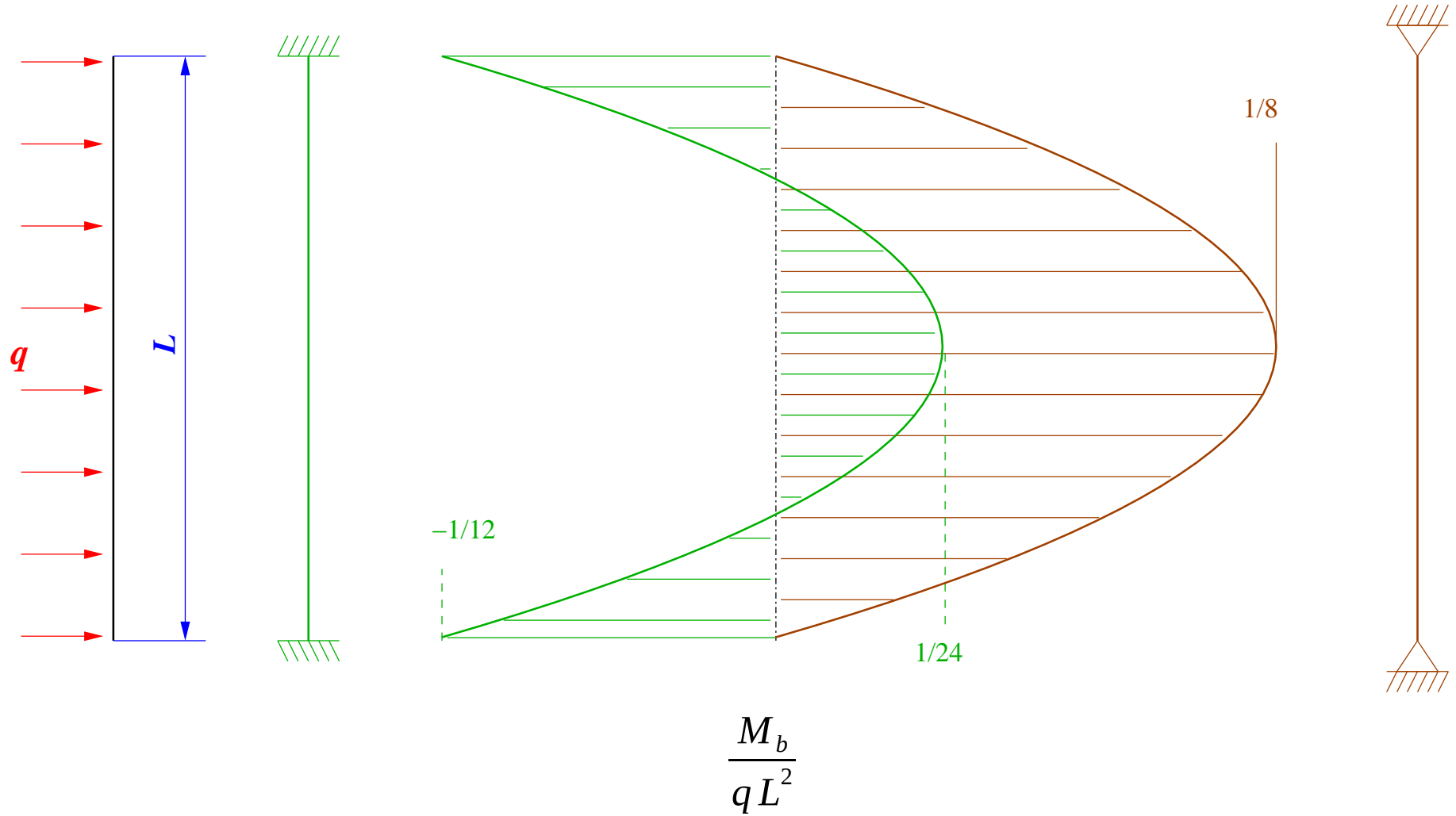
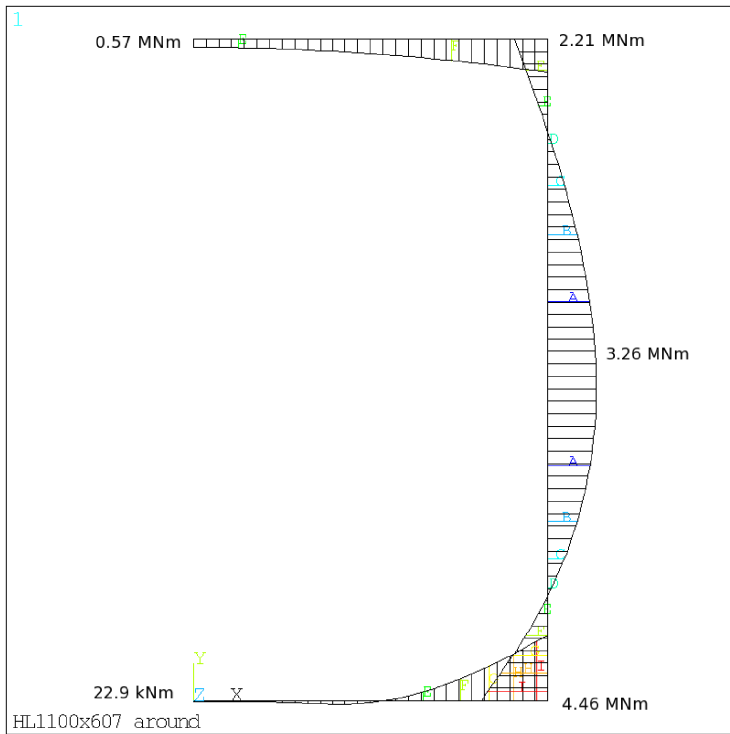


