.30      |            | [°C] |        |        |        |        |     |
| 900299 | dTz  | 0.000 | 0.050 | 25.30      |            | [°C] |        |        |        |        |     |
| 900300 | dTz  | 0.000 | 0.050 | 25.30      |            | [°C] |        |        |        |        |     |
| 900301 | dTz  | 0.000 | 0.039 | 25.30      |            | [°C] |        |        |        |        |     |
| 900302 | dTz  | 0.000 | 0.039 | 25.30      |            | [°C] |        |        |        |        |     |
| 900303 | dTz  | 0.000 | 0.051 | 25.30      |            | [°C] |        |        |        |        |     |
| 900304 | dTz  | 0.000 | 0.051 | 25.30      |            | [°C] |        |        |        |        |     |
| 900305 | dTz  | 0.000 | 0.039 | 25.30      |            | [°C] |        |        |        |        |     |
| 900306 | dTz  | 0.000 | 0.089 | 25.30      |            | [°C] |        |        |        |        |     |
| 900307 | dTz  | 0.000 | 0.081 | 25.30      |            | [°C] |        |        |        |        |     |
| 900308 | dTz  | 0.000 | 0.081 | 25.30      |            | [°C] |        |        |        |        |     |
| 900309 | dTz  | 0.000 | 0.102 | 25.30      |            | [°C] |        |        |        |        |     |
| 900310 | dTz  | 0.000 | 0.102 | 25.30      |            | [°C] |        |        |        |        |     |
| 900311 | dTz  | 0.000 | 0.098 | 25.30      |            | [°C] |        |        |        |        |     |
| 900312 | dTz  | 0.000 | 0.098 | 25.30      |            | [°C] |        |        |        |        |     |
| 900313 | dTz  | 0.000 | 0.076 | 25.30      |            | [°C] |        |        |        |        |     |
| 900314 | dTz  | 0.000 | 0.076 | 25.30      |            | [°C] |        |        |        |        |     |
| 900315 | dTz  | 0.000 | 0.060 | 25.30      |            | [°C] |        |        |        |        |     |
| 900316 | dTz  | 0.000 | 0.060 | 25.30      |            | [°C] |        |        |        |        |     |
| 900317 | dTz  | 0.000 | 0.048 | 25.30      |            | [°C] |        |        |        |        |     |
| 900318 | dTz  | 0.000 | 0.048 | 25.30      |            | [°C] |        |        |        |        |     |

ΕΛΕΓΧΟΙ ΜΕΣΟΒΑΘΡΩΝ  
ΠΕΡΙΓΡΑΦΗ ΒΑΣΙΚΩΝ ΦΟΡΤΙΣΕΩΝ

Loads acting on Beam elements

| Number | Type | a[m]  | l[m]  | Load value | Load value Unit | ya[mm] | za[mm] | ye[mm] | ze[mm] | Ref |
|--------|------|-------|-------|------------|-----------------|--------|--------|--------|--------|-----|
| 900319 | dTz  | 0.000 | 0.039 | 25.30      | [°C]            |        |        |        |        |     |
| 900320 | dTz  | 0.000 | 0.038 | 25.30      | [°C]            |        |        |        |        |     |
| 900321 | dTz  | 0.000 | 0.050 | 25.30      | [°C]            |        |        |        |        |     |
| 900322 | dTz  | 0.000 | 0.050 | 25.30      | [°C]            |        |        |        |        |     |
| 900323 | dTz  | 0.000 | 0.050 | 25.30      | [°C]            |        |        |        |        |     |
| 900324 | dTz  | 0.000 | 0.050 | 25.30      | [°C]            |        |        |        |        |     |
| 900325 | dTz  | 0.000 | 0.050 | 25.30      | [°C]            |        |        |        |        |     |
| 900326 | dTz  | 0.000 | 0.050 | 25.30      | [°C]            |        |        |        |        |     |
| 900327 | dTz  | 0.000 | 0.036 | 25.30      | [°C]            |        |        |        |        |     |
| 900328 | dTz  | 0.000 | 0.036 | 25.30      | [°C]            |        |        |        |        |     |
| 900329 | dTz  | 0.000 | 0.046 | 25.30      | [°C]            |        |        |        |        |     |
| 900330 | dTz  | 0.000 | 0.046 | 25.30      | [°C]            |        |        |        |        |     |
| 900331 | dTz  | 0.000 | 0.057 | 25.30      | [°C]            |        |        |        |        |     |
| 900332 | dTz  | 0.000 | 0.057 | 25.30      | [°C]            |        |        |        |        |     |
| 900333 | dTz  | 0.000 | 0.070 | 25.30      | [°C]            |        |        |        |        |     |
| 900334 | dTz  | 0.000 | 0.070 | 25.30      | [°C]            |        |        |        |        |     |
| 900335 | dTz  | 0.000 | 0.087 | 25.30      | [°C]            |        |        |        |        |     |
