



EUROPEAN ORGANIZATION FOR NUCLEAR RESEARCH
ORGANIZATION EUROPEENNE POUR LA RECHERCHE NUCLEAIRE

CERN - TS Department

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*the distance between the cooling channel and the nozzle was increased to 10 mm

FIRST CHANNELS - 6MM RAD-WATER 21 DEG

WATER AVERAGE TEMPERATURE 21 DEG: $H=5800 \text{ W/m}^2\cdot\text{K}$

FLOW AVERAGE SPEED: 1,4 m/s

TOTAL FLOW NEEDED: 300 l/min

DISPLACEMENT RESULTS:

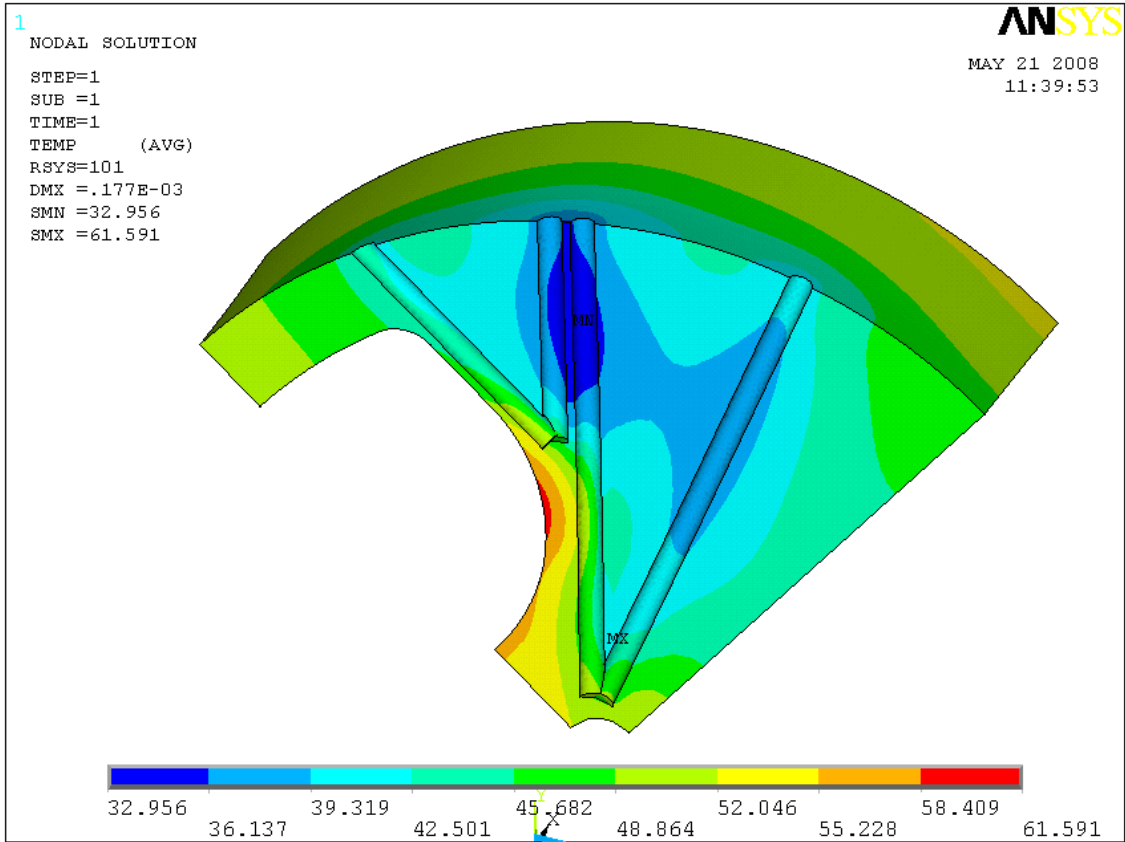
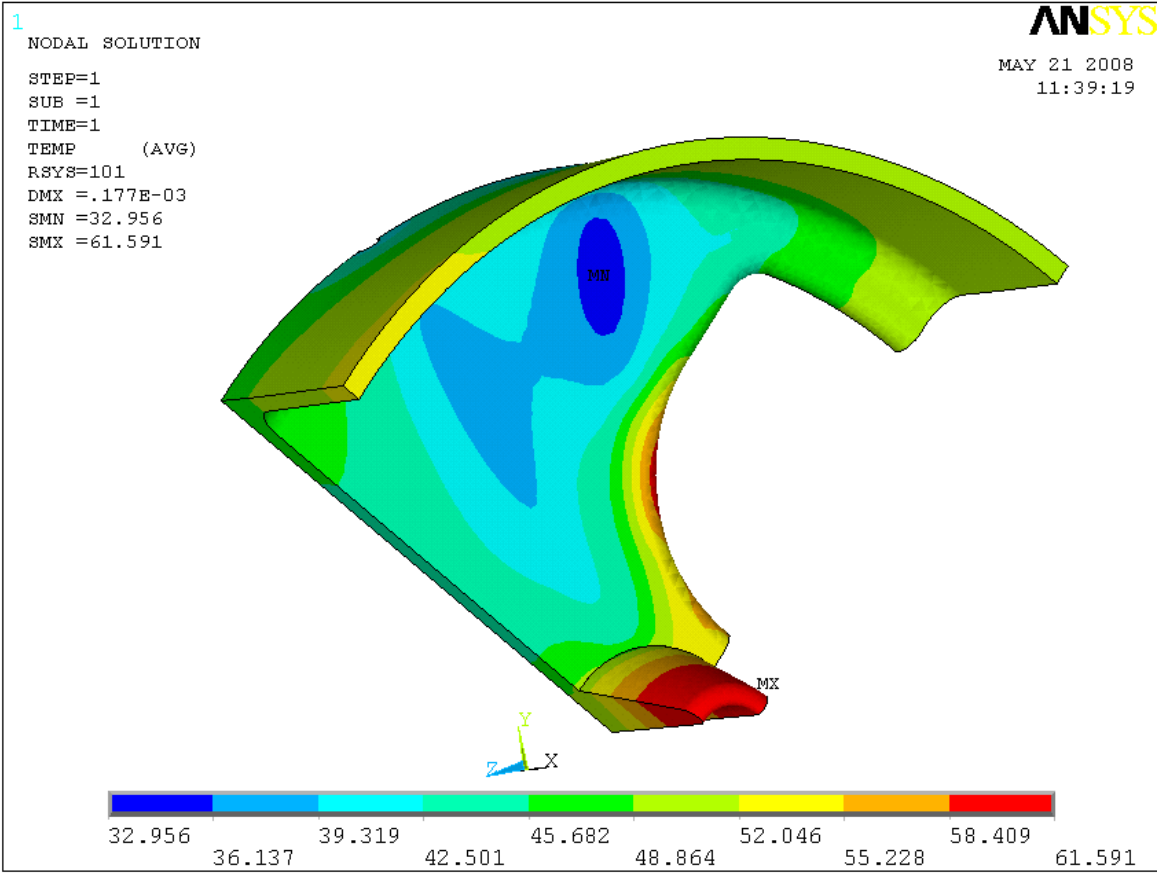
NOZZLE: 47 μm longer

CELL LENGTH: 50 μm x 2 longer

CELL HEIGHT: 110 μm bigger

HOLE RADIUS: 40 μm bigger

TEMPERATURE (FIRST CHANNELS-6MM RAD-300 l/min) 21 deg



VONMISES STRESS (FIRST CHANNELS - 6MM RAD-300 l/min) 21 deg