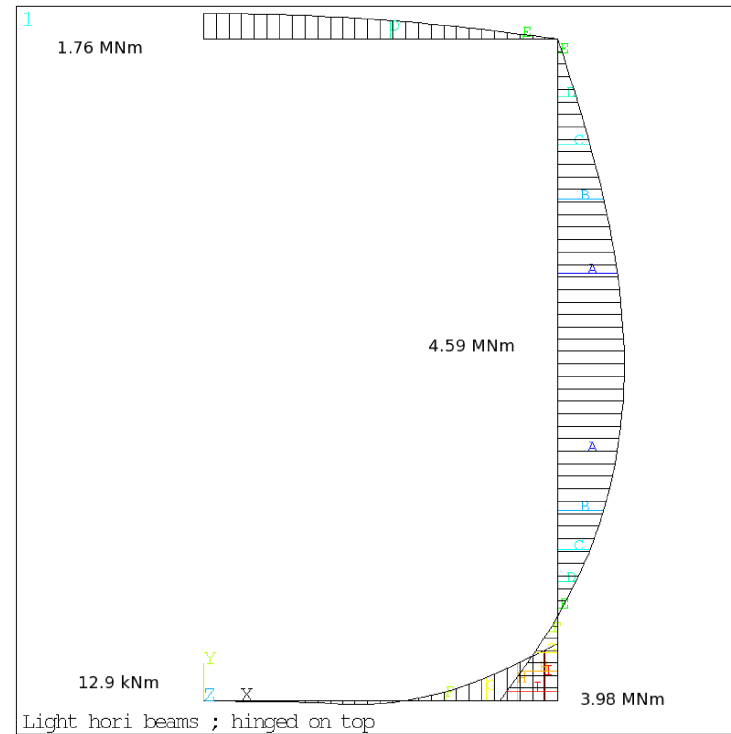
“belt” : heavy beam 1200 / 550 / 40 / 75 [mm] all around ; including own weight ; deflections x 150 ; max. deflection = 19 mm
 (... but “old” width and height)

Recipes for bending moment M_b become simple if (distributed) load q is uniform :