| 900336 | dTz  | 0.000 | 0.087 | 25.30      | [°C]            |        |        |        |        |     |
| 900337 | dTz  | 0.000 | 0.087 | 25.30      | [°C]            |        |        |        |        |     |
| 900338 | dTz  | 0.000 | 0.091 | 25.30      | [°C]            |        |        |        |        |     |
| 900339 | dTz  | 0.000 | 0.072 | 25.30      | [°C]            |        |        |        |        |     |
| 900340 | dTz  | 0.000 | 0.072 | 25.30      | [°C]            |        |        |        |        |     |
| 900341 | dTz  | 0.000 | 0.058 | 25.30      | [°C]            |        |        |        |        |     |
| 900342 | dTz  | 0.000 | 0.058 | 25.30      | [°C]            |        |        |        |        |     |
| 900343 | dTz  | 0.000 | 0.047 | 25.30      | [°C]            |        |        |        |        |     |
| 900344 | dTz  | 0.000 | 0.047 | 25.30      | [°C]            |        |        |        |        |     |
| 900345 | dTz  | 0.000 | 0.038 | 25.30      | [°C]            |        |        |        |        |     |
| 900346 | dTz  | 0.000 | 0.037 | 25.30      | [°C]            |        |        |        |        |     |
| 900347 | dTz  | 0.000 | 0.050 | 25.30      | [°C]            |        |        |        |        |     |
| 900348 | dTz  | 0.000 | 0.050 | 25.30      | [°C]            |        |        |        |        |     |
| 900349 | dTz  | 0.000 | 0.050 | 25.30      | [°C]            |        |        |        |        |     |
| 900350 | dTz  | 0.000 | 0.050 | 25.30      | [°C]            |        |        |        |        |     |
| 900351 | dTz  | 0.000 | 0.050 | 25.30      | [°C]            |        |        |        |        |     |
| 900352 | dTz  | 0.000 | 0.050 | 25.30      | [°C]            |        |        |        |        |     |
| 900353 | dTz  | 0.000 | 0.050 | 25.30      | [°C]            |        |        |        |        |     |
| 900354 | dTz  | 0.000 | 0.050 | 25.30      | [°C]            |        |        |        |        |     |
| 900355 | dTz  | 0.000 | 0.039 | 25.30      | [°C]            |        |        |        |        |     |
| 900356 | dTz  | 0.000 | 0.039 | 25.30      | [°C]            |        |        |        |        |     |
| 900357 | dTz  | 0.000 | 0.049 | 25.30      | [°C]            |        |        |        |        |     |
| 900358 | dTz  | 0.000 | 0.049 | 25.30      | [°C]            |        |        |        |        |     |
| 900359 | dTz  | 0.000 | 0.061 | 25.30      | [°C]            |        |        |        |        |     |
| 900360 | dTz  | 0.000 | 0.061 | 25.30      | [°C]            |        |        |        |        |     |
| 900361 | dTz  | 0.000 | 0.078 | 25.30      | [°C]            |        |        |        |        |     |
| 900362 | dTz  | 0.000 | 0.078 | 25.30      | [°C]            |        |        |        |        |     |
| 900363 | dTz  | 0.000 | 0.098 | 25.30      | [°C]            |        |        |        |        |     |
| 900364 | dTz  | 0.000 | 0.098 | 25.30      | [°C]            |        |        |        |        |     |
| 900365 | dTz  | 0.000 | 0.098 | 25.30      | [°C]            |        |        |        |        |     |
| 900366 | dTz  | 0.000 | 0.098 | 25.30      | [°C]            |        |        |        |        |     |
| 900367 | dTz  | 0.000 | 0.078 | 25.30      | [°C]            |        |        |        |        |     |
| 900368 | dTz  | 0.000 | 0.078 | 25.30      | [°C]            |        |        |        |        |     |
| 900369 | dTz  | 0.000 | 0.061 | 25.30      | [°C]            |        |        |        |        |     |
| 900370 | dTz  | 0.000 | 0.061 | 25.30      | [°C]            |        |        |        |        |     |
| 900371 | dTz  | 0.000 | 0.049 | 25.30      | [°C]            |        |        |        |        |     |
| 900372 | dTz  | 0.000 | 0.049 | 25.30      | [°C]            |        |        |        |        |     |
| 900373 | dTz  | 0.000 | 0.039 | 25.30      | [°C]            |        |        |        |        |     |
| 900374 | dTz  | 0.000 | 0.039 | 25.30      | [°C]            |        |        |        |        |     |
| 900375 | dTz  | 0.000 | 0.050 | 25.30      | [°C]            |        |        |        |        |     |
| 900376 | dTz  | 0.000 | 0.050 | 25.30      | [°C]            |        |        |        |        |     |

