

## STM10P - Free Standing - 10kg Payload - High Speed - High Acceleration

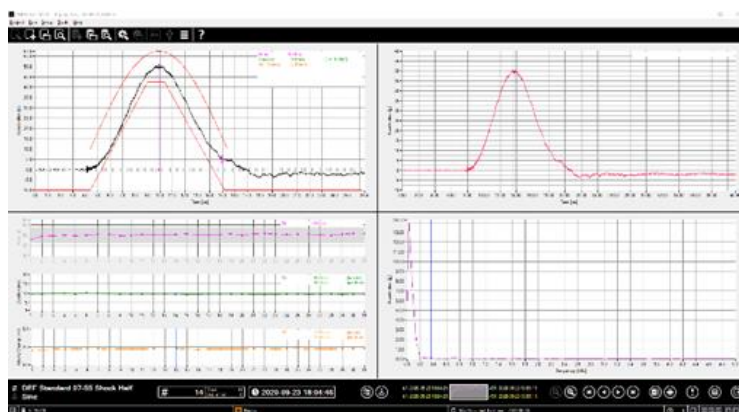
- Shock repetition rate of up to ~1 shock/second
- Closed loop control on shock amplitude
- 320 x 250mm payload area
- Resonance free shock amplitudes of up to 1400g
- Ideal for development, life duration and production testing
- Free standing machine, with own seismic mass

The STM10P is our high-performance flatbed shock machine for cost effective shock testing. Several machines have been delivered to the watch, defense and aerospace industry where high amplitude shocks are made for life duration testing.

Test items are mounted on a 320x250mm aluminum table which can be adapted to interface with quick release platforms for minimum setup time on the production line. Table lifting is achieved by a built-in pneumatic ram which is then accelerated down allowing the table to free fall. Through utilization of timer counters coupled to high precision valves controlled by our IMPALA2 software, this machine generates highly repeatable shocks at a rate of up to ~60/minute.



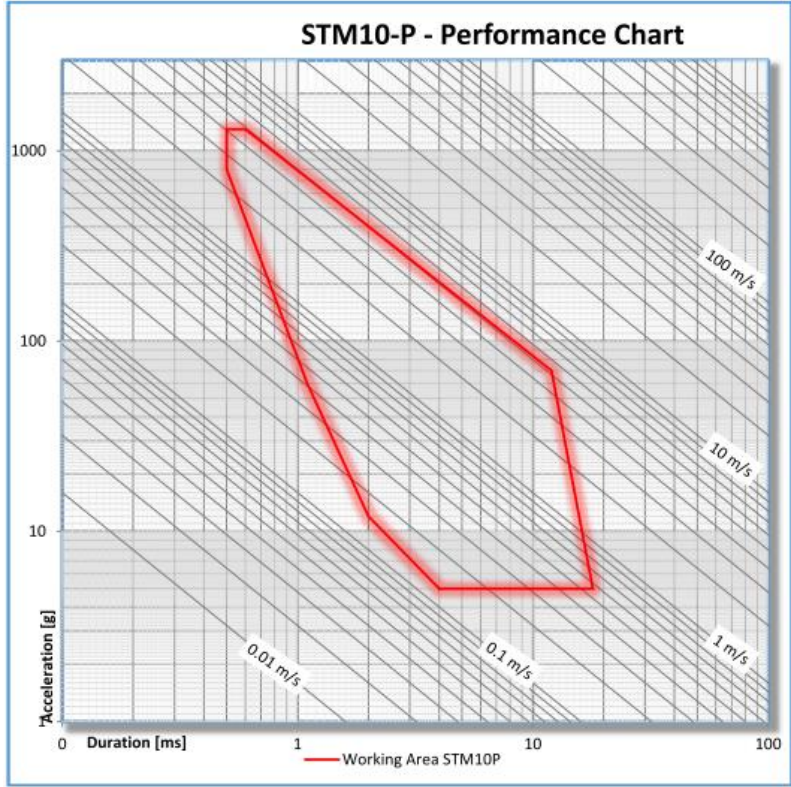
**IMPALA2** is a closed loop control and visualization software that continuously monitors the response signal from the test item mounting platform. Any change in the response amplitude will be immediately corrected ensuring continuous high-quality shocks. A range of current industry standard tolerance zones can be selected and displayed over the response waveform. Full remote control is available for integration into the production environment.



### Feature Highlights

- Easy and user-friendly software
- Automatic amplitude control (Closed loop)
- Time function FFT and trend data on peak, duration, and velocity
- 4 channel data acquisition
- Simple test and data viewer with replay function
- Comprehensive cursor read-outs
- Tolerance window monitoring

## Technical Specifications

PERFORMANCE AND TEST ITEM MOUNTING	
Maximum Test Item Weight	10kg
Mounting Surface	320 x 250mm
Maximum Acceleration	up to 1400g
Range of Shock Pulse Width	0.5ms to 20ms
Range of Velocity Change	0.13m/s to 5m/s
Shock Repetition Rate	up to ~60/minute
Performance Chart	 <p>STM10-P - Performance Chart</p>
PHYSICAL	
Machine Weight	approx. 440kg
Required Floor Area	450 x 370mm
Outside Dimensions	400 x 320 x 800mm (950mm included safety guard)
REQUIRED UTILITIES	
Air Pressure	4-6 bar (4 bar recommended)
Power	wide range 110/240VAC - 50/60Hz
Min. Software/HW requirements	>= Win10 - Prof. / 1x free USB-A / Full-HD Monitor
Accelerometer	1x Ref. Accelerometer with BNC end



ELSTAR Elektronik AG  
Hardstrasse 41  
5430 Wettingen  
Switzerland

eMail: [mail@elstar.com](mailto:mail@elstar.com)  
Web: [www.elstar.com](http://www.elstar.com)  
Tel: +41 56-427 18 88

