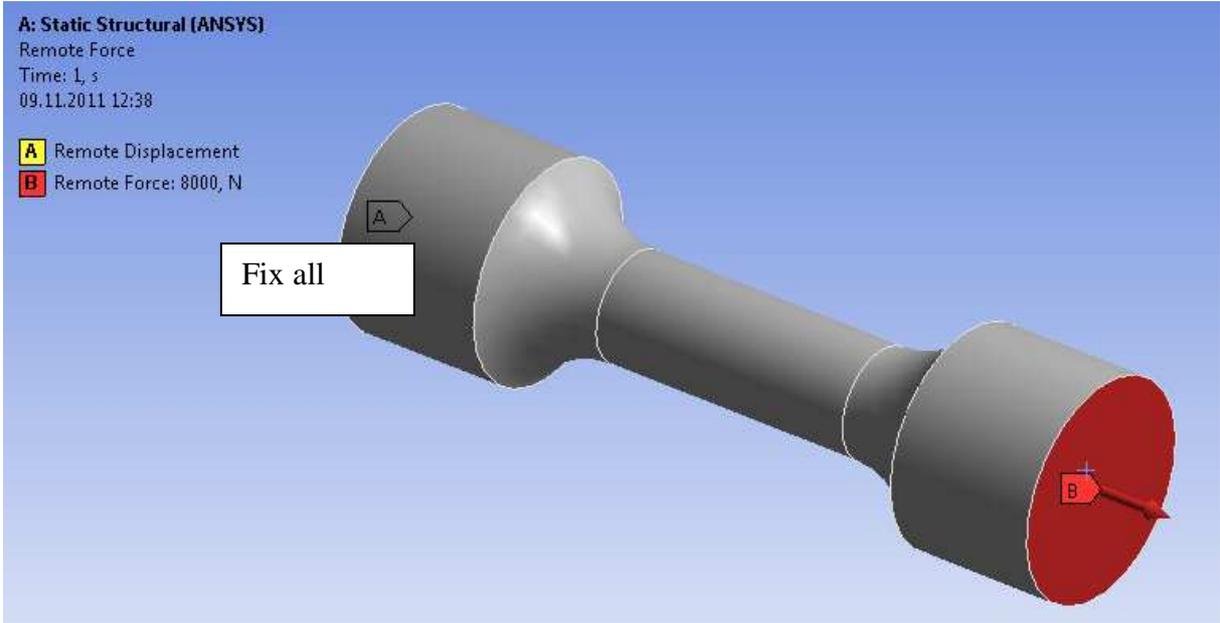
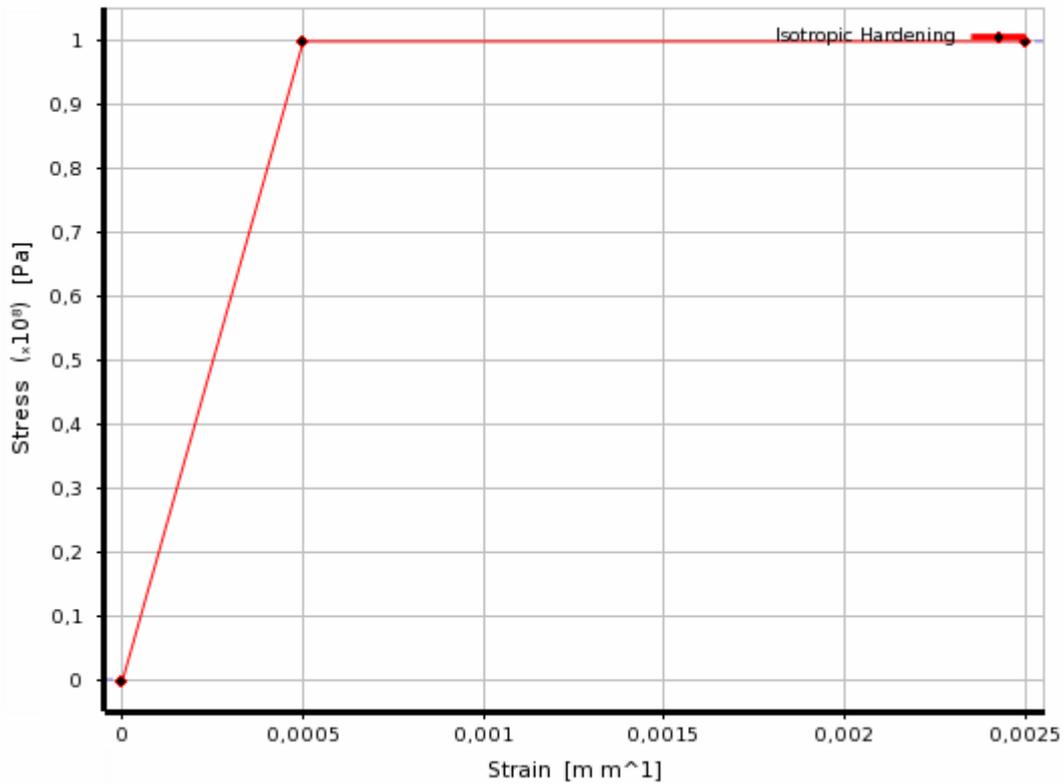