ΕΛΕΓΧΟΙ ΜΕΣΟΒΑΘΡΩΝ  
ΠΕΡΙΓΡΑΦΗ ΒΑΣΙΚΩΝ ΦΟΡΤΙΣΕΩΝ

Loads acting on Beam elements

| Number | Type | a[m]  | l[m]  | Load value | Load value | Unit | ya[mm] | za[mm] | ye[mm] | ze[mm] | Ref |
|--------|------|-------|-------|------------|------------|------|--------|--------|--------|--------|-----|
| 900377 | dTz  | 0.000 | 0.050 | 25.30      |            | [°C] |        |        |        |        |     |
| 900378 | dTz  | 0.000 | 0.050 | 25.30      |            | [°C] |        |        |        |        |     |
| 900379 | dTz  | 0.000 | 0.039 | 25.30      |            | [°C] |        |        |        |        |     |
| 900380 | dTz  | 0.000 | 0.039 | 25.30      |            | [°C] |        |        |        |        |     |
| 900381 | dTz  | 0.000 | 0.050 | 25.30      |            | [°C] |        |        |        |        |     |
| 900382 | dTz  | 0.000 | 0.050 | 25.30      |            | [°C] |        |        |        |        |     |
| 900383 | dTz  | 0.000 | 0.063 | 25.30      |            | [°C] |        |        |        |        |     |
| 900384 | dTz  | 0.000 | 0.063 | 25.30      |            | [°C] |        |        |        |        |     |
| 900385 | dTz  | 0.000 | 0.079 | 25.30      |            | [°C] |        |        |        |        |     |
| 900386 | dTz  | 0.000 | 0.079 | 25.30      |            | [°C] |        |        |        |        |     |
| 900387 | dTz  | 0.000 | 0.107 | 25.30      |            | [°C] |        |        |        |        |     |
| 900388 | dTz  | 0.000 | 0.091 | 25.30      |            | [°C] |        |        |        |        |     |
| 900389 | dTz  | 0.000 | 0.096 | 25.30      |            | [°C] |        |        |        |        |     |
| 900390 | dTz  | 0.000 | 0.096 | 25.30      |            | [°C] |        |        |        |        |     |
| 900391 | dTz  | 0.000 | 0.093 | 25.30      |            | [°C] |        |        |        |        |     |
| 900392 | dTz  | 0.000 | 0.059 | 25.30      |            | [°C] |        |        |        |        |     |
| 900393 | dTz  | 0.000 | 0.060 | 25.30      |            | [°C] |        |        |        |        |     |
| 900394 | dTz  | 0.000 | 0.060 | 25.30      |            | [°C] |        |        |        |        |     |
| 900395 | dTz  | 0.000 | 0.049 | 25.30      |            | [°C] |        |        |        |        |     |
| 900396 | dTz  | 0.000 | 0.049 | 25.30      |            | [°C] |        |        |        |        |     |
| 900397 | dTz  | 0.000 | 0.039 | 25.30      |            | [°C] |        |        |        |        |     |
| 900398 | dTz  | 0.000 | 0.039 | 25.30      |            | [°C] |        |        |        |        |     |
| 900399 | dTz  | 0.000 | 0.050 | 25.30      |            | [°C] |        |        |        |        |     |
| 900400 | dTz  | 0.000 | 0.050 | 25.30      |            | [°C] |        |        |        |        |     |
| 900401 | dTz  | 0.000 | 0.050 | 25.30      |            | [°C] |        |        |        |        |     |
| 900402 | dTz  | 0.000 | 0.050 | 25.30      |            | [°C] |        |        |        |        |     |
| 900403 | dTz  | 0.000 | 0.042 | 25.30      |            | [°C] |        |        |        |        |     |
| 900404 | dTz  | 0.000 | 0.042 | 25.30      |            | [°C] |        |        |        |        |     |
| 900405 | dTz  | 0.000 | 0.047 | 25.30      |            | [°C] |        |        |        |        |     |
| 900406 | dTz  | 0.000 | 0.071 | 25.30      |            | [°C] |        |        |        |        |     |
| 900407 | dTz  | 0.000 | 0.078 | 25.30      |            | [°C] |        |        |        |        |     |
| 900408 | dTz  | 0.000 | 0.078 | 25.30      |            | [°C] |        |        |        |        |     |
| 900409 | dTz  | 0.000 | 0.077 | 25.30      |            | [°C] |        |        |        |        |     |
| 900410 | dTz  | 0.000 | 0.121 | 25.30      |            | [°C] |        |        |        |        |     |
| 900411 | dTz  | 0.000 | 0.126 | 25.30      |            | [°C] |        |        |        |        |     |
| 900412 | dTz  | 0.000 | 0.126 | 25.30      |            | [°C] |        |        |        |        |     |
| 900413 | dTz  | 0.000 | 0.296 | 25.30      |            | [°C] |        |        |        |        |     |
| 900414 | dTz  | 0.000 | 0.296 | 25.30      |            | [°C] |        |        |        |        |     |
| 900415 | dTz  | 0.000 | 0.289 | 25.30      |            | [°C] |        |        |        |        |     |
| 900416 | dTz  | 0.000 | 0.289 | 25.30      |            | [°C] |        |        |        |        |     |
| 900417 | dTz  | 0.000 | 0.324 | 25.30      |            | [°C] |        |        |        |        |     |
| 900418 | dTz  | 0.000 | 0.324 | 25.30      |            | [°C] |        |        |        |        |     |
| 900419 | dTz  | 0.000 | 0.294 | 25.30      |            | [°C] |        |        |        |        |     |
| 900420 | dTz  | 0.000 | 0.295 | 25.30      |            | [°C] |        |        |        |        |     |
| 900421 | dTz  | 0.000 | 0.113 | 25.30      |            | [°C] |        |        |        |        |     |
| 900422 | dTz  | 0.000 | 0.113 | 25.30      |            | [°C] |        |        |        |        |     |
| 900423 | dTz  | 0.000 | 0.123 | 25.30      |            | [°C] |        |        |        |        |     |
| 900424 | dTz  | 0.000 | 0.123 | 25.30      |            | [°C] |        |        |        |        |     |
| 900425 | dTz  | 0.000 | 0.134 | 25.30      |            | [°C] |        |        |        |        |     |
| 900426 | dTz  | 0.000 | 0.134 | 25.30      |            | [°C] |        |        |        |        |     |
| 900427 | dTz  | 0.000 | 0.149 | 25.30      |            | [°C] |        |        |        |        |     |
| 900428 | dTz  | 0.000 | 0.149 | 25.30      |            | [°C] |        |        |        |        |     |
| 900429 | dTz  | 0.000 | 0.172 | 25.30      |            | [°C] |        |        |        |        |     |
| 900430 | dTz  | 0.000 | 0.105 | 25.30      |            | [°C] |        |        |        |        |     |
| 900431 | dTz  | 0.000 | 0.122 | 25.30      |            | [°C] |        |        |        |        |     |
| 900432 | dTz  | 0.000 | 0.122 | 25.30      |            | [°C] |        |        |        |        |     |
| 900433 | dTz  | 0.000 | 0.122 | 25.30      |            | [°C] |        |        |        |        |     |
| 900434 | dTz  | 0.000 | 0.122 | 25.30      |            | [°C] |        |        |        |        |     |

