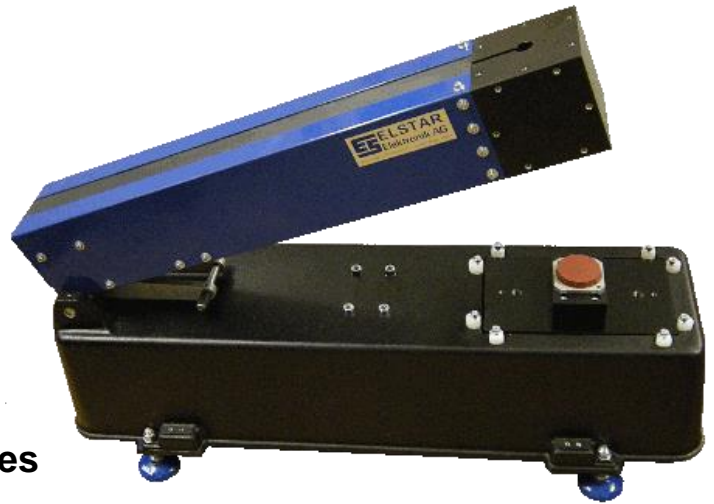
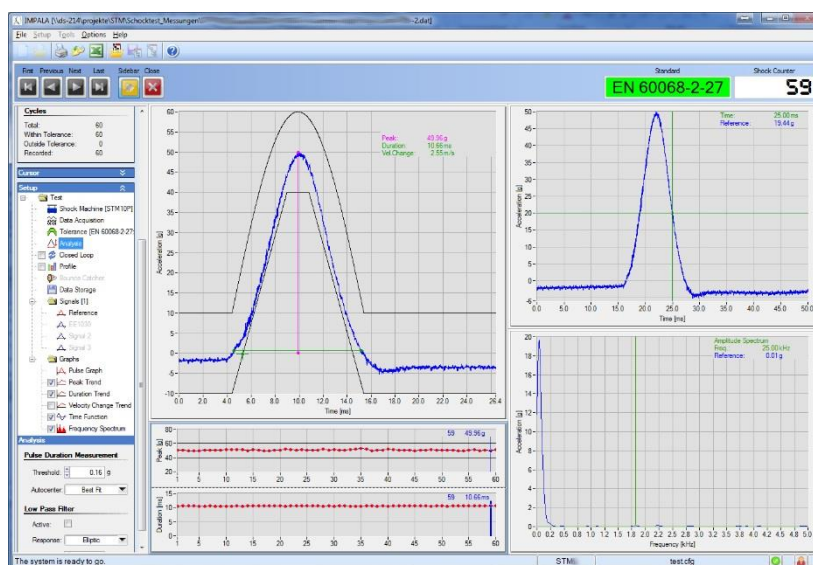


High Acceleration – Tri-Axis Mounting – High Speed

- Shock repetition rate of up to ~1 shock per second.
- Closed loop control on shock amplitude.
- Test item can be mounted in three axis. (top/left/right)
- Resonant free shock amplitudes of up to 2000g.
- Ideal for small component testing.



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 three 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.



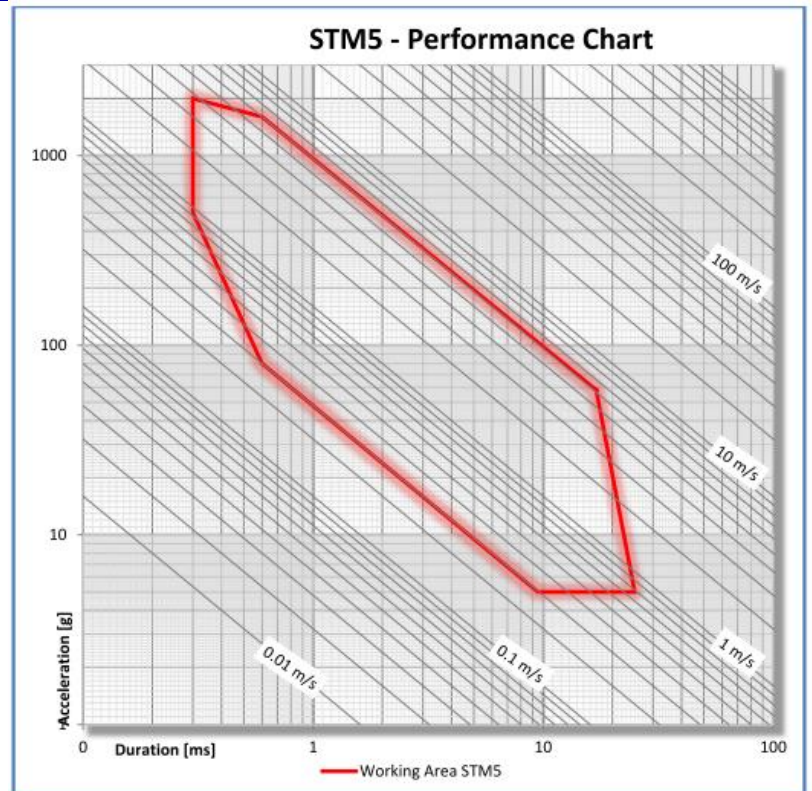
IMPALA is a closed loop control and visualisation software that continuously monitors the response signal from the test item mounting platform. Any change in the response amplitude will be immediately corrected ensuring continuous high quality resonance free shocks. A range of predefined industry standard tolerance zones can be selected or edited. A remote control API is optional for integration into a production environment.

Technical Specifications

PERFORMANCE AND TEST ITEM MOUNTING

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

Performance Chart



PHYSICAL

Machine Weight	ca. 120kg
Required Floor Area	400 x 1300mm
Outside Dimensions	350 x 1250 x 1070mm high

REQUIRED UTILITIES

Air Pressure	4-8 bar (6bar recommended)
Power	110/240VAC 50/60Hz
Software / HW	>= Win10 - Prof. / 1x free USB
Accelerometer	1x Reference Accelerometer with BNC end (eg. +/-2500g)

ELSTAR Elektronik AG

Hardstrasse 41
CH-5430 Wettingen
Switzerland

Tel: +41 (0)56 4271888
Fax: +41 (0)56 4271976

Web: www.elstar.com
eMail: mail@elstar.com

