

STM5 - High Acceleration – Tri-Axis Mounting – High Speed

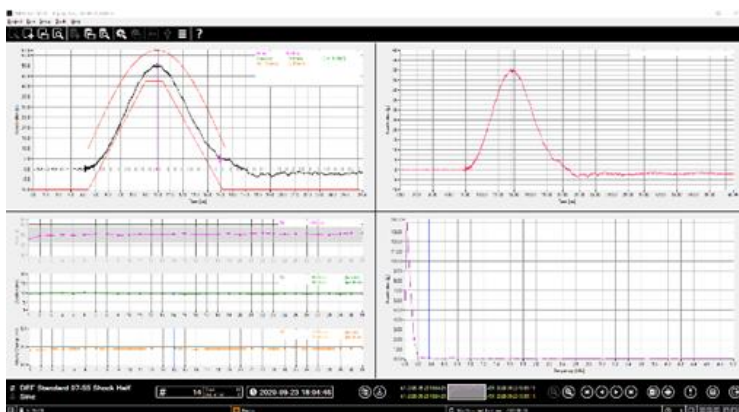
- Shock repetition rate of up to ~1 shock/second
- Closed loop control on shock amplitude
- Test item can be mounted in tri-axis (top/left/right)
- Resonance free shock amplitudes of up to 2000g
- Ideal for small component testing
- Free standing machine with own seismic mass

The STM5 has been developed to meet the shock testing requirements of the small components industry. Several machines have been delivered to car & watch manufacturers in the field of production quality control together with research and development.



Test items can be mounted on 3 surfaces (top/left/right) simultaneous on a 150mm cube which allows testing of multiple components in tri-axis. This machine is unique in our product line in having a dynamically tuned beam pivoting at one end. This construction allows resonant free testing down to at least 0.3ms. Beam lifting is achieved by a built-in pneumatic ram which is then accelerated down allowing the beam to free fall. Our own made software controls the STM resulting highly repeatable shocks at a rate of max. 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

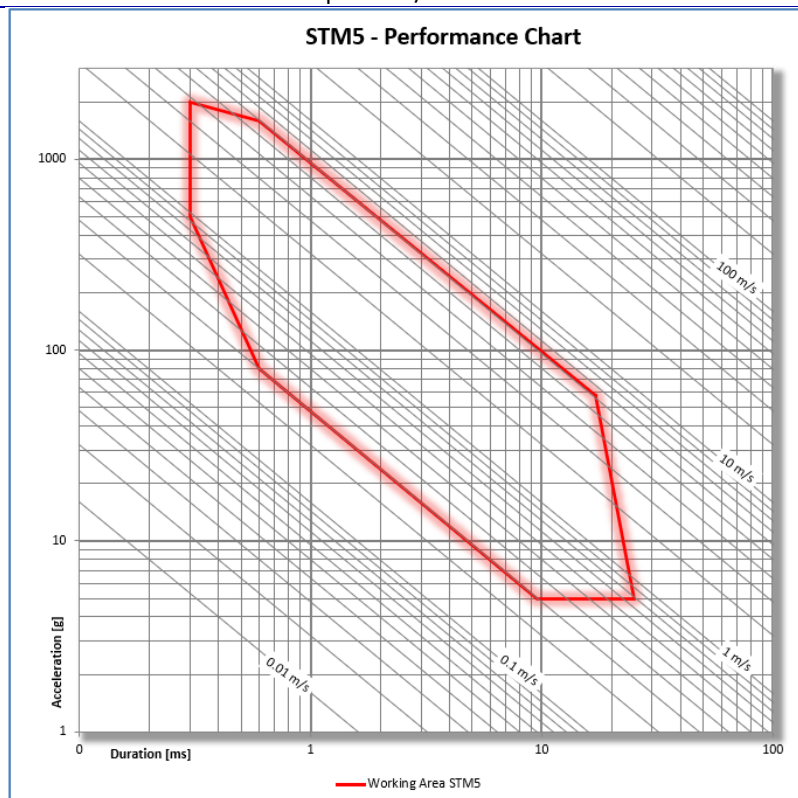
- Easy and user-friendly software
- Automatic amplitude control (Closed loop)
- Time function FFT and trend data on peak, duration, and velocity
- 4 channel data acquisition
- Simple test and data viewer with replay function
- Comprehensive cursor read-outs
- Tolerance window monitoring

Technical Specifications

PERFORMANCE AND TEST ITEM MOUNTING

Maximum Test Item Weight	5kg
Mounting Surface	152 x 152 x 152mm
Maximum Acceleration	up to 2000g
Range of Shock Pulse Width	0.3ms to 25ms
Range of Velocity Change	0.3m/s to 6m/s
Shock Repetition Rate	up to ~60/minute

Performance Chart



PHYSICAL

Machine Weight	approx. 120kg
Required Floor Area	400 x 1300mm
Outside Dimensions	350 x 1200 x 1070mm (Safety-Guard: 420x 1340x 1200mm)

REQUIRED UTILITIES

Air Pressure	4-6 bar (6 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



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