ΕΛΕΓΧΟΙ ΜΕΣΟΒΑΘΡΩΝ  
ΠΕΡΙΓΡΑΦΗ ΒΑΣΙΚΩΝ ΦΟΡΤΙΣΕΩΝ

Loads acting on Beam elements

| Number | Type | a[m]  | l[m]  | Load value | Load value Unit | ya[mm] | za[mm] | ye[mm] | ze[mm] | Ref |
|--------|------|-------|-------|------------|-----------------|--------|--------|--------|--------|-----|
| 900493 | dTz  | 0.000 | 0.247 | 25.30      | [°C]            |        |        |        |        |     |
| 900494 | dTz  | 0.000 | 0.247 | 25.30      | [°C]            |        |        |        |        |     |
| 900495 | dTz  | 0.000 | 0.214 | 25.30      | [°C]            |        |        |        |        |     |
| 900496 | dTz  | 0.000 | 0.214 | 25.30      | [°C]            |        |        |        |        |     |
| 900497 | dTz  | 0.000 | 0.221 | 25.30      | [°C]            |        |        |        |        |     |
| 900498 | dTz  | 0.000 | 0.221 | 25.30      | [°C]            |        |        |        |        |     |
| 900499 | dTz  | 0.000 | 0.230 | 25.30      | [°C]            |        |        |        |        |     |
| 900500 | dTz  | 0.000 | 0.230 | 25.30      | [°C]            |        |        |        |        |     |
| 900501 | dTz  | 0.000 | 0.218 | 25.30      | [°C]            |        |        |        |        |     |
| 900502 | dTz  | 0.000 | 0.218 | 25.30      | [°C]            |        |        |        |        |     |
| 900503 | dTz  | 0.000 | 0.205 | 25.30      | [°C]            |        |        |        |        |     |
| 900504 | dTz  | 0.000 | 0.205 | 25.30      | [°C]            |        |        |        |        |     |
| 900505 | dTz  | 0.000 | 0.132 | 25.30      | [°C]            |        |        |        |        |     |
| 900506 | dTz  | 0.000 | 0.257 | 25.30      | [°C]            |        |        |        |        |     |
| 900507 | dTz  | 0.000 | 0.183 | 25.30      | [°C]            |        |        |        |        |     |
| 900508 | dTz  | 0.000 | 0.183 | 25.30      | [°C]            |        |        |        |        |     |
| 900509 | dTz  | 0.000 | 0.173 | 25.30      | [°C]            |        |        |        |        |     |
| 900510 | dTz  | 0.000 | 0.173 | 25.30      | [°C]            |        |        |        |        |     |
| 900511 | dTz  | 0.000 | 0.173 | 25.30      | [°C]            |        |        |        |        |     |
| 900512 | dTz  | 0.000 | 0.173 | 25.30      | [°C]            |        |        |        |        |     |
| 900513 | dTz  | 0.000 | 0.130 | 25.30      | [°C]            |        |        |        |        |     |
| 900514 | dTz  | 0.000 | 0.237 | 25.30      | [°C]            |        |        |        |        |     |
| 900515 | dTz  | 0.000 | 0.229 | 25.30      | [°C]            |        |        |        |        |     |
| 900516 | dTz  | 0.000 | 0.159 | 25.30      | [°C]            |        |        |        |        |     |
| 900517 | dTz  | 0.000 | 0.205 | 25.30      | [°C]            |        |        |        |        |     |
| 900518 | dTz  | 0.000 | 0.205 | 25.30      | [°C]            |        |        |        |        |     |
| 900519 | dTz  | 0.000 | 0.138 | 25.30      | [°C]            |        |        |        |        |     |
| 900520 | dTz  | 0.000 | 0.297 | 25.30      | [°C]            |        |        |        |        |     |
| 900521 | dTz  | 0.000 | 0.230 | 25.30      | [°C]            |        |        |        |        |     |
| 900522 | dTz  | 0.000 | 0.230 | 25.30      | [°C]            |        |        |        |        |     |
| 900523 | dTz  | 0.000 | 0.296 | 25.30      | [°C]            |        |        |        |        |     |
| 900524 | dTz  | 0.000 | 0.245 | 25.30      | [°C]            |        |        |        |        |     |
| 900525 | dTz  | 0.000 | 0.266 | 25.30      | [°C]            |        |        |        |        |     |
| 900526 | dTz  | 0.000 | 0.266 | 25.30      | [°C]            |        |        |        |        |     |
| 900527 | dTz  | 0.000 | 0.224 | 25.30      | [°C]            |        |        |        |        |     |
| 900528 | dTz  | 0.000 | 0.224 | 25.30      | [°C]            |        |        |        |        |     |
| 900529 | dTz  | 0.000 | 0.158 | 25.30      | [°C]            |        |        |        |        |     |
| 900530 | dTz  | 0.000 | 0.158 | 25.30      | [°C]            |        |        |        |        |     |
| 900531 | dTz  | 0.000 | 0.106 | 25.30      | [°C]            |        |        |        |        |     |
| 900532 | dTz  | 0.000 | 0.106 | 25.30      | [°C]            |        |        |        |        |     |
| 900533 | dTz  | 0.000 | 0.096 | 25.30      | [°C]            |        |        |        |        |     |
| 900534 | dTz  | 0.000 | 0.096 | 25.30      | [°C]            |        |        |        |        |     |
| 900535 | dTz  | 0.000 | 0.084 | 25.30      | [°C]            |        |        |        |        |     |
| 900536 | dTz  | 0.000 | 0.084 | 25.30      | [°C]            |        |        |        |        |     |
| 900537 | dTz  | 0.000 | 0.096 | 25.30      | [°C]            |        |        |        |        |     |
| 900538 | dTz  | 0.000 | 0.096 | 25.30      | [°C]            |        |        |        |        |     |
| 900539 | dTz  | 0.000 | 0.123 | 25.30      | [°C]            |        |        |        |        |     |
| 900540 | dTz  | 0.000 | 0.096 | 25.30      | [°C]            |        |        |        |        |     |
| 900541 | dTz  | 0.000 | 0.125 | 25.30      | [°C]            |        |        |        |        |     |
| 900542 | dTz  | 0.000 | 0.125 | 25.30      | [°C]            |        |        |        |        |     |
| 900543 | dTz  | 0.000 | 0.234 | 25.30      | [°C]            |        |        |        |        |     |
| 900544 | dTz  | 0.000 | 0.234 | 25.30      | [°C]            |        |        |        |        |     |
| 900545 | dTz  | 0.000 | 0.210 | 25.30      | [°C]            |        |        |        |        |     |
| 900546 | dTz  | 0.000 | 0.210 | 25.30      | [°C]            |        |        |        |        |     |
| 900547 | dTz  | 0.000 | 0.198 | 25.30      | [°C]            |        |        |        |        |     |
| 900548 | dTz  | 0.000 | 0.198 | 25.30      | [°C]            |        |        |        |        |     |
| 900549 | dTz  | 0.000 | 0.217 | 25.30      | [°C]            |        |        |        |        |     |
| 900550 | dTz  | 0.000 | 0.243 | 25.30      | [°C]            |        |        |        |        |     |