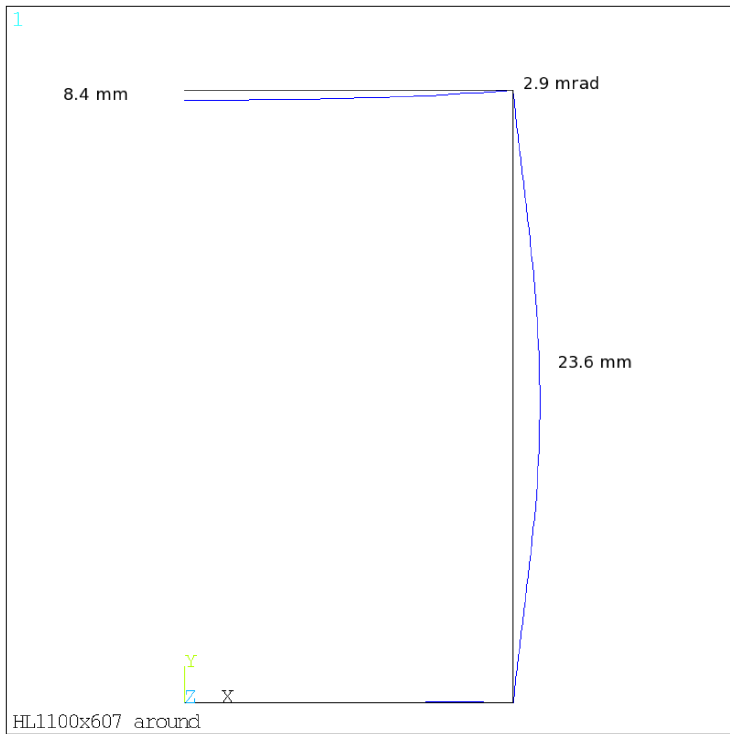




ANSYS 15.0
 MAY 6 2015
 10:25:55
 PLOT NO. 1
 LINE STRESS
 STEP=1
 SUB =1
 TIME=1
 MI MJ
 MIN =-.326E+07
 ELEM=54
 MAX =.446E+07
 ELEM=30
 A =-.283E+07
 B =-.197E+07
 C =-.112E+07
 D =-257888
 E =599438
 F =.146E+07
 G =.231E+07
 H =.317E+07
 I =.403E+07

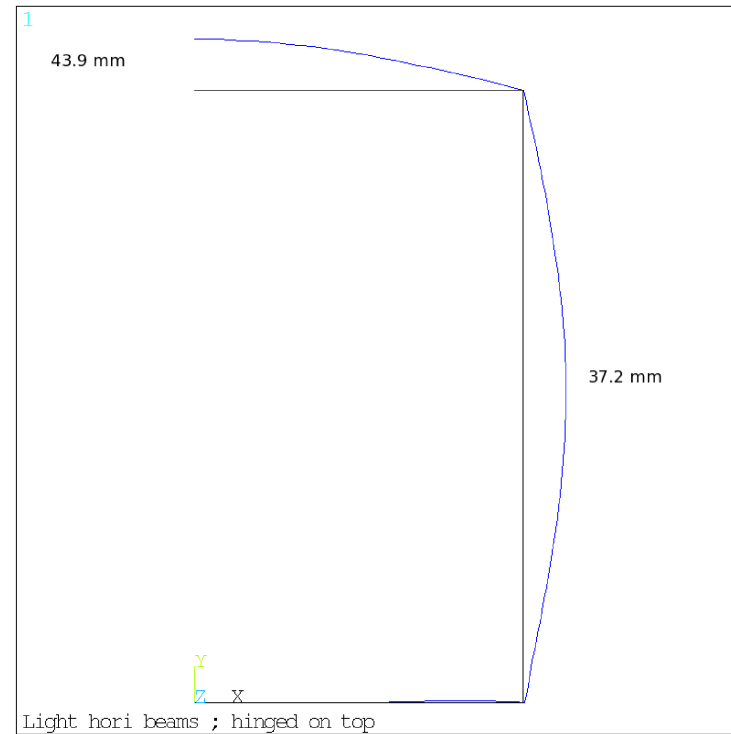


ANSYS 15.0
 MAY 6 2015
 10:14:39
 PLOT NO. 1
 LINE STRESS
 STEP=1
 SUB =1
 TIME=1
 MI MJ
 MIN =-.459E+07
 ELEM=56
 MAX =.398E+07
 ELEM=30
 A =-.412E+07
 B =-.316E+07
 C =-.221E+07
 D =-.126E+07
 E =-307063
 F =645171
 G =.160E+07
 H =.255E+07
 I =.350E+07



