

Hydrobrake

Hydraulic programmable sled deceleration system to non-destructively reproduce complex crash pulses.

- Allows pre-crash braking tests
- Performs all standard component tests as well as complex crash pulses
- | Initial peak prevention
- Excellent reproduction of both the deceleration pulse and velocity curve
- Can be integrated into existing crash facility
- Suitable for pitch, yaw and roll testing



Child Seat Tests	Seat Belt Tests	Battery Tests
ECE R44	ECE R16	ECE R100
ECE R129	AK-LV106	GB/T 31467.3-2015
FMVSS 213	FMVSS 208	
ADAC child seat test pulse		

Seat Tests	Rear Impact Tests	Other Applications
ECE R80 ECE R17	FMVSS 202a IIHS RCAR-IIWPG	DIN ISO 27955 (securing of cargo)
FAR 25.562 (aircraft seat tests)		

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

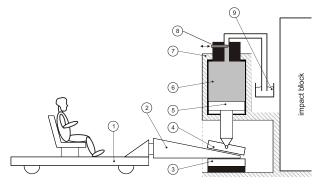


Figure 1: Schematic side view

- 1 Sled
- 2 Brake wedge
- 3 Bottom brake shoe
- 4 Top brake shoe
- 5 Piston
- 6 Primary volume
- 7 Hydraulic cylinder
- 8 Servo-hydraulic valve
- 9 Expansion chamber



TECHNICAL SPECIFICATIONS

Max. braking force	2 MN / 3.2 MN
Max. speed	80 km/h
Max. deceleration examples	110 G @ 500 kg payload and 2 MN 95 G @ 2,000 kg payload and 3.2 MN
Pulse control	Servo valve
Power supply	11 kVA, 380480 VAC, 50/60 Hz, CEE 32 A (2 MN) 15 kVA, 380480 VAC, 50/60 Hz, CEE 32 A (3.2 MN)
Max. jerk	15 G/ms
Max. braking distance	1,800 mm
Typical speed deviation for Hydrobrake pulses (see table 1)	± 0.5 km/h
Typical acceleration deviation for Hydrobrake pulses (see table 1)	± 1 G RMS (CFC60, 030 G)
Time span between two tests	< 10 min
Dimensions (L x W x H)	1,173 mm x 2,250 mm x 1,902 mm (2 MN) 1,160 mm x 2,500 mm x 2,053 mm (3.2 MN)
Weight	3,943 kg (2 MN) 5,541 kg (3.2 MN)

Scope of supply | Hydrobrake

Safety guard

Crashsoft control software

Optional equipment | Impact wedge

Universal test sled

Maintenance services