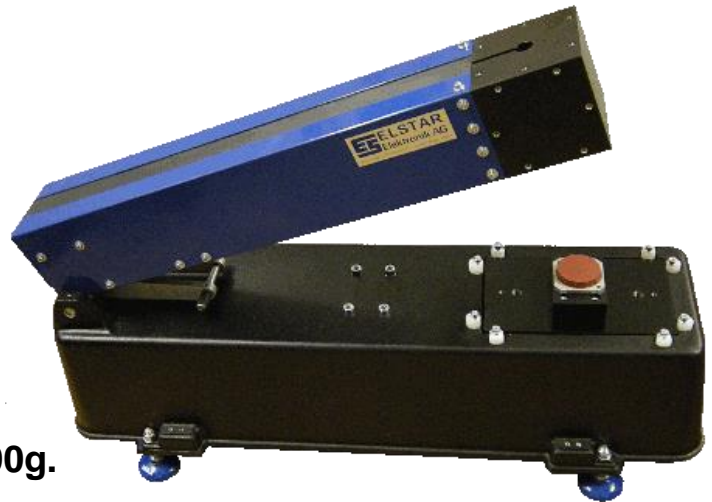
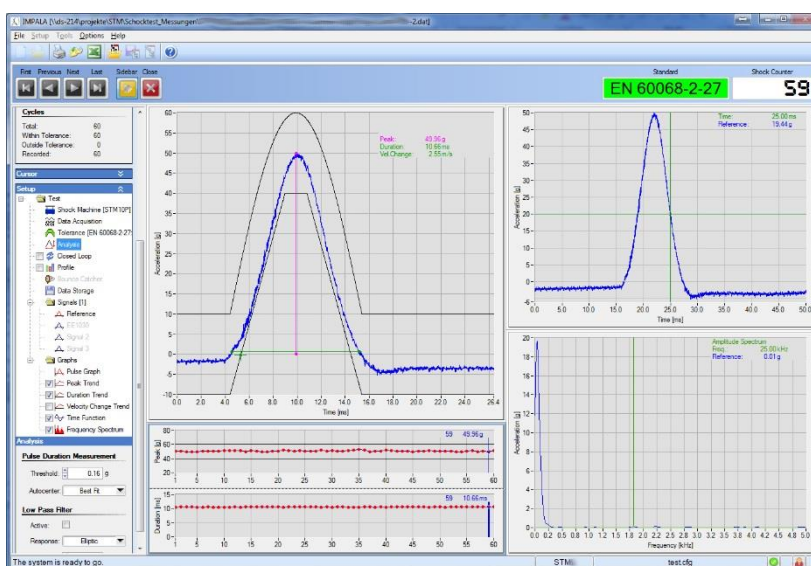


## High Acceleration – Tri-Axis Mounting – High Speed

- Shock repetition rate of up to ~1 shock per second.
- Full closed loop shock amplitude control.
- Test item can be mounted in three axis.
- Shock amplitudes of up to 2000g.
- Ideal for watch and 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 watch manufacturers in the field of production quality control together with research and development. Test items are mounted on a 150mm cube which allows for testing multiple components to be tested 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. Through utilisation of timer counters coupled to high precision valves controlled by our **IMPALA** software, this machine generates highly repeatable shocks at a rate of up to ~60/minute.



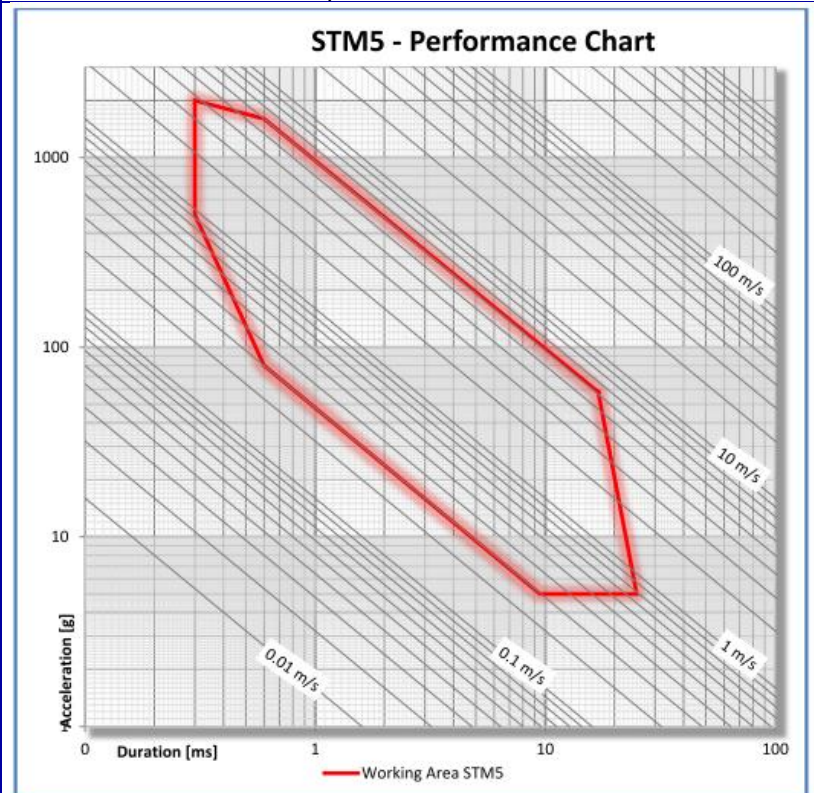
**IMPALA** is a closed loop control and visualisation software that continuously monitors the response signal from the test item mounting platform. Any change in the response amplitude will be immediately corrected ensuring continuous high quality shocks. A range of current industry standard tolerance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

## 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

### Min. REQUIRED UTILITIES

Air Pressure	4-8 bar (6bar recommended)
Power	110/240VAC 50/60Hz
Software / HW	>= WIN7-SP1 - Prof. / 2x PCI slots

### ELSTAR Elektronik AG

Hardstrasse 41  
CH-5430 Wettingen  
Switzerland

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

Web: [www.elstar.com](http://www.elstar.com)  
eMail: [mail@elstar.com](mailto:mail@elstar.com)

