

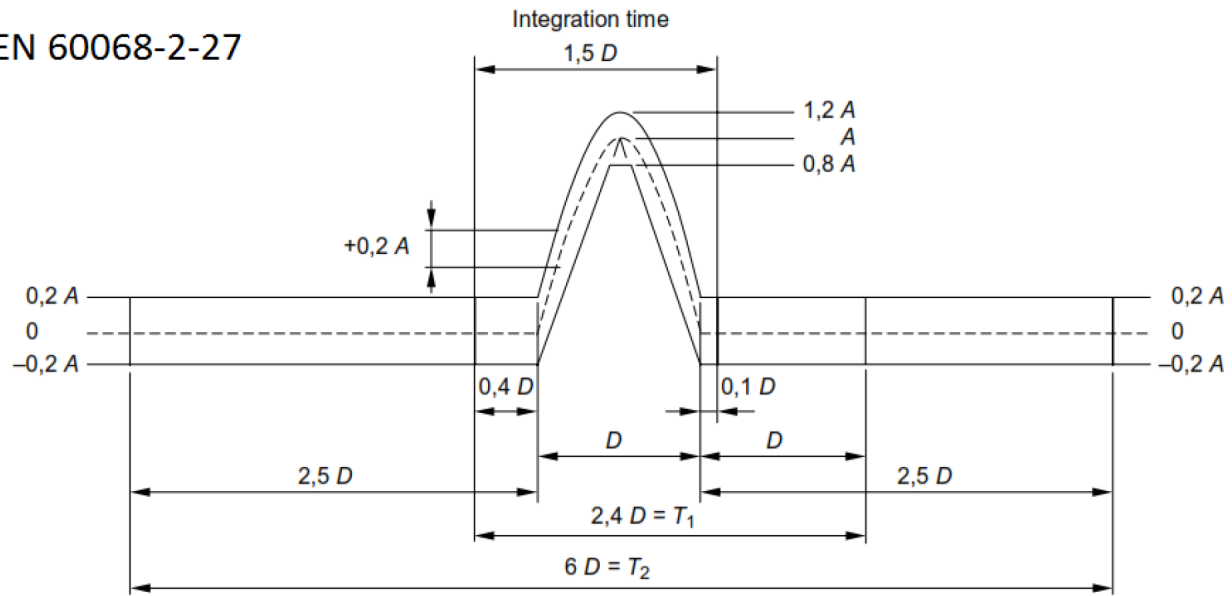
**Dongling <|> pneumatic shock test system**

**Model: SY11-50**

<b>Parameter</b>	<b>Value</b>
Max payload (kg)	50
Work table size (mm)	500x500
<b>Impulse waveform</b>	<b>Half-sine</b>
Peak acceleration (m/s <sup>2</sup> )	100 to 7000
Impulse duration (ms)	40 to 1
Max shock frequency (shocks per minute)	80
Control accuracy (%)	< 3
Laboratory condition	General
Temperature (°C)	23 ±5
Relative humidity (%)	10 to 60

<b>Testing can be performed according to standards</b>	<b>Condition</b>
IEC 60068-2-27:2008	Half-sine
EN 60068-2-27:2009	Half-sine
SIST EN 60068-2-27:2009	Half-sine
MIL-STD-202G	Method 213B (Half-sine)

EN 60068-2-27



IEC 303/08

**Key** (applicable for all three Figures 1 to 3)

--- nominal pulse

— limits of tolerance

$D$  = duration of nominal pulse

$A$  = peak acceleration of nominal pulse

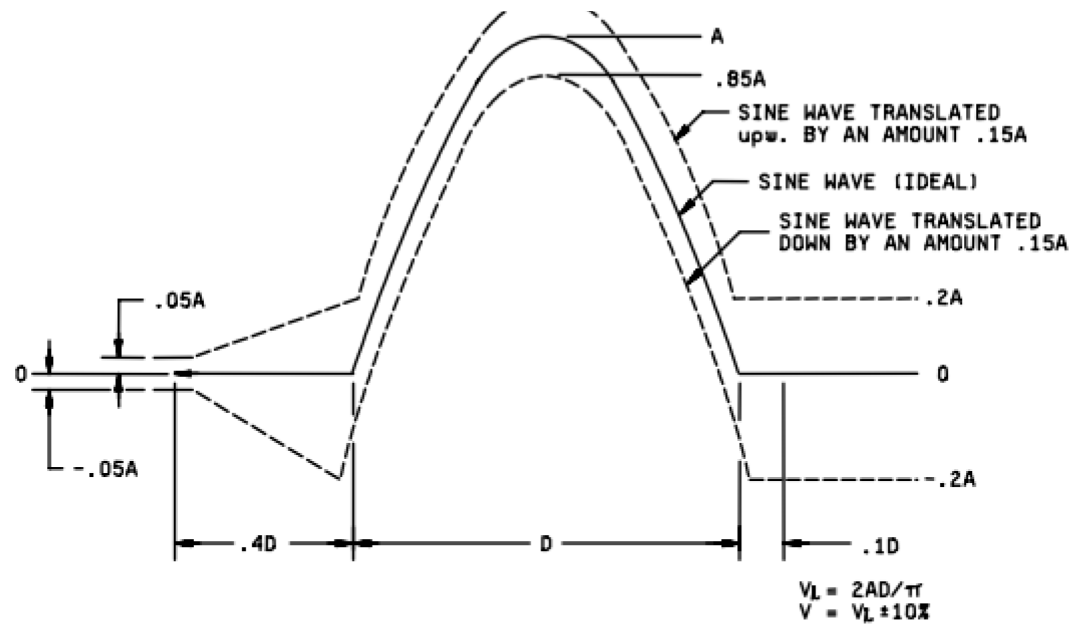
$T_1$  = minimum time during which the pulse shall be monitored for shocks produced using a conventional shock-testing machine

$T_2$  = minimum time during which the pulse shall be monitored for shocks produced using a vibration generator

**Figure 1 – Pulse shape and limits of tolerance for half-sine pulse**

MIL-STD-202G

1.15A



NOTE: The oscillogram should include a time about 3D long with the pulse located approximately in the center. The integration to determine velocity change should extend from .4D before the pulse to .1D beyond the pulse. The acceleration amplitude of the ideal half sine pulse is A and its duration is D. Any measured acceleration pulse which can be contained between the broken line boundaries is a nominal half sine pulse of nominal amplitude A and nominal duration D. The velocity change associated with the measured acceleration pulse is V.

FIGURE 213-1. Tolerances for half sine shock pulse.