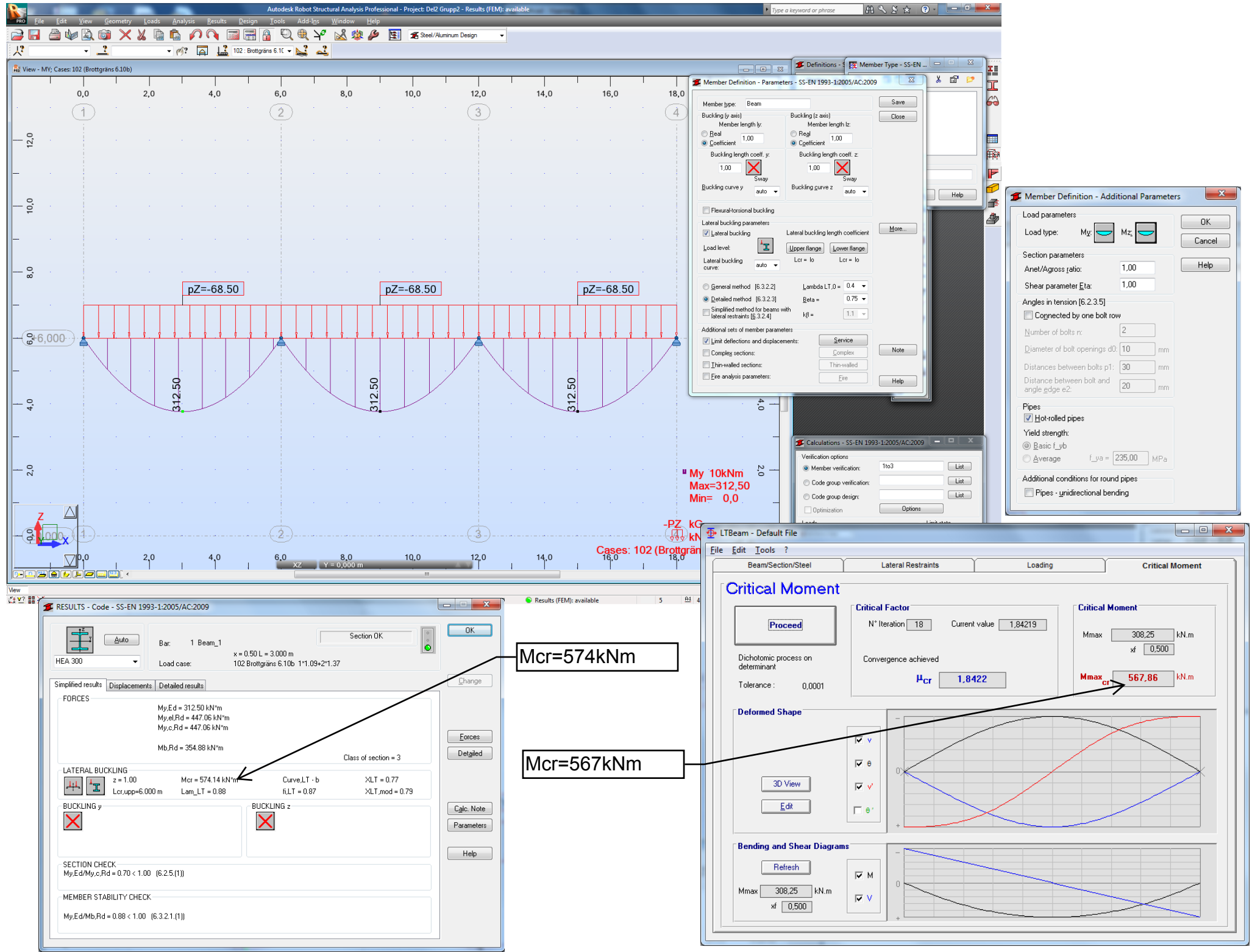
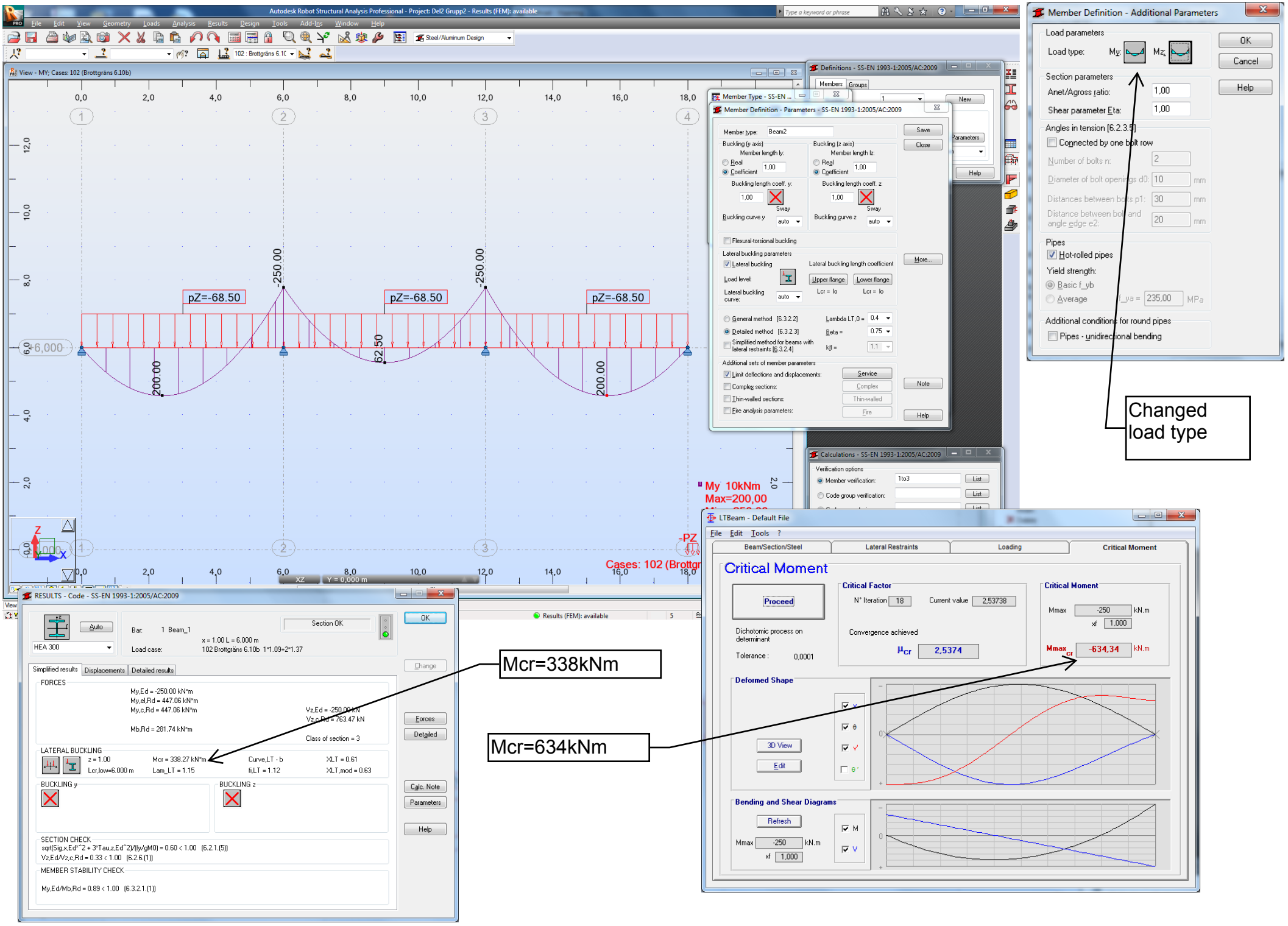

Autodesk Robot Structural Analysis Professional - Project: Del2 Grupp2 - Results (FEM): available
View - MY; Cases: 102 (Brottgräns 6.10b)
pZ=-68.50
pZ=-68.50
pZ=-68.50
312.50
312.50
312.50
My 10kNm
Max=312,50
Min= 0,0
Member Definition - Parameters - SS-EN 1993-1-1:2005/AC:2009
Member Definition - Additional Parameters
Calculations - SS-EN 1993-1-1:2005/AC:2009
RESULTS - Code - SS-EN 1993-1-1:2005/AC:2009
HEA 300
Section OK
Simplified results
Displacements
Detailed results
FORCES
My,Ed = 312.50 kN*m
My,el,Rd = 447.06 kN*m
My,c,Rd = 447.06 kN*m
Mb,Rd = 354.88 kN*m
Class of section = 3
LATERAL BUCKLING
Mcr = 574.14 kN*m
Curve,LT - b
XLT = 0.77
Lam_LT = 0.88
fi,LT = 0.87
XLT,mod = 0.79
BUCKLING y
BUCKLING z
SECTION CHECK
My,Ed/My,c,Rd = 0.70 < 1.00 (6.2.5.(1))
MEMBER STABILITY CHECK
My,Ed/Mb,Rd = 0.88 < 1.00 (6.3.2.1.(1))
Mcr=574kNm
Mcr=567kNm
LTBeam - Default File
Beam/Section/Steel
Lateral Restraints
Loading
Critical Moment
Critical Moment
Proceed
Critical Factor
N° Iteration 18
Current value 1,84219
Dichotomic process on determinant
Convergence achieved
