

ANSYS Class3 Error Report**ERROR NO:**

2015-03

Keywords:

TB,CTE TBFIELD USER-FIELD VARIABLES

Description of Error:

The results are incorrect when the coefficient of thermal expansion is defined using TB,CTE and is used in combination with certain material models as described below.

TB,CTE produces incorrect results when used with the following material models: Chaboche model (TB,CHAB), kinematic hardening models (TB,KINH; TB,MKIN and TB,PLAS,,,KINH), Prony series (TB,PRONY), or Mullins effect hyperelasticity (TB,CDM).

When user-field variables (TBFIELD) are used with TB,CTE and combined with any of the following material models: Shape Memory Alloy with the Superelasticity option (TB,SMA,,,,SUPE), Cast Iron (TB,CAST), Bilinear Kinematic Hardening (TB,BKIN), Hill Anisotropy (TB,HILL), Isotropic Hardening models (TB,BISO; TB,MISO; TB,PLAS,) or Creep (TB,CREEP), the user-field variables are set to zero while evaluating thermal expansions coefficients.

Typical GUI Path(s):

NA

Other Comments:**First Incorrect Version:**

Release 14.5

Corrected In:

Release 17.0

Suggested User Action For Running on Uncorrected Version:

Use MP,ALPX instead for TB,CTE for these combinations.

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