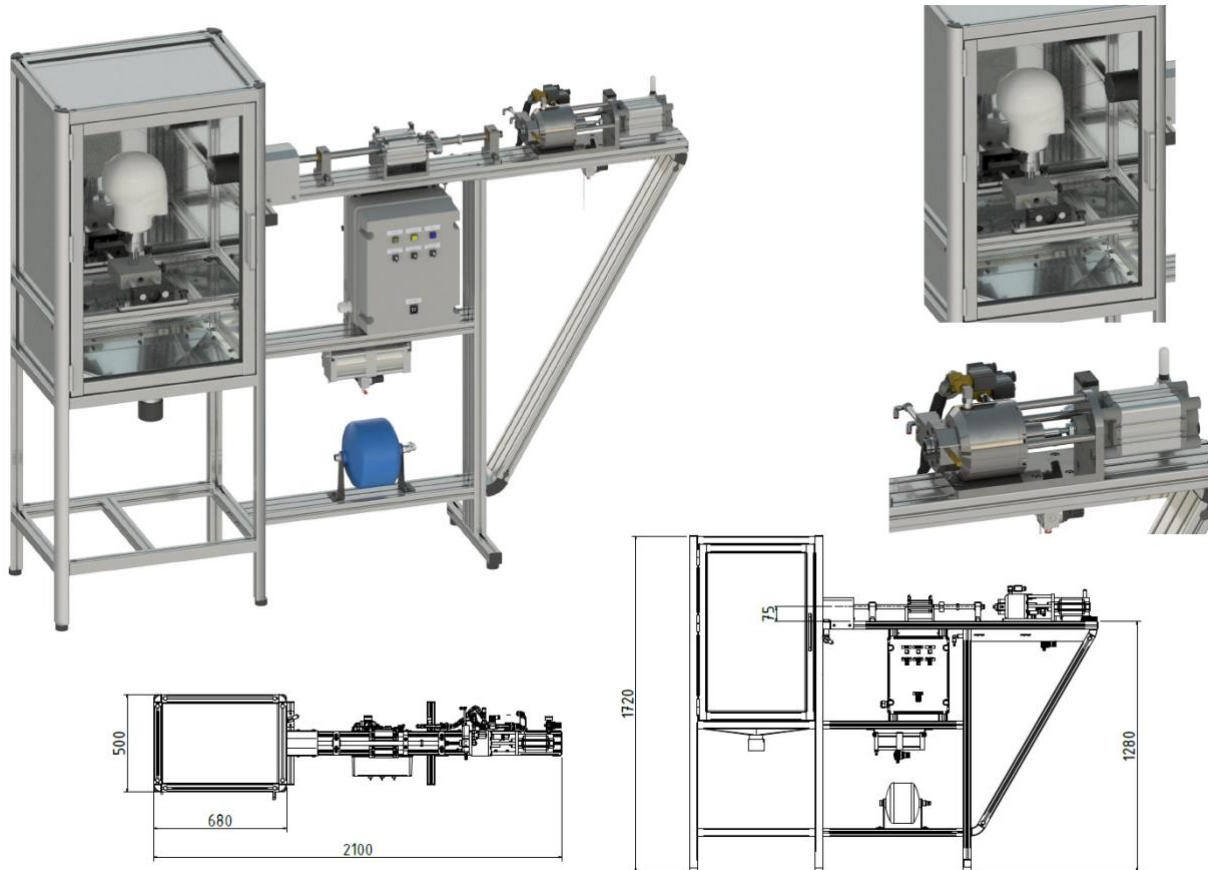


1112/1	HPG 1200/R1	This compressed air cannon is specifically designed for high-precision visor and lens testing. It features a single-barrel configuration capable of launching a 6 mm sphere at velocities up to 300 m/s. The system includes an automatic loading mechanism and is powered by the advanced QASM7 board for comprehensive instrument control and speed management. The unit comes fully integrated with dedicated software and a pre-configured PC.
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Overview & Technical Features:

- **Frame:** Constructed from ITEM aluminum profiles.
- **Pressure Vessel:** Loading air-pressure steel tank with 500 cm³ capacity.
- **Firing Mechanism:** Special high-speed firing valve actuated by a pneumatic cylinder.
- **Pressure Control:** Air-pressure loading system equipped with a digital pressure gauge.
- **Velocity Control:** Electronic speed control managed via included PC software.
- **Enclosure:** Steel containment chamber with a polycarbonate inspection window.
- **Headform:** Medium-size resin headform compliant with ISO 12311/12 or EN 960 (other models available).
- **Supported Projectiles:** 6 mm, 5 mm, 1/4", 4 mm, and Diabolo pellets, calibers .22 or .15 using sabot
- **Performance:** Maximum velocity up to 350 m/s at 60 bar using Helium gas, depending by the used pellets .
- **Gun Barrels:** Manufactured from specialized steel , same used in firearms .
- **Sample Positioning:** Adjustable sample support protected inside a chamber with a polycarbonate window.
- **Velocity Measurement:** Speed recording system utilizing laser illumination and high-speed detectors.
- **Weight:** 150 kg. - **Overall Dimensions:** 2100 × 500 × 1720 mm.

Scope of the device:

- Equipment for testing the impact resistance of eye protectors according to AS 1609, ANSI Z87.1, Snell M 2025, and MIL-PRF-32432 , EN 167–168, ISO 12311, ISO 18526-3, and ECE 22/06 , BS 4110.

Typical test results

BARREL	BULLET	GAS	PRESSURE (bar)	Average SPEED (m/s)
6,45 mm	Steel balls 6,35 mm	Helium	30	309
			16	252
		Air	29.9	252
			18.4	216.5
			14.4	197.6
			4	121.5
			1.73	81
			0.6	46
	Steel balls 6,00 mm	Helium	30	281
			34.9	253.5
		Air	22.2	215.6
			16.6	197
			3.93	120.7
			1.68	80.7
			0.63	45.6
	Projectile 0,22 in	Air	6.36	121.5
BARREL	BULLET	GAS	PRESSURE (bar)	Average SPEED (m/s)
6,45 mm	Projectile MIL 0,15 in + Sabot	Helium	25	283.4
6,10 mm	Steel balls 6,00 mm	Helium	30	273
		Air	32.5	253
			20.15	214.5
			15	197
			3.81	121
			1.7	81
			0.62	46

After 1 or 2 shots at the target pressure (necessary for mechanical stabilization), the variation between consecutive shots at the same pressure is:

- Less than 5% for 100% of the shots;
- Less than 2% for 90% of the shots;

Note:

These values may vary from HPG to HPG and depend on the environment in which the equipment is installed.

Optional Accessories

- **MPA.50.PB. Pressure Multiplier:** 5:1 compression ratio intensive unit designed for high-pressure operation as an alternative to gas cylinders.
- **Automatic Ball Loader:**
- **SABOT:** Specialized sabot support tailored for 0.15 caliber projectiles.
- **High-Pressure Circuitry:** Heavy-duty pneumatic circuit supporting up to 100 bar, engineered for testing at velocities reaching 400 m/s. Includes control valves and pressure transducers rated for high-flow calibration up to 100 bar.
- **Motorized Z-axis** with manual lateral adjustment