

# ENGINEERED SOLUTIONS CORPORATION

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## General Motors, LLC Lockout Device Certification

Manufacturer: **Tech Rim Standards, LLC**

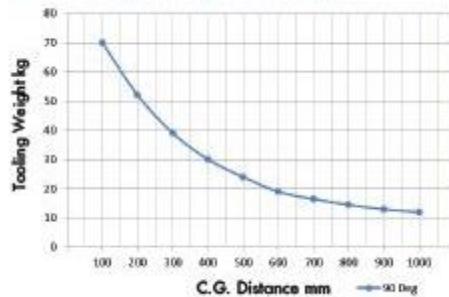
ESCo Project No.: 0201.083

Lockout Device: Tech Pivot TR80/TR100

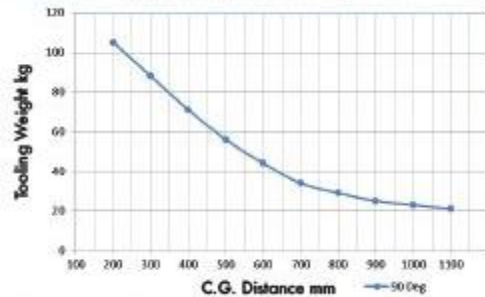
Rated Capacity: 4300 N (1000 lbs) single shear

Moment:

**TECH-PIVOT 80 (VERTICAL/HORIZONTAL)**



**TECH-PIVOT 100 (VERTICAL/HORIZONTAL)**



Safe operating zone operating indicated below the curved line.

Acceptance Criteria: 3 against material yield strength  
5 against material ultimate strength

Material Specifications:

Pin material	AISI 4140
Tooling plates	ASTM A-36

Disclaimer: This certification is based on the use of the product as intended and in accordance with the manufacturer's specification. The weights and CG distances must fall below the above curves. Any application not complying with those provisions is not deemed certified.

Certification:

**Steven K Smith, P.E.**  
Engineered Solutions Corporation  
August 27, 2013