ΕΛΕΓΧΟΙ ΜΕΣΟΒΑΘΡΩΝ  
ΠΕΡΙΓΡΑΦΗ ΒΑΣΙΚΩΝ ΦΟΡΤΙΣΕΩΝ

Loads acting on Beam elements

| Number | Type | a[m]  | l[m]  | Load value | Load value Unit | ya[mm] | za[mm] | ye[mm] | ze[mm] | Ref |
|--------|------|-------|-------|------------|-----------------|--------|--------|--------|--------|-----|
| 900609 | dTz  | 0.000 | 0.241 | 25.30      | [°C]            |        |        |        |        |     |
| 900610 | dTz  | 0.000 | 0.241 | 25.30      | [°C]            |        |        |        |        |     |
| 900611 | dTz  | 0.000 | 0.241 | 25.30      | [°C]            |        |        |        |        |     |
| 900612 | dTz  | 0.000 | 0.241 | 25.30      | [°C]            |        |        |        |        |     |
| 900613 | dTz  | 0.000 | 0.241 | 25.30      | [°C]            |        |        |        |        |     |
| 900614 | dTz  | 0.000 | 0.241 | 25.30      | [°C]            |        |        |        |        |     |
| 900615 | dTz  | 0.000 | 0.241 | 25.30      | [°C]            |        |        |        |        |     |
| 900616 | dTz  | 0.000 | 0.241 | 25.30      | [°C]            |        |        |        |        |     |
| 900617 | dTz  | 0.000 | 0.241 | 25.30      | [°C]            |        |        |        |        |     |
| 900618 | dTz  | 0.000 | 0.241 | 25.30      | [°C]            |        |        |        |        |     |
| 900619 | dTz  | 0.000 | 0.211 | 25.30      | [°C]            |        |        |        |        |     |
| 900620 | dTz  | 0.000 | 0.211 | 25.30      | [°C]            |        |        |        |        |     |
| 900621 | dTz  | 0.000 | 0.254 | 25.30      | [°C]            |        |        |        |        |     |
| 900622 | dTz  | 0.000 | 0.254 | 25.30      | [°C]            |        |        |        |        |     |
| 900623 | dTz  | 0.000 | 0.302 | 25.30      | [°C]            |        |        |        |        |     |
| 900624 | dTz  | 0.000 | 0.302 | 25.30      | [°C]            |        |        |        |        |     |
| 900625 | dTz  | 0.000 | 0.239 | 25.30      | [°C]            |        |        |        |        |     |
| 900626 | dTz  | 0.000 | 0.239 | 25.30      | [°C]            |        |        |        |        |     |
| 900627 | dTz  | 0.000 | 0.198 | 25.30      | [°C]            |        |        |        |        |     |
| 900628 | dTz  | 0.000 | 0.198 | 25.30      | [°C]            |        |        |        |        |     |
| 900629 | dTz  | 0.000 | 0.295 | 25.30      | [°C]            |        |        |        |        |     |
| 900630 | dTz  | 0.000 | 0.295 | 25.30      | [°C]            |        |        |        |        |     |
| 900631 | dTz  | 0.000 | 0.345 | 25.30      | [°C]            |        |        |        |        |     |
| 900632 | dTz  | 0.000 | 0.345 | 25.30      | [°C]            |        |        |        |        |     |
| 900633 | dTz  | 0.000 | 0.311 | 25.30      | [°C]            |        |        |        |        |     |
| 900634 | dTz  | 0.000 | 0.311 | 25.30      | [°C]            |        |        |        |        |     |
| 900635 | dTz  | 0.000 | 0.279 | 25.30      | [°C]            |        |        |        |        |     |
| 900636 | dTz  | 0.000 | 0.225 | 25.30      | [°C]            |        |        |        |        |     |
| 900637 | dTz  | 0.000 | 0.191 | 25.30      | [°C]            |        |        |        |        |     |
| 900638 | dTz  | 0.000 | 0.291 | 25.30      | [°C]            |        |        |        |        |     |
| 900639 | dTz  | 0.000 | 0.271 | 25.30      | [°C]            |        |        |        |        |     |
| 900640 | dTz  | 0.000 | 0.210 | 25.30      | [°C]            |        |        |        |        |     |
| 900641 | dTz  | 0.000 | 0.241 | 25.30      | [°C]            |        |        |        |        |     |
| 900642 | dTz  | 0.000 | 0.241 | 25.30      | [°C]            |        |        |        |        |     |
| 900643 | dTz  | 0.000 | 0.241 | 25.30      | [°C]            |        |        |        |        |     |
| 900644 | dTz  | 0.000 | 0.241 | 25.30      | [°C]            |        |        |        |        |     |
| 900645 | dTz  | 0.000 | 0.241 | 25.30      | [°C]            |        |        |        |        |     |
| 900646 | dTz  | 0.000 | 0.241 | 25.30      | [°C]            |        |        |        |        |     |
| 900647 | dTz  | 0.000 | 0.241 | 25.30      | [°C]            |        |        |        |        |     |
| 900648 | dTz  | 0.000 | 0.241 | 25.30      | [°C]            |        |        |        |        |     |
| 900649 | dTz  | 0.000 | 0.241 | 25.30      | [°C]            |        |        |        |        |     |
| 900650 | dTz  | 0.000 | 0.241 | 25.30      | [°C]            |        |        |        |        |     |
| 900651 | dTz  | 0.000 | 0.241 | 25.30      | [°C]            |        |        |        |        |     |
| 900652 | dTz  | 0.000 | 0.241 | 25.30      | [°C]            |        |        |        |        |     |
| 900653 | dTz  | 0.000 | 0.241 | 25.30      | [°C]            |        |        |        |        |     |
| 900654 | dTz  | 0.000 | 0.241 | 25.30      | [°C]            |        |        |        |        |     |
| 900655 | dTz  | 0.000 | 0.241 | 25.30      | [°C]            |        |        |        |        |     |
| 900656 | dTz  | 0.000 | 0.241 | 25.30      | [°C]            |        |        |        |        |     |
| 900657 | dTz  | 0.000 | 0.229 | 25.30      | [°C]            |        |        |        |        |     |
| 900658 | dTz  | 0.000 | 0.229 | 25.30      | [°C]            |        |        |        |        |     |
| 900659 | dTz  | 0.000 | 0.286 | 25.30      | [°C]            |        |        |        |        |     |
| 900660 | dTz  | 0.000 | 0.286 | 25.30      | [°C]            |        |        |        |        |     |
| 900661 | dTz  | 0.000 | 0.375 | 25.30      | [°C]            |        |        |        |        |     |
| 900662 | dTz  | 0.000 | 0.375 | 25.30      | [°C]            |        |        |        |        |     |
| 900663 | dTz  | 0.000 | 0.314 | 25.30      | [°C]            |        |        |        |        |     |
| 900664 | dTz  | 0.000 | 0.314 | 25.30      | [°C]            |        |        |        |        |     |
| 900665 | dTz  | 0.000 | 0.295 | 25.30      | [°C]            |        |        |        |        |     |
| 900666 | dTz  | 0.000 | 0.295 | 25.30      | [°C]            |        |        |        |        |     |

