

## The Experimental and Numerical Analysis of TRIP Steel Wire Drawing Processes Drawn with Different Partial Reductions

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**Abstract :** The strain intensity and redundant strains, dependent in multistage TRIP wire drawing processes from values used single partial reductions, should influence on the intensity of transformation the retained austenite into martensite and thereby on mechanical properties of drawn wires. The numerical analysis of drawing processes with use of Drawing 2D programme, for steel wires made from TRIP steel with 0,29 % has been shown in the work. The change of strain intensity  $\epsilon_c$  and the values of redundant strain  $\epsilon_{xy}$ , has been determined for particular draws in dependence of used single partial reductions.

**Keywords :** steel wire, TRIP steel, drawing processes, fem modelling

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