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Seat-belt Locking Device Test

Specification

The customer requested a system to measure the force required to release the locking mechanism of a car seat-belt whilst it is under tension. The test is carried out to ensure the seat-belt can be released easily by a passenger after an accident.

The force measuring instruments must be versatile and easy to fit into a customised test rig designed by the customer.

Solution

Two separate force gauges were supplied for integration into a mechanical test rig. The 1000N Micro-processor Force Gauge was connected to a motor drive assembly which served to pre-tension the seat-belt to a specified limit.

A lever-mechanism was attached to the 250N force gauge and used to measure the compression force required to activate the locking device. The peak force was then recorded on the display and noted by the operator.

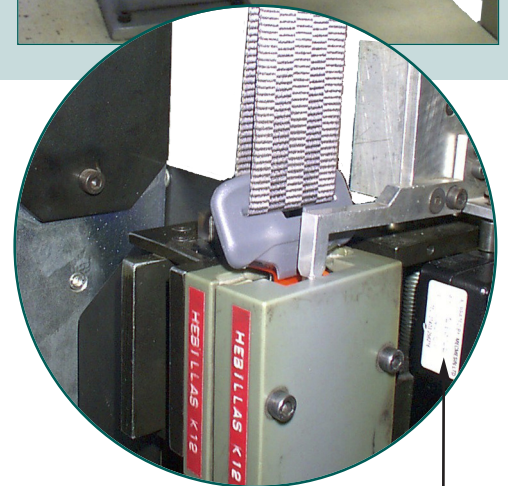
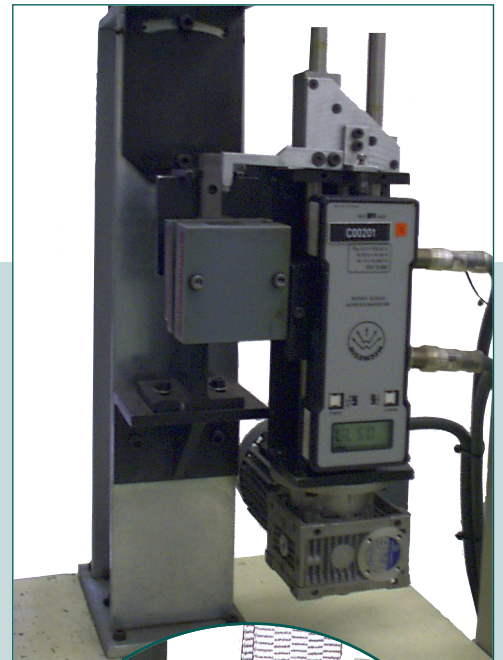
System

- 1000N and 250N MFG

The input of development ideas and suggestions were also a key part of the service to this customer.

Supplied to

Autolov Kle, Spain



Force gauge to measure compression of opening seat belt

Mecmesin Limited

Newton House, Spring Copse Business Park, Slinfold,
West Sussex, United Kingdom, RH13 0SZ

e: sales@mecmesin.com t: +44 (0) 1403 799979 f: +44 (0) 1403 799975 www.mecmesin.com

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