ΕΛΕΓΧΟΙ ΜΕΣΟΒΑΘΡΩΝ  
 ΠΕΡΙΓΡΑΦΗ ΒΑΣΙΚΩΝ ΦΟΡΤΙΣΕΩΝ

Loads acting on Beam elements

| Number | Type | a[m]  | l[m]  | Load value | Load value | Unit | ya[mm] | za[mm] | ye[mm] | ze[mm] | Ref |
|--------|------|-------|-------|------------|------------|------|--------|--------|--------|--------|-----|
| 900667 | dTz  | 0.000 | 0.346 | 25.30      |            | [°C] |        |        |        |        |     |
| 900668 | dTz  | 0.000 | 0.346 | 25.30      |            | [°C] |        |        |        |        |     |
| 900669 | dTz  | 0.000 | 0.311 | 25.30      |            | [°C] |        |        |        |        |     |
| 900670 | dTz  | 0.000 | 0.311 | 25.30      |            | [°C] |        |        |        |        |     |
| 900671 | dTz  | 0.000 | 0.252 | 25.30      |            | [°C] |        |        |        |        |     |
| 900672 | dTz  | 0.000 | 0.252 | 25.30      |            | [°C] |        |        |        |        |     |
| 900673 | dTz  | 0.000 | 0.241 | 25.30      |            | [°C] |        |        |        |        |     |
| 900674 | dTz  | 0.000 | 0.241 | 25.30      |            | [°C] |        |        |        |        |     |
| 900675 | dTz  | 0.000 | 0.241 | 25.30      |            | [°C] |        |        |        |        |     |
| 900676 | dTz  | 0.000 | 0.241 | 25.30      |            | [°C] |        |        |        |        |     |
| 900677 | dTz  | 0.000 | 0.241 | 25.30      |            | [°C] |        |        |        |        |     |
| 900678 | dTz  | 0.000 | 0.241 | 25.30      |            | [°C] |        |        |        |        |     |
| 900679 | dTz  | 0.000 | 0.241 | 25.30      |            | [°C] |        |        |        |        |     |
| 900680 | dTz  | 0.000 | 0.241 | 25.30      |            | [°C] |        |        |        |        |     |
| 900681 | dTz  | 0.000 | 0.241 | 25.30      |            | [°C] |        |        |        |        |     |
| 900682 | dTz  | 0.000 | 0.241 | 25.30      |            | [°C] |        |        |        |        |     |
| 900683 | dTz  | 0.000 | 0.241 | 25.30      |            | [°C] |        |        |        |        |     |
| 900684 | dTz  | 0.000 | 0.241 | 25.30      |            | [°C] |        |        |        |        |     |
| 900685 | dTz  | 0.000 | 0.241 | 25.30      |            | [°C] |        |        |        |        |     |
| 900686 | dTz  | 0.000 | 0.241 | 25.30      |            | [°C] |        |        |        |        |     |
| 900687 | dTz  | 0.000 | 0.241 | 25.30      |            | [°C] |        |        |        |        |     |
| 900688 | dTz  | 0.000 | 0.241 | 25.30      |            | [°C] |        |        |        |        |     |
| 900689 | dTz  | 0.000 | 0.241 | 25.30      |            | [°C] |        |        |        |        |     |
| 900690 | dTz  | 0.000 | 0.241 | 25.30      |            | [°C] |        |        |        |        |     |
| 900691 | dTz  | 0.000 | 0.241 | 25.30      |            | [°C] |        |        |        |        |     |
| 900692 | dTz  | 0.000 | 0.241 | 25.30      |            | [°C] |        |        |        |        |     |
| 900693 | dTz  | 0.000 | 0.223 | 25.30      |            | [°C] |        |        |        |        |     |
| 900694 | dTz  | 0.000 | 0.223 | 25.30      |            | [°C] |        |        |        |        |     |
| 900695 | dTz  | 0.000 | 0.276 | 25.30      |            | [°C] |        |        |        |        |     |
| 900696 | dTz  | 0.000 | 0.276 | 25.30      |            | [°C] |        |        |        |        |     |
| 900697 | dTz  | 0.000 | 0.383 | 25.30      |            | [°C] |        |        |        |        |     |
| 900698 | dTz  | 0.000 | 0.383 | 25.30      |            | [°C] |        |        |        |        |     |
| 900699 | dTz  | 0.000 | 0.321 | 25.30      |            | [°C] |        |        |        |        |     |
| 900700 | dTz  | 0.000 | 0.321 | 25.30      |            | [°C] |        |        |        |        |     |
| 900701 | dTz  | 0.000 | 0.301 | 25.30      |            | [°C] |        |        |        |        |     |
| 900702 | dTz  | 0.000 | 0.300 | 25.30      |            | [°C] |        |        |        |        |     |
| 900703 | dTz  | 0.000 | 0.349 | 25.30      |            | [°C] |        |        |        |        |     |
| 900704 | dTz  | 0.000 | 0.349 | 25.30      |            | [°C] |        |        |        |        |     |
| 900705 | dTz  | 0.000 | 0.313 | 25.30      |            | [°C] |        |        |        |        |     |
| 900706 | dTz  | 0.000 | 0.313 | 25.30      |            | [°C] |        |        |        |        |     |
| 900707 | dTz  | 0.000 | 0.241 | 25.30      |            | [°C] |        |        |        |        |     |
| 900708 | dTz  | 0.000 | 0.241 | 25.30      |            | [°C] |        |        |        |        |     |
| 900709 | dTz  | 0.000 | 0.241 | 25.30      |            | [°C] |        |        |        |        |     |
| 900710 | dTz  | 0.000 | 0.241 | 25.30      |            | [°C] |        |        |        |        |     |
| 900711 | dTz  | 0.000 | 0.241 | 25.30      |            | [°C] |        |        |        |        |     |
| 900712 | dTz  | 0.000 | 0.241 | 25.30      |            | [°C] |        |        |        |        |     |
| 900713 | dTz  | 0.000 | 0.241 | 25.30      |            | [°C] |        |        |        |        |     |
| 900714 | dTz  | 0.000 | 0.241 | 25.30      |            | [°C] |        |        |        |        |     |
| 900715 | dTz  | 0.000 | 0.241 | 25.30      |            | [°C] |        |        |        |        |     |
| 900716 | dTz  | 0.000 | 0.241 | 25.30      |            | [°C] |        |        |        |        |     |
| 900717 | dTz  | 0.000 | 0.241 | 25.30      |            | [°C] |        |        |        |        |     |
| 900718 | dTz  | 0.000 | 0.241 | 25.30      |            | [°C] |        |        |        |        |     |
| 900719 | dTz  | 0.000 | 0.241 | 25.30      |            | [°C] |        |        |        |        |     |
| 900720 | dTz  | 0.000 | 0.241 | 25.30      |            | [°C] |        |        |        |        |     |
| 900721 | dTz  | 0.000 | 0.241 | 25.30      |            | [°C] |        |        |        |        |     |
| 900722 | dTz  | 0.000 | 0.241 | 25.30      |            | [°C] |        |        |        |        |     |
| 900723 | dTz  | 0.000 | 0.241 | 25.30      |            | [°C] |        |        |        |        |     |
| 900724 | dTz  | 0.000 | 0.241 | 25.30      |            | [°C] |        |        |        |        |     |

