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A Study of Large Plastic Deformations in Dual Phase Steel Using Digital Image Correlation and FE Analysis

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The publisher regrets that the following errors appeared in "A Study of Large Plastic Deformations in Dual Phase Steel Using Digital Image Correlation and FE Analysis," by V. Tarigopula et al., in *Experimental Mechanics*.

An incorrect version of Table 2 was published. Please see below for corrected version.

On the same page as Table 2 in the article, an incorrect symbol was published. $\widehat{\sigma}$ should be $\dot{\widehat{\sigma}}$. The corrected sentence is as follows: The linear hypoelastic relation, which defines the objective stress rate $\sigma^{\nabla J}$ (or $\dot{\widehat{\sigma}}$) in terms of elastic rate-of-deformation $\mathbf{D}^e$ (or $\widehat{\mathbf{D}}^e$), is assumed to be isotropic, i.e. $\mathbf{C}$ is an isotropic fourth order tensor, which is determined by Young's modulus E and Poisson's ratio *í*.

The reference for Wang et al. was omitted from citation list. The full reference is as follows:

Wang T, Hopperstad OS, Lademo OG, Larsen PK (2007) Finite element analysis of welded beam-to-column joints in aluminum allow EN AW 6082 T6. Finite Elem Anal Des 44 (1-2):1-16.

Table 2 Basic constitutive equations for shell (co-rotational) and brick elements

Shell element formulation (co-rotational)	Brick element formulation (Jaumann)
Additive decomposition of rate-of-deformation tensor into elastic and plastic parts	
$\widehat{\mathbf{D}} = \widehat{\mathbf{D}}^e + \widehat{\mathbf{D}}^p, \quad \widehat{\mathbf{D}} = \mathbf{R}^T \cdot \mathbf{D} \cdot \mathbf{R}$	$\mathbf{D} = \mathbf{D}^e + \mathbf{D}^p$
Hypoelastic stress-strain relation on rate form	
$\dot{\widehat{\sigma}} = \mathbf{C} : \widehat{\mathbf{D}}^e, \quad \widehat{\sigma} = \mathbf{R}^T \cdot \sigma \cdot \mathbf{R}$	$\sigma^{\nabla J} = \mathbf{C} : \mathbf{D}^e$
Yield criterion	
$f(\widehat{\sigma}, R) = \overline{\sigma}(\widehat{\sigma}) - (\sigma_0 + R) \leq 0$	$f(\sigma, R) = \overline{\sigma}(\sigma) - (\sigma_0 + R) \leq 0$
Associated flow rule	
$\widehat{\mathbf{D}}^p = \dot{\lambda}\frac{\partial f}{\partial \widehat{\sigma}}, \quad \dot{\overline{\varepsilon}} = -\dot{\lambda}\frac{\partial f}{\partial R} = \dot{\lambda}$	$\mathbf{D}^p = \dot{\lambda}\frac{\partial f}{\partial \sigma}, \quad \dot{\overline{\varepsilon}} = -\dot{\lambda}\frac{\partial f}{\partial R} = \dot{\lambda}$
Loading/unloading conditions	
$f(\widehat{\sigma}) \leq 0;\ \dot{\lambda} \geq 0;\ f\dot{\lambda} = 0$	$f(\sigma) \leq 0;\ \dot{\lambda} \geq 0;\ f\dot{\lambda} = 0$

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