Tolerance : 0,0001
μCr 1,8422
Critical Moment
Mmax 308,25 kN.m
xf 0,500
Mmax cr 567,86 kN.m
Deformed Shape
3D View
Edit
Bending and Shear Diagrams
Refresh
Mmax 308,25 kN.m
xf 0,500


Autodesk Robot Structural Analysis Professional - Project: Del2 Grupp2 - Results (FEM): available
View - MY; Cases: 102 (Brottgräns 6.10b)
pZ=-68.50
pZ=-68.50
pZ=-68.50
250.00
250.00
200.00
62.50
200.00
My 10kNm
Max=200,00
Cases: 102 (Brottgr
Member Definition - Additional Parameters
Load parameters
Load type:
Section parameters
Anet/Agross ratio: 1,00
Shear parameter Eta: 1,00
Angles in tension [6.2.3.5]
Connected by one bolt row
Number of bolts n: 2
Diameter of bolt openings d0: 10 mm
Distances between bolts p1: 30 mm
Distance between bolt and angle edge e2: 20 mm
Pipes
Hot-rolled pipes
Yield strength:
Basic f_yb
Average f_ya = 235,00 MPa
Additional conditions for round pipes
Pipes - unidirectional bending
OK
Cancel
Help
Changed load type
Definitions - SS-EN 1993-1:2005/AC:2009
Member Type - SS-EN ...
Member Definition - Parameters - SS-EN 1993-1:2005/AC:2009
Member type: Beam2
Buckling (y axis)
Buckling (z axis)
Lateral buckling parameters