ΕΛΕΓΧΟΙ ΜΕΣΟΒΑΘΡΩΝ  
ΠΕΡΙΓΡΑΦΗ ΒΑΣΙΚΩΝ ΦΟΡΤΙΣΕΩΝ

Loads acting on Beam elements

| Number | Type | a[m]  | l[m]  | Load value | Load value | Unit | ya[mm] | za[mm] | ye[mm] | ze[mm] | Ref |
|--------|------|-------|-------|------------|------------|------|--------|--------|--------|--------|-----|
| 900725 | dTz  | 0.000 | 0.241 | 25.30      |            | [°C] |        |        |        |        |     |
| 900726 | dTz  | 0.000 | 0.241 | 25.30      |            | [°C] |        |        |        |        |     |
| 900727 | dTz  | 0.000 | 0.241 | 25.30      |            | [°C] |        |        |        |        |     |
| 900728 | dTz  | 0.000 | 0.241 | 25.30      |            | [°C] |        |        |        |        |     |
| 900729 | dTz  | 0.000 | 0.220 | 25.30      |            | [°C] |        |        |        |        |     |
| 900730 | dTz  | 0.000 | 0.220 | 25.30      |            | [°C] |        |        |        |        |     |
| 900731 | dTz  | 0.000 | 0.291 | 25.30      |            | [°C] |        |        |        |        |     |
| 900732 | dTz  | 0.000 | 0.291 | 25.30      |            | [°C] |        |        |        |        |     |
| 900733 | dTz  | 0.000 | 0.373 | 25.30      |            | [°C] |        |        |        |        |     |
| 900734 | dTz  | 0.000 | 0.373 | 25.30      |            | [°C] |        |        |        |        |     |
| 900735 | dTz  | 0.000 | 0.319 | 25.30      |            | [°C] |        |        |        |        |     |
| 900736 | dTz  | 0.000 | 0.319 | 25.30      |            | [°C] |        |        |        |        |     |
| 900737 | dTz  | 0.000 | 0.190 | 25.30      |            | [°C] |        |        |        |        |     |
| 900738 | dTz  | 0.000 | 0.190 | 25.30      |            | [°C] |        |        |        |        |     |
| 900739 | dTz  | 0.000 | 0.227 | 25.30      |            | [°C] |        |        |        |        |     |
| 900740 | dTz  | 0.000 | 0.227 | 25.30      |            | [°C] |        |        |        |        |     |
| 900741 | dTz  | 0.000 | 0.282 | 25.30      |            | [°C] |        |        |        |        |     |
| 900742 | dTz  | 0.000 | 0.282 | 25.30      |            | [°C] |        |        |        |        |     |
| 900743 | dTz  | 0.000 | 0.273 | 25.30      |            | [°C] |        |        |        |        |     |
| 900744 | dTz  | 0.000 | 0.273 | 25.30      |            | [°C] |        |        |        |        |     |
| 900745 | dTz  | 0.000 | 0.232 | 25.30      |            | [°C] |        |        |        |        |     |
| 900746 | dTz  | 0.000 | 0.232 | 25.30      |            | [°C] |        |        |        |        |     |
| 900747 | dTz  | 0.000 | 0.241 | 25.30      |            | [°C] |        |        |        |        |     |
| 900748 | dTz  | 0.000 | 0.241 | 25.30      |            | [°C] |        |        |        |        |     |
| 900749 | dTz  | 0.000 | 0.241 | 25.30      |            | [°C] |        |        |        |        |     |
| 900750 | dTz  | 0.000 | 0.241 | 25.30      |            | [°C] |        |        |        |        |     |
| 900751 | dTz  | 0.000 | 0.241 | 25.30      |            | [°C] |        |        |        |        |     |
| 900752 | dTz  | 0.000 | 0.241 | 25.30      |            | [°C] |        |        |        |        |     |
| 900753 | dTz  | 0.000 | 0.241 | 25.30      |            | [°C] |        |        |        |        |     |
| 900754 | dTz  | 0.000 | 0.241 | 25.30      |            | [°C] |        |        |        |        |     |
| 900755 | dTz  | 0.000 | 0.241 | 25.30      |            | [°C] |        |        |        |        |     |
| 900756 | dTz  | 0.000 | 0.241 | 25.30      |            | [°C] |        |        |        |        |     |
| 900757 | dTz  | 0.000 | 0.241 | 25.30      |            | [°C] |        |        |        |        |     |
| 900758 | dTz  | 0.000 | 0.241 | 25.30      |            | [°C] |        |        |        |        |     |
| 900759 | dTz  | 0.000 | 0.241 | 25.30      |            | [°C] |        |        |        |        |     |
| 900760 | dTz  | 0.000 | 0.241 | 25.30      |            | [°C] |        |        |        |        |     |
| 900761 | dTz  | 0.000 | 0.241 | 25.30      |            | [°C] |        |        |        |        |     |
| 900762 | dTz  | 0.000 | 0.241 | 25.30      |            | [°C] |        |        |        |        |     |
| 900763 | dTz  | 0.000 | 0.241 | 25.30      |            | [°C] |        |        |        |        |     |
| 900764 | dTz  | 0.000 | 0.241 | 25.30      |            | [°C] |        |        |        |        |     |
| 900765 | dTz  | 0.000 | 0.241 | 25.30      |            | [°C] |        |        |        |        |     |
| 900766 | dTz  | 0.000 | 0.241 | 25.30      |            | [°C] |        |        |        |        |     |
| 900767 | dTz  | 0.000 | 0.208 | 25.30      |            | [°C] |        |        |        |        |     |
| 900768 | dTz  | 0.000 | 0.208 | 25.30      |            | [°C] |        |        |        |        |     |
| 900769 | dTz  | 0.000 | 0.250 | 25.30      |            | [°C] |        |        |        |        |     |
| 900770 | dTz  | 0.000 | 0.250 | 25.30      |            | [°C] |        |        |        |        |     |
| 900771 | dTz  | 0.000 | 0.305 | 25.30      |            | [°C] |        |        |        |        |     |
| 900772 | dTz  | 0.000 | 0.305 | 25.30      |            | [°C] |        |        |        |        |     |
| 900773 | dTz  | 0.000 | 0.242 | 25.30      |            | [°C] |        |        |        |        |     |
| 900774 | dTz  | 0.000 | 0.242 | 25.30      |            | [°C] |        |        |        |        |     |
| 900775 | dTz  | 0.000 | 0.199 | 25.30      |            | [°C] |        |        |        |        |     |
| 900776 | dTz  | 0.000 | 0.199 | 25.30      |            | [°C] |        |        |        |        |     |
| 900777 | dTz  | 0.000 | 0.078 | 25.30      |            | [°C] |        |        |        |        |     |
| 900778 | dTz  | 0.000 | 0.078 | 25.30      |            | [°C] |        |        |        |        |     |
| 900779 | dTz  | 0.000 | 0.093 | 25.30      |            | [°C] |        |        |        |        |     |
| 900780 | dTz  | 0.000 | 0.084 | 25.30      |            | [°C] |        |        |        |        |     |
| 900781 | dTz  | 0.000 | 0.098 | 25.30      |            | [°C] |        |        |        |        |     |
| 900782 | dTz  | 0.000 | 0.098 | 25.30      |            | [°C] |        |        |        |        |     |

