

Servo-hydraulic accelerator sled system for non-destructive testing of vehicle components such as safety belts, seats, child seats, batteries or airbags.

- No special foundation required
- Installation on common industrial floor
- Minimal footprint – only 18 m x 2.2 m
- Complete integration of data acquisition system, lighting and many other components
- Fully factory pre-commissioned system
- Extremely fast installation – typically 3 weeks
- High test frequency – less than 10 min between tests
- Minimal maintenance costs – wear free brake system



Child Seat Tests	Seat Belt Tests	Battery Tests
<ul style="list-style-type: none"> ▪ ECE R44 ▪ ECE R129 ▪ FMVSS 213 ▪ ADAC frontal and side impact 	<ul style="list-style-type: none"> ▪ ECE R16 ▪ AK-LV106 ▪ FMVSS 208 	<ul style="list-style-type: none"> ▪ ECE R100 ▪ GB/T 31467.3-2015
Seat Tests	Rear Impact Tests	Other Applications
<ul style="list-style-type: none"> ▪ ECE R80 ▪ ECE R17 ▪ FAR 25.562 (aircraft seat tests) 	<ul style="list-style-type: none"> ▪ Whiplash (Euro NCAP, ANCAP, KNCAP, CNCAP, JNCAP) ▪ FMVSS 202a ▪ IIHS RCAR-IIWPG 	<ul style="list-style-type: none"> ▪ DIN ISO 27955 (securing of cargo)

Table 1: CIS pulses, application examples (individual vehicle pulses on request)

TECHNICAL SPECIFICATIONS

Max. force	0.8 MN
Max. speed	80 kph
Max. payload	1,500 kg
Max. stroke	1,200 mm
Max. acceleration	80 G
Max. jerk	15 G/ms
Pulse control	Servo valve
Power supply	45 kVA, 380...480 VAC, 50/60 Hz
Footprint (L x W)	18 m x 2.2 m

Sled platform dimensions (L x W)	2.20 m x 1.4 m Mounting grid 50 mm x 100 mm (M12)
Installation height (options)	1.97m (on grade) 1.5 m (below grade)
Number of trigger outputs	7
Time span between two tests	< 10 min
Typical speed deviation for CIS pulses (see table 1)	± 0.5 km/h
Typical acceleration deviation for CIS pulses (see table 1)	± 1 G (CFC60)

(Due to the inter-related nature of sled performance specifications, it may not be possible to simultaneously achieve each maximum. MESSRING technical experts can help you determine the feasibility of each pulse individually.)

Scope of supply

- CIS (Compact Impact Sled)
- M=BUS Pro data acquisition system for 8 analog channels
- Accelerometer (2000 G)
- Control-PC and software

Options

- M=LIGHT LED lighting system
- M=CAM high-speed cameras (on-/offboard)
- M=BUS data acquisition system
- Sled test fixtures, e.g. according to ECE R16, R129, R44, ADAC frontal or side impact
- Maintenance and calibration services