

TECCON

heart of engineering

DT-3000 SERIES DROPTOWER TEST SYSTEM

Our Drop Tower allows tests that are tailored to our customers' needs: Flexible Test configurations and variable impactors result in maximal individualization. The component and baseline tests create conclusive results that help to minimize the development effort for components and systems.

Added Value

Supports the technical component design and reduces development cost for the system.

We offer a wide range of tests with different masses and speeds.

- Component tests (Bumper, doors, crashbox, battery modules, ...)
- Tests for simulation validation
- Material validation
- Optimization of energy absorption
- Shock tests

Besides the customer specific turn key systems for your test lab, we also offer testing services on our test system at TECCON.



ADVANTAGES OF THE DT-3000 AT A GLANCE

Flexible

- Impact tests and Shock tests possible
- Interchangeable impactors and masses for different stiffnesses
- Force, Acceleration and Intrusion measurement
- Customized sensors possible
- Interchangeable drop sleds
- Masses from 200 kg to 3,000 kg
- Speeds from 5 kph to 30 kph
- Wide impact area

Accurat

- High reproducibility
- High repeatability of impact speed
- Rebound protection

User Friendly

- One man operation
- automatic data processing

Safe

- Redundant Safety systems
- Mechanical lock at service position

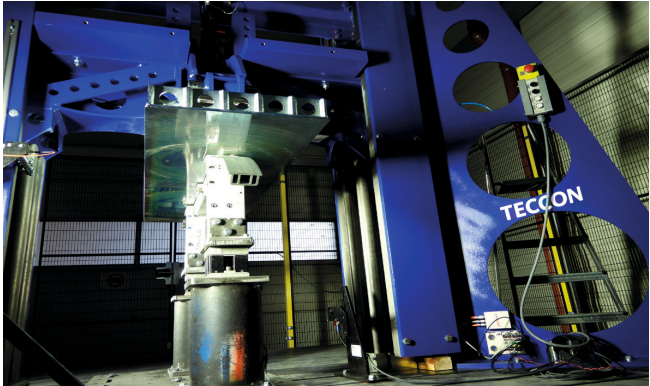


DT-3000: the specifications in details

Supply	400VAC – 3/N/PE 8A
Rebound protecion	Compressed air 6 Bar 150l/min
Energy	Mechanical brake
Dropweight small	0.145 bis 104 kJ
Dropweigth big	150 - 700 kg
Speed	700 - 3000 kg
max. Drophigh	5 - 30 km/h (1,4 - 8,3 m/s)
Speed repetition	4.5 m
Standard sensors (Sensors can be customized)	+/- 0,1 km/h
Dimensions drop tower (lxbxh)	Load cell 500 kN uniaxial
Dimensions impactor max. (lxbxh)	Intrusion measurement 600 mm, Sampling rate 10 kHz, triaxial acceleration sensor
max. width / Impaktor	3.400 x 1.850 x 7.700 mm
recommended room temperature	1.650 x 1.300 x 1.000 mm
	1.300 mm
	22 °C +/- 4°C

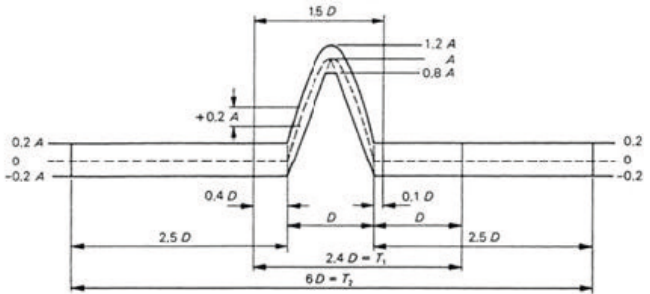
Droptower

A freely definable impactor is brought to a height corresponding to the input parameters. The impactor is dropped by an automatic release unit and hits a test specimen mounted on the floor. Appropriate measurement technology can be used to collect data for component and system development.



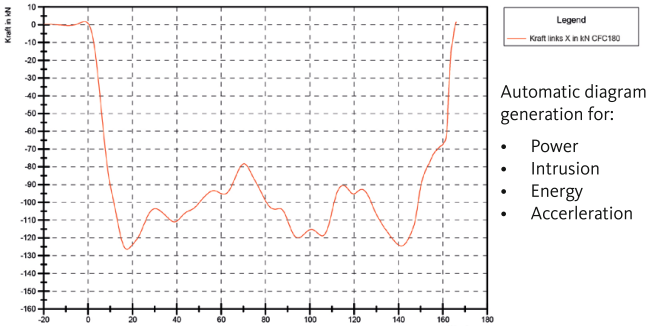
Shock test

For the shock test, the test specimen can be mounted on the drop carriage and a shock can be simulated on impact. The shock profile can be customized by using special deformation elements.



Additional equipment

The standard equipment of the system includes the sensors described in the specifications. The appropriate measurement technology, high-speed cameras and light can also be offered according to customer requirements. For evaluation and documentation. It supports export to all common data formats.



Highspeed Camera



Lighting Technology



PASSIVE SAFETY UNIQUE EXPERIENCE IN ENGINEERING, SIMULATION, TEST AND TEST EQUIPMENT.



Our products

We offer a comprehensive range of test equipment for passive safety and combine the highest precision with maximum automation to achieve the best possible test efficiency.

Universal Impactor Testing System

- FMH
- FGS-Kopf
- Upper Leg
- Linear Impaktor
- Flex PLI
- aPLI
- TRL-Bein
- Ejection Mitigation
- H-Pendel
- Bodyblock
- Misuse

Moving Barriers

- FMVSS 214
- FMVSS 301
- IIHS
- ECE R95
- ECE R34
- TRIASS15
- NHTSA OMDB
- RCAR
- MPDB
- AE-MDB
- KMVSS

Bumper Pendulum

- US Part 581
- CMVSS 215
- ECE-R42
- GB 17354
- AIS-006
- KMVSS Art. 93
- GOS 41

Customizer Test Systems

- feste Barrieren
- Laborausstattung
- Pfahltest Systeme
- Seitenschlitten
- Airbag Testing
- dyn. Rollover
- Dachlastprüfstände, uvm.

Low Speed Crash System

- ECE-R42
- US PART 581
- (CMVSS 215)
- IIHS
- RCAR und Allianz Tests

Static Rollover

- FMVSS 301
- FMVSS 305