FEM-Modell; 8211 Knoten; 1782 Elemente; Solid 186 (20 Node Hexa)



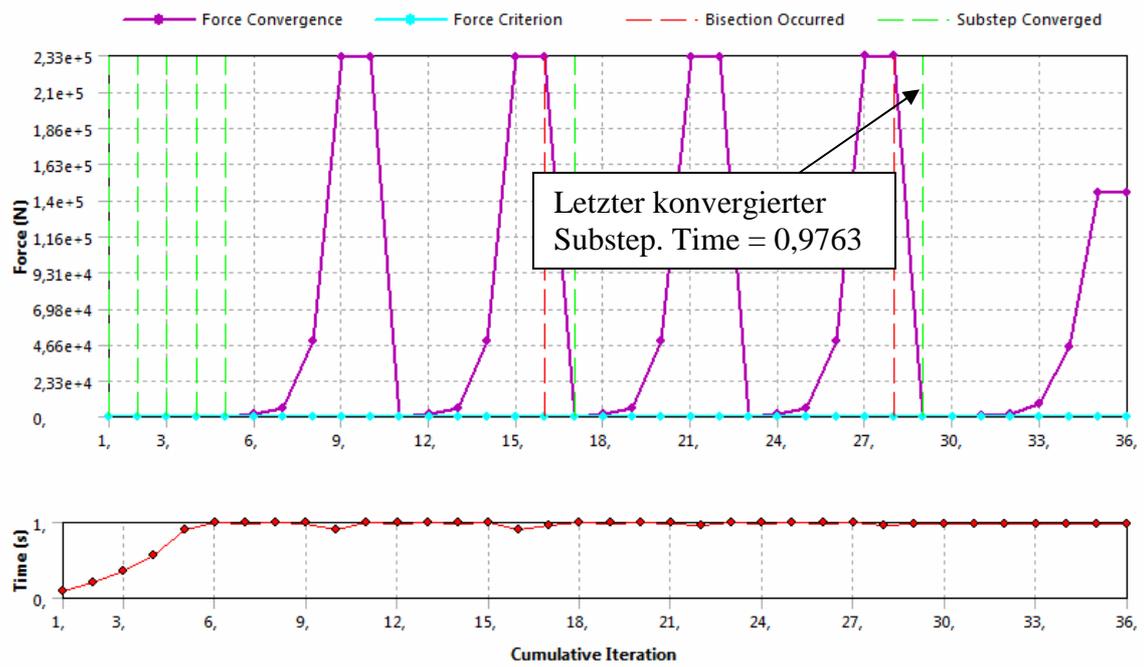
Randbedingungen: A= Einspannung; B= Axialkraft $F_{max} = 8000\text{N}$



Materialgesetz; Linear elastisch, ideal Plastisch; $R_p = 100\text{N/mm}^2$; Isotrope Verfestigung

| | |
|-------------------------------------|----------|
| [-] Step Controls | |
| Number Of Steps | 1, |
| Current Step Number | 1, |
| Step End Time | 1, s |
| Auto Time Stepping | On |
| Define By | Substeps |
| Initial Substeps | 10, |
| Minimum Substeps | 1, |
| Maximum Substeps | 50, |
| [-] Solver Controls | |
| Solver Type | Direct |
| Weak Springs | Off |
| Large Deflection | Off |
| Inertia Relief | Off |
| [+] Nonlinear Controls | |
| [+] Output Controls | |
| [+] Analysis Data Management | |
| [+] Visibility | |

