

## Accepted Manuscript

Title: Limiting drawing ratio and deep drawing behavior of dual phase steel tailor welded blanks: FE simulation and experimental validation

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PII: S0924-0136(14)00389-6  
DOI: <http://dx.doi.org/doi:10.1016/j.jmatprotec.2014.10.022>  
Reference: PROTEC 14160

To appear in: *Journal of Materials Processing Technology*

Received date: 16-7-2014  
Revised date: 9-10-2014  
Accepted date: 26-10-2014

Please cite this article as: Bandyopadhyay, K., Panda, S.K., Saha, P., Padmanabham, G., Limiting drawing ratio and deep drawing behavior of dual phase steel tailor welded blanks: FE simulation and experimental validation, *Journal of Materials Processing Technology* (2014), <http://dx.doi.org/10.1016/j.jmatprotec.2014.10.022>

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**Highlights**

- Successful deep drawing of TWBs without failure in the tempered martensite region
- Weld movement, thinning development and undulated cup edge predicted successfully
- Decrease in formability of TWB is not severe in deep drawing unlike stretch forming
- Improvement in LDR from 1.78 to 1.92 by changing initial weld placement in TWBs

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