

Thermo-mechanical analysis of front plate supported horn

Revision of temperature induced stress level

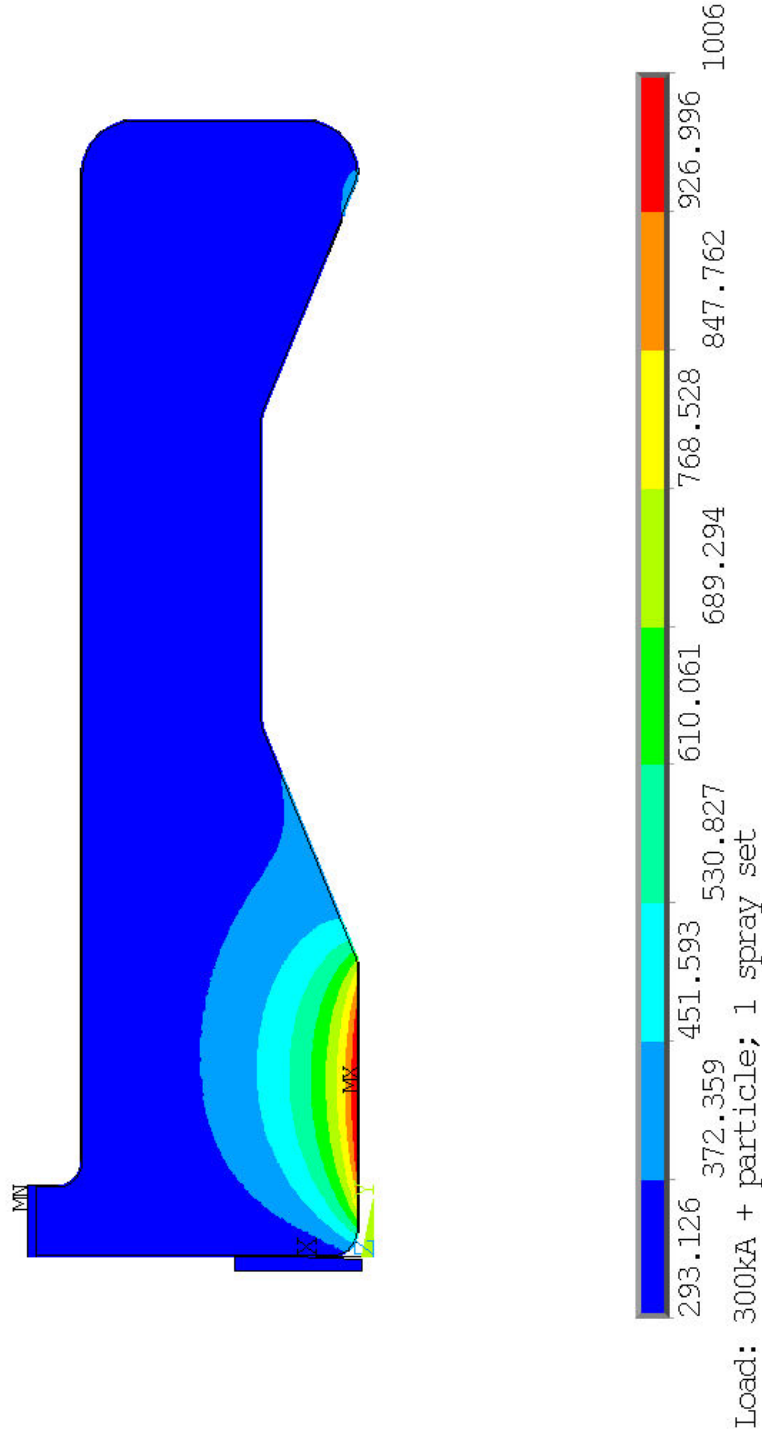
Jan Bielski

1 NODAL SOLUTION

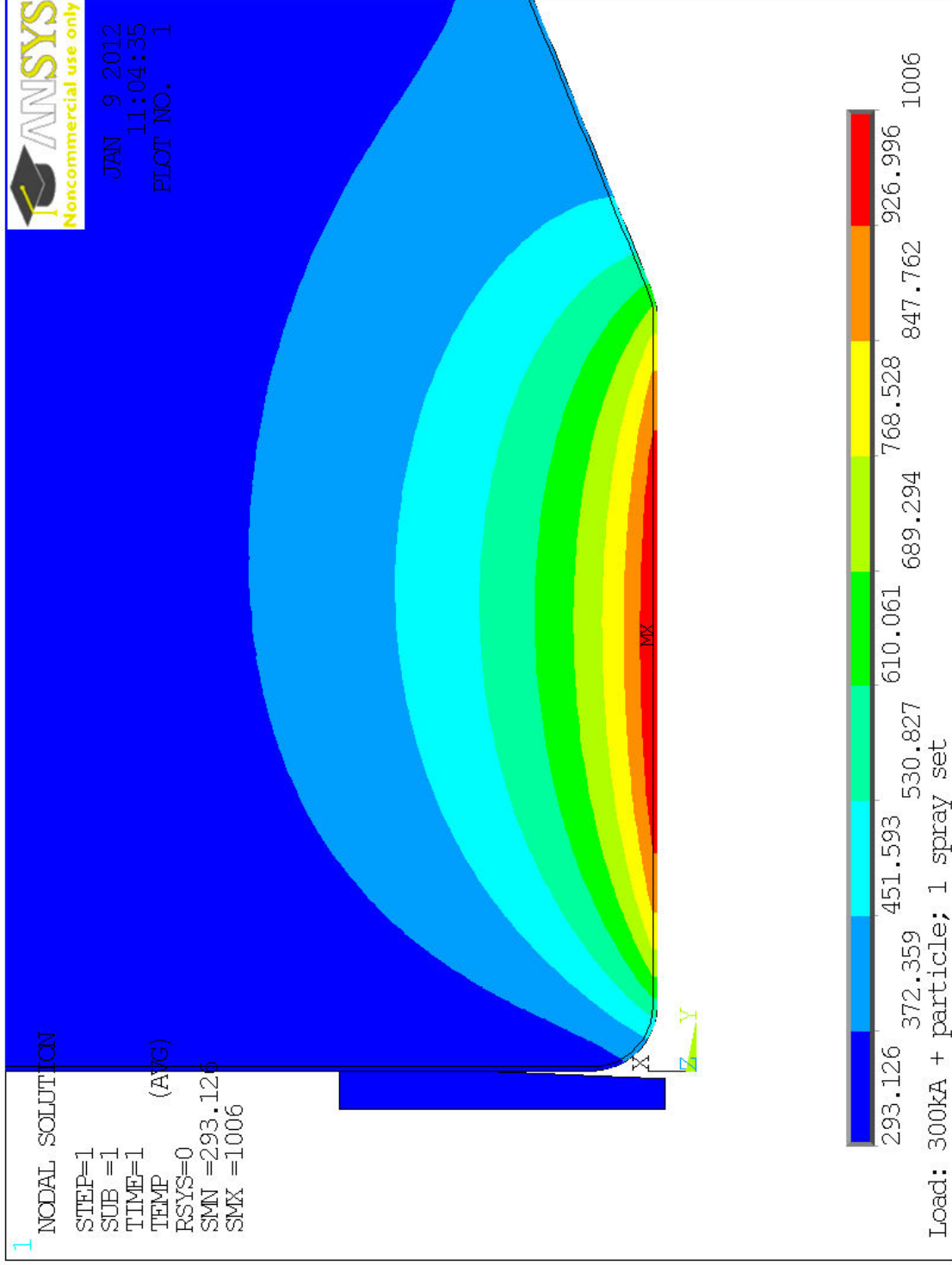
STEP=1
SUB =1
TIME=1
TEMP (AVG)
RSYS=0
SMN =293.126
SMX =1006



JAN 9 2012
11:03:34
PLOT NO. 1



Temperature distribution due to current impulse of 300kA + secondary particle energy



Temperature distribution due to current impulse of 300kA + secondary particle energy