Additional sets of member parameters
Calculations - SS-EN 1993-1:2005/AC:2009
RESULTS - Code - SS-EN 1993-1:2005/AC:2009
HEA 300
Bar: 1 Beam_1
Load case: 102 Brottgräns 6.10b 1*1.09+2*1.37
Section OK
Simplified results
Displacements
Detailed results
FORCES
My,Ed = -250.00 kN*m
My,el,Rd = 447.06 kN*m
My,c,Rd = 447.06 kN*m
Vz,Ed = -250.00 kN
Vz,c,Rd = 763.47 kN
Mb,Rd = 281.74 kN*m
Class of section = 3
LATERAL BUCKLING
z = 1.00
Lcr,low=6.000 m
Mcr = 338.27 kN*m
Lam_LT = 1.15
Curve,LT - b
fi,LT = 1.12
XLT = 0.61
XLT,mod = 0.63
BUCKLING y
BUCKLING z
SECTION CHECK
sqrt(Sig,x,Ed^^2 + 3*Tau,z,Ed^2)/(fy/gM0) = 0.60 < 1.00 (6.2.1.(5))
Vz,Ed/Vz,c,Rd = 0.33 < 1.00 (6.2.6.(1))
MEMBER STABILITY CHECK
My,Ed/Mb,Rd = 0.89 < 1.00 (6.3.2.1.(1))
Mcr=338kNm
Mcr=634kNm
LTBeam - Default File
Beam/Section/Steel
Lateral Restraints
Loading
Critical Moment
Critical Moment
Proceed
Critical Factor
N° Iteration 18
Current value 2,53738
Dichotomic process on determinant
Convergence achieved
Tolerance : 0,0001
μcr 2,5374
Critical Moment
Mmax -250 kN.m
xf 1,000
Mmax cr -634,34 kN.m
Deformed Shape
3D View
Edit
Bending and Shear Diagrams
Refresh
Mmax -250 kN.m
xf 1,000