ANSYS - Thermal Stresses in a Bar

Author: Ben Mullen, Cornell University

Problem Specification
1. Pre-Analysis & Start-Up
2. Geometry
3. Mesh
4. Physics Setup
5. Numerical Solution
6. Numerical Results
7. Verification & Validation
Exercises
Comments

**This page has been moved to https://courses.ansys.com/index.php/courses/thermal-stresses-in-a-bar/
Click in the link above if you are not automatically redirected in 10 seconds.**

Thermal Stresses in a Bar

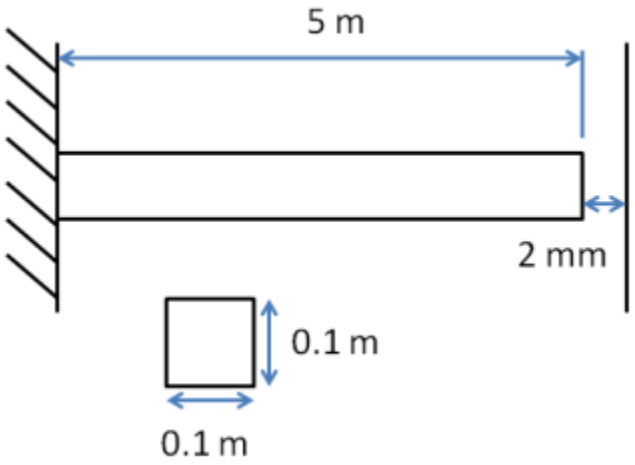
Created using ANSYS 13.0

Problem Specification

A steel bar (E = 2.0E10 Pa, = 0.3, = 1.2E-5) with the dimensions shown below is placed between two walls. On one side, the bar is rigidly fixed to the wall and on the other, there is a 2 mm gap between the wall and the bar. What is the stress in the bar after the temperature increases

[illegible]

?



Go to Step 1: Pre-Analysis & Start-Up

Go to all ANSYS Learning Modules