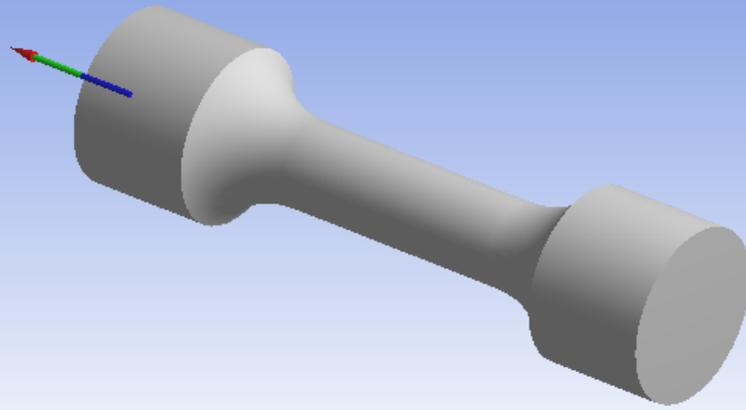
Solver Einstellungen



Konvergenzverlauf

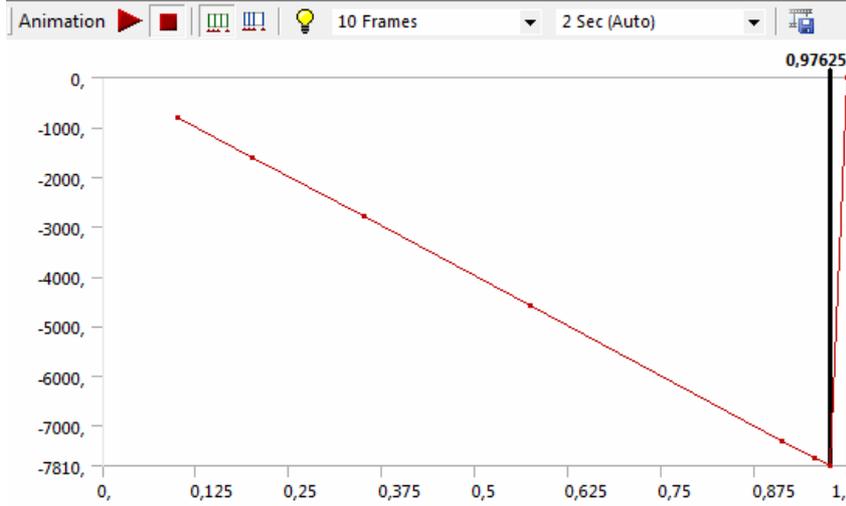
A: Static Structural (ANSYS)

Force Reaction
09.11.2011 13:06



Geometry Worksheet Print Preview Report Preview

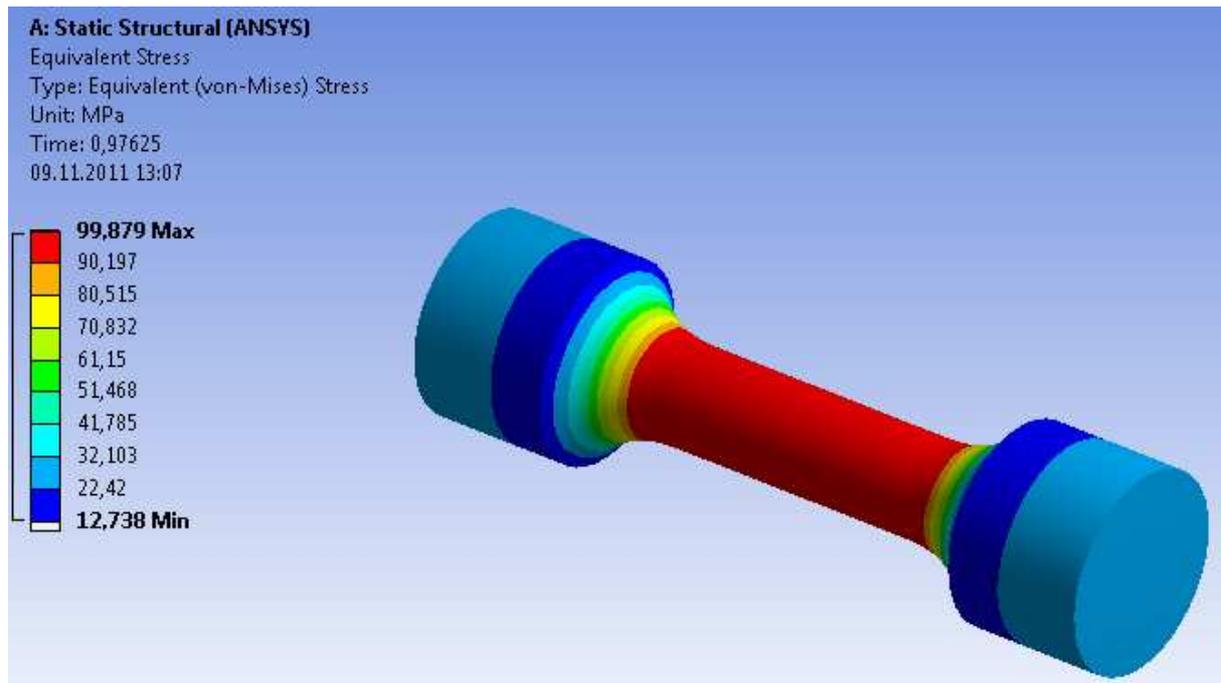
Graph



Tabular Data

| | Time [s] | Force Reaction (X) [N] |
|---|----------|------------------------|
| 1 | 0,1 | -800, |
| 2 | 0,2 | -1600, |
| 3 | 0,35 | -2800, |
| 4 | 0,575 | -4600, |
| 5 | 0,9125 | -7300, |
| 6 | 0,95625 | -7650, |
| 7 | 0,97625 | -7810, |
| 8 | 1, | 0, |

Reaktionskraft



Mises-Vergleichsspannung; $Seqv,max = 99,9N/mm^2 \approx 100N/mm^2$