ΕΛΕΓΧΟΙ ΜΕΣΟΒΑΘΡΩΝ  
ΠΕΡΙΓΡΑΦΗ ΒΑΣΙΚΩΝ ΦΟΡΤΙΣΕΩΝ

Loads acting on Beam elements

| Number | Type | a[m]  | l[m]  | Load value | Load value Unit | ya[mm] | za[mm] | ye[mm] | ze[mm] | Ref |
|--------|------|-------|-------|------------|-----------------|--------|--------|--------|--------|-----|
| 900783 | dTz  | 0.000 | 0.138 | 25.30      | [°C]            |        |        |        |        |     |
| 900784 | dTz  | 0.000 | 0.138 | 25.30      | [°C]            |        |        |        |        |     |
| 900785 | dTz  | 0.000 | 0.226 | 25.30      | [°C]            |        |        |        |        |     |
| 900786 | dTz  | 0.000 | 0.226 | 25.30      | [°C]            |        |        |        |        |     |
| 900787 | dTz  | 0.000 | 0.284 | 25.30      | [°C]            |        |        |        |        |     |
| 900788 | dTz  | 0.000 | 0.284 | 25.30      | [°C]            |        |        |        |        |     |
| 900789 | dTz  | 0.000 | 0.291 | 25.30      | [°C]            |        |        |        |        |     |
| 900790 | dTz  | 0.000 | 0.291 | 25.30      | [°C]            |        |        |        |        |     |
| 900791 | dTz  | 0.000 | 0.241 | 25.30      | [°C]            |        |        |        |        |     |
| 900792 | dTz  | 0.000 | 0.241 | 25.30      | [°C]            |        |        |        |        |     |
| 900793 | dTz  | 0.000 | 0.241 | 25.30      | [°C]            |        |        |        |        |     |
| 900794 | dTz  | 0.000 | 0.241 | 25.30      | [°C]            |        |        |        |        |     |
| 900795 | dTz  | 0.000 | 0.241 | 25.30      | [°C]            |        |        |        |        |     |
| 900796 | dTz  | 0.000 | 0.241 | 25.30      | [°C]            |        |        |        |        |     |
| 900797 | dTz  | 0.000 | 0.241 | 25.30      | [°C]            |        |        |        |        |     |
| 900798 | dTz  | 0.000 | 0.241 | 25.30      | [°C]            |        |        |        |        |     |
| 900799 | dTz  | 0.000 | 0.241 | 25.30      | [°C]            |        |        |        |        |     |
| 900800 | dTz  | 0.000 | 0.241 | 25.30      | [°C]            |        |        |        |        |     |
| 900801 | dTz  | 0.000 | 0.241 | 25.30      | [°C]            |        |        |        |        |     |
| 900802 | dTz  | 0.000 | 0.241 | 25.30      | [°C]            |        |        |        |        |     |
| 900803 | dTz  | 0.000 | 0.241 | 25.30      | [°C]            |        |        |        |        |     |
| 900804 | dTz  | 0.000 | 0.241 | 25.30      | [°C]            |        |        |        |        |     |
| 900805 | dTz  | 0.000 | 0.241 | 25.30      | [°C]            |        |        |        |        |     |
| 900806 | dTz  | 0.000 | 0.241 | 25.30      | [°C]            |        |        |        |        |     |
| 900807 | dTz  | 0.000 | 0.241 | 25.30      | [°C]            |        |        |        |        |     |
| 900808 | dTz  | 0.000 | 0.241 | 25.30      | [°C]            |        |        |        |        |     |
| 900809 | dTz  | 0.000 | 0.241 | 25.30      | [°C]            |        |        |        |        |     |
| 900810 | dTz  | 0.000 | 0.241 | 25.30      | [°C]            |        |        |        |        |     |
| 900811 | dTz  | 0.000 | 0.271 | 25.30      | [°C]            |        |        |        |        |     |
| 900812 | dTz  | 0.000 | 0.271 | 25.30      | [°C]            |        |        |        |        |     |
| 900813 | dTz  | 0.000 | 0.266 | 25.30      | [°C]            |        |        |        |        |     |
| 900814 | dTz  | 0.000 | 0.266 | 25.30      | [°C]            |        |        |        |        |     |
| 900815 | dTz  | 0.000 | 0.224 | 25.30      | [°C]            |        |        |        |        |     |
| 900816 | dTz  | 0.000 | 0.224 | 25.30      | [°C]            |        |        |        |        |     |
| 900817 | dTz  | 0.000 | 0.158 | 25.30      | [°C]            |        |        |        |        |     |
| 900818 | dTz  | 0.000 | 0.158 | 25.30      | [°C]            |        |        |        |        |     |
| 900819 | dTz  | 0.000 | 0.106 | 25.30      | [°C]            |        |        |        |        |     |
| 900820 | dTz  | 0.000 | 0.106 | 25.30      | [°C]            |        |        |        |        |     |
| 900821 | dTz  | 0.000 | 0.098 | 25.30      | [°C]            |        |        |        |        |     |
| 900822 | dTz  | 0.000 | 0.094 | 25.30      | [°C]            |        |        |        |        |     |
| 900823 | dTz  | 0.000 | 0.084 | 25.30      | [°C]            |        |        |        |        |     |
| 900824 | dTz  | 0.000 | 0.084 | 25.30      | [°C]            |        |        |        |        |     |
| 900825 | dTz  | 0.000 | 0.079 | 25.30      | [°C]            |        |        |        |        |     |
| 900826 | dTz  | 0.000 | 0.078 | 25.30      | [°C]            |        |        |        |        |     |
| 900827 | dTz  | 0.000 | 0.094 | 25.30      | [°C]            |        |        |        |        |     |
| 900828 | dTz  | 0.000 | 0.086 | 25.30      | [°C]            |        |        |        |        |     |
| 900829 | dTz  | 0.000 | 0.099 | 25.30      | [°C]            |        |        |        |        |     |
| 900830 | dTz  | 0.000 | 0.099 | 25.30      | [°C]            |        |        |        |        |     |
| 900831 | dTz  | 0.000 | 0.138 | 25.30      | [°C]            |        |        |        |        |     |
| 900832 | dTz  | 0.000 | 0.138 | 25.30      | [°C]            |        |        |        |        |     |
| 900833 | dTz  | 0.000 | 0.227 | 25.30      | [°C]            |        |        |        |        |     |
| 900834 | dTz  | 0.000 | 0.227 | 25.30      | [°C]            |        |        |        |        |     |
| 900835 | dTz  | 0.000 | 0.282 | 25.30      | [°C]            |        |        |        |        |     |
| 900836 | dTz  | 0.000 | 0.282 | 25.30      | [°C]            |        |        |        |        |     |
| 900837 | dTz  | 0.000 | 0.289 | 25.30      | [°C]            |        |        |        |        |     |
| 900838 | dTz  | 0.000 | 0.289 | 25.30      | [°C]            |        |        |        |        |     |
| 900839 | dTz  | 0.000 | 0.241 | 25.30      | [°C]            |        |        |        |        |     |
| 900840 | dTz  | 0.000 | 0.241 | 25.30      | [°C]            |        |        |        |        |     |