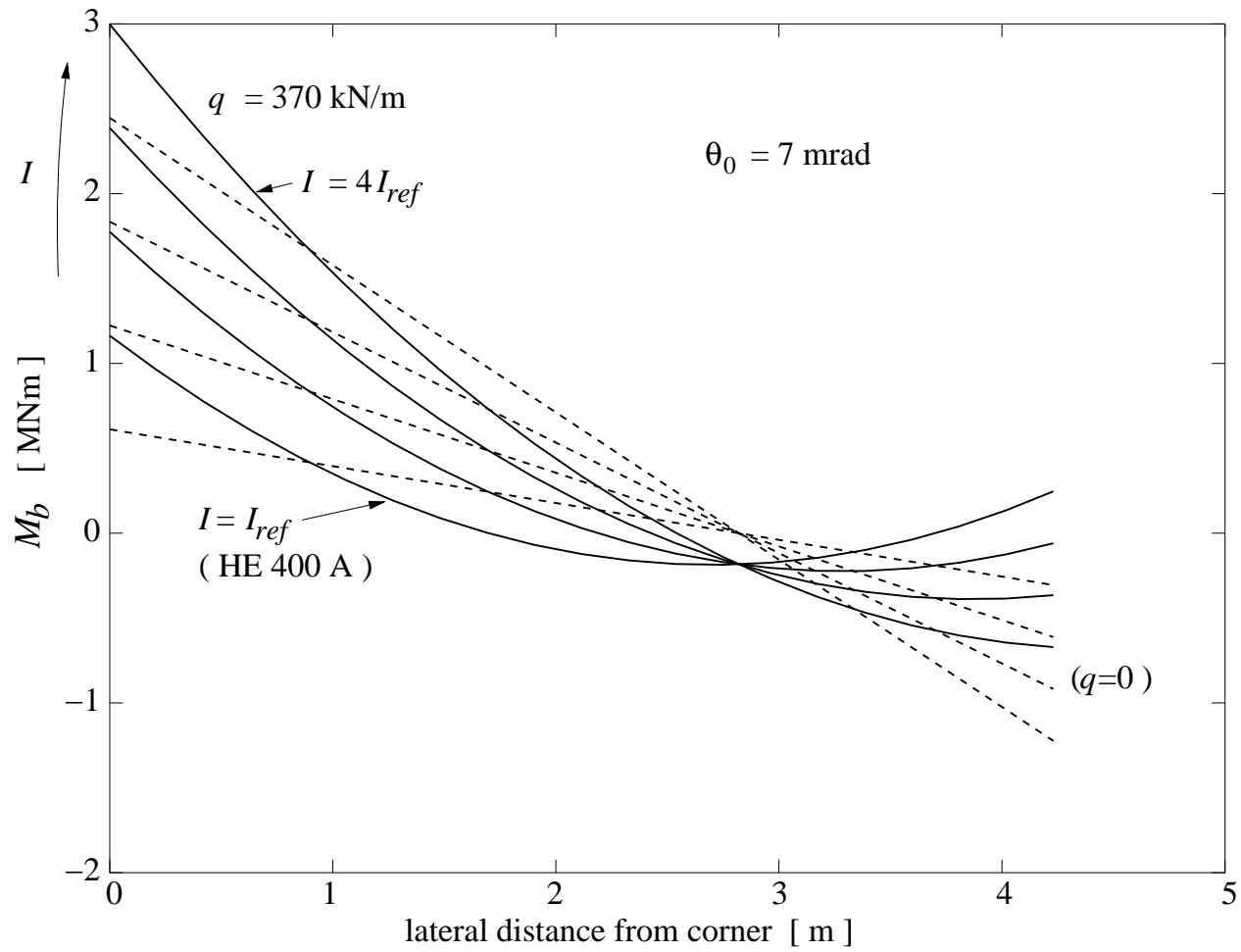
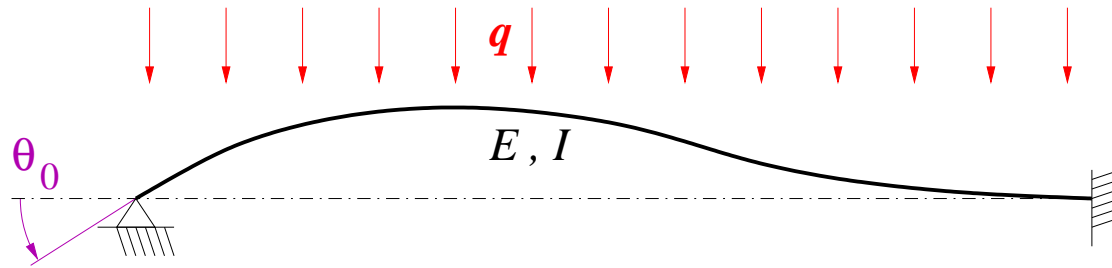
ANSYS 15.0
MAY 6 2015
10:48:44
PLOT NO. 1
DISPLACEMENT
STEP=1
SUB =1
TIME=1
PowerGraphics
EFACET=1
AVRES=Mat
DMX =.023561