Still too high temperature level near target

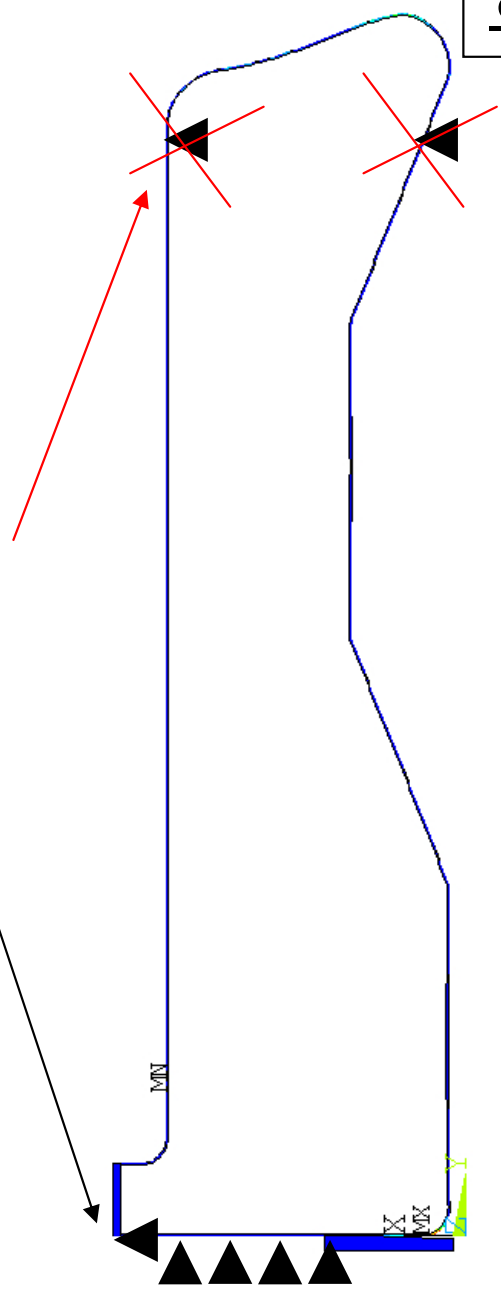
1

NODAL SOLUTION

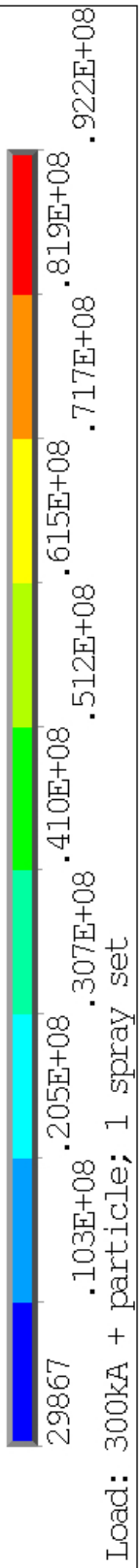
STEP=1
SUB =1
TIME=1
SEQV (AVG)
DMX =.011244
SMN =29867
SMX =.922E+08

radial constraint applied

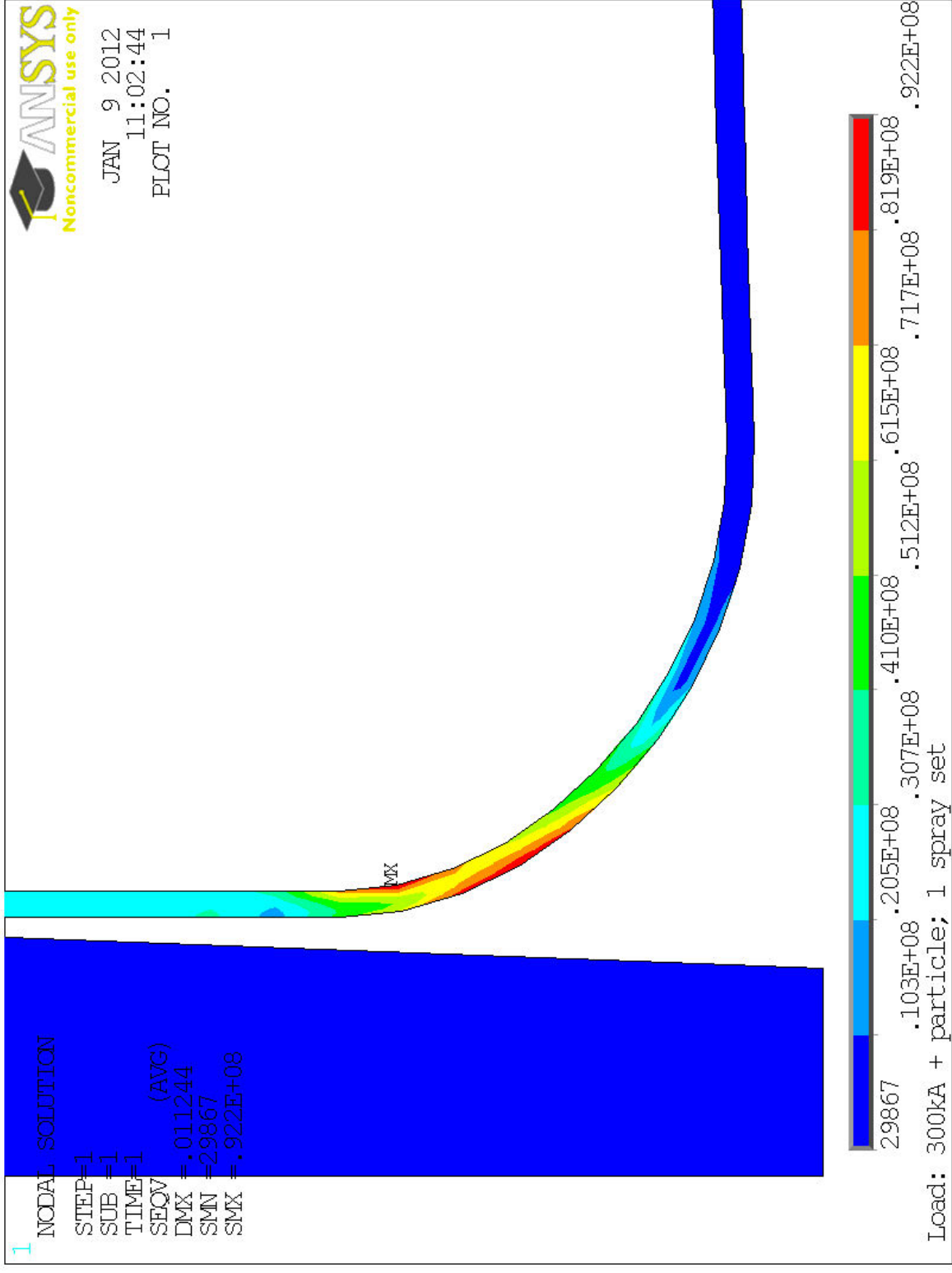
here and **not** here (before)



level of **90 MPa**
instead of 300 MPa



Equivalent thermal stress distribution due to current impulse of 300kA + secondary particle energy



Equivalent thermal stress distribution due to current impulse of 300kA + secondary particle energy