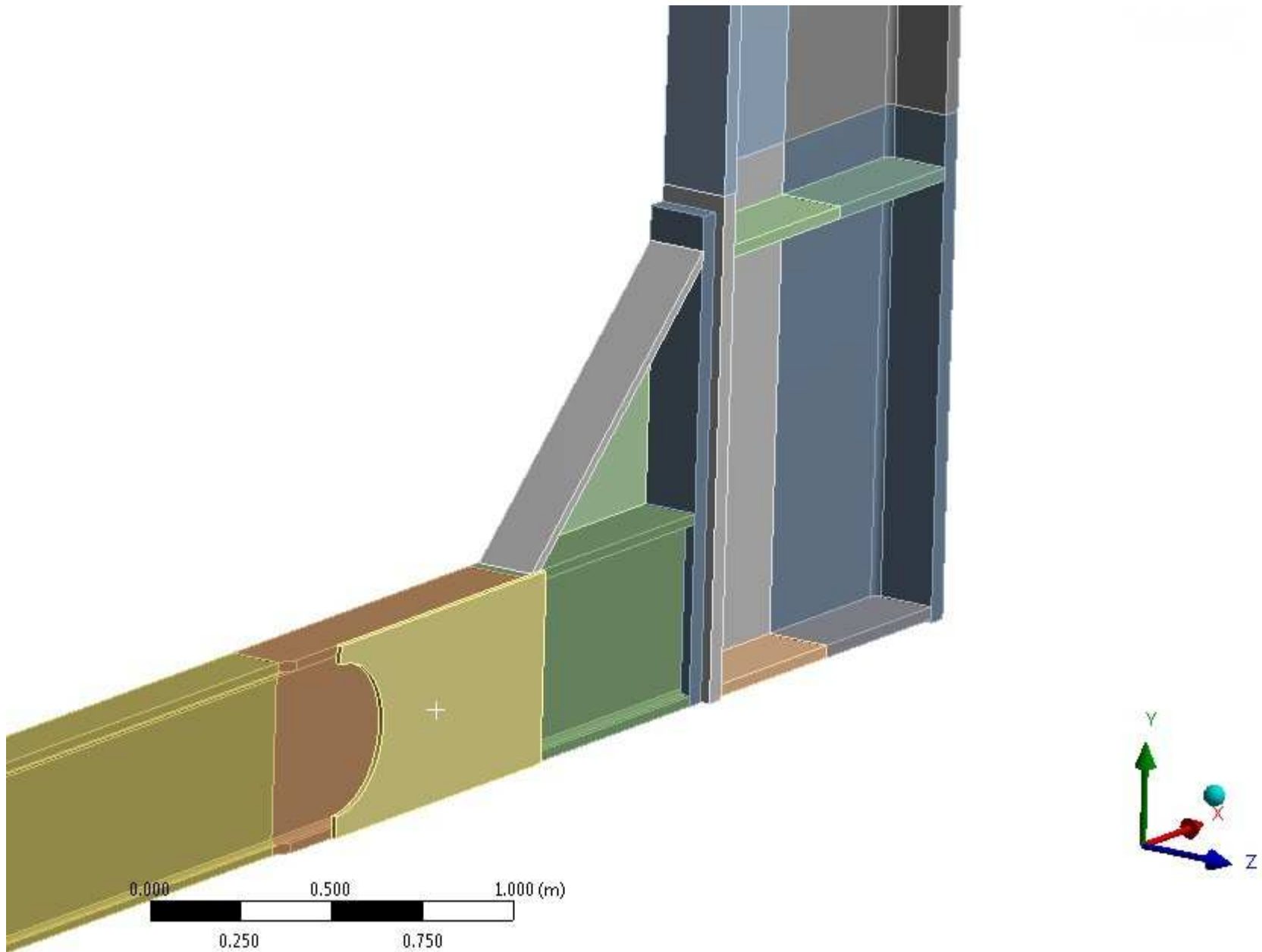
*DSCA=30
ZV =1
*DIST=9.4
*XF =4.8
*YF =8.6



ANSYS 15.0
MAY 6 2015
10:01:43
PLOT NO. 1
DISPLACEMENT
STEP=1
SUB =1
TIME=1
PowerGraphics
EFACET=1
AVRES=Mat
DMX =.043921

*DSCA=30
ZV =1
*DIST=9.4
*XF =4.8
*YF =8.6





Courtesy : Diego !