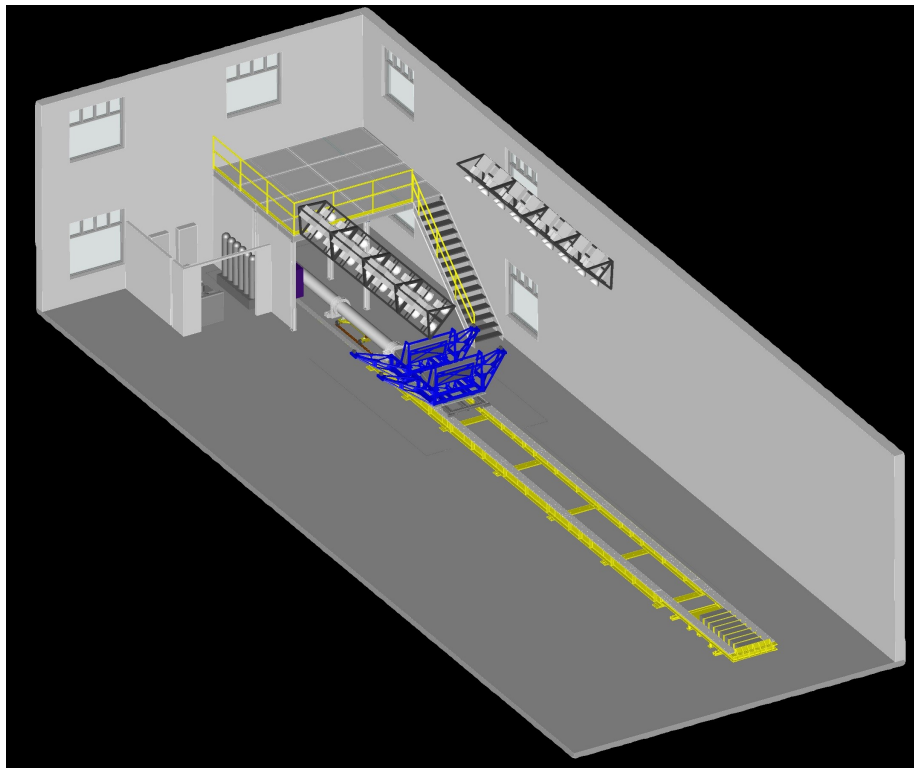


Accelerator Sled Facility

MGA's Accelerator Sleds have supported a variety of industries throughout the world for over 20 years. With systems installed in facilities ranging from automotive OEMs to child restraint manufacturers, our facilities have produced repeatable results that aid in product development. Not only do we design these systems, four of our sled systems are being used at MGA facilities everyday. With this experience comes the ability to layout optimized lab space to maximize efficiency. Our experience with these systems, along with our expertise in design, results in our customers having the best installation, training, and system dependability for this certified test facility.



System Specifications

12" Sled Capabilities

Operating System	Pneumatic
Maximum Force	500kN+
Maximum Stroke	1,200mm+
Maximum Velocity	80Km/h+
Maximum Acceleration	100G+
Maximum Payload	2,000kg+
Maximum Jerk	10G/ms+

Features

- Pulse duration ranging from 40-250 milliseconds
- Acceleration range of 5-100 g's
- Modular system with capability to be moved and re-installed
- Rail lengths built to suit facility requirements
- Optional maintenance pit for easy carriage setup and maintenance
- MGA Autopin Software for developing customized metering pins
- Integrated to high volume air compressors system

Features

MGA Sled Control Panel

- Touch screen control, precise reading (± 2 psi accuracy)
- PLC automatically returns sled system to safe state after firing a test
- Software and hardware can be integrated to control other types of equipment

Lighting

- Control system can be integrated in to existing or new lighting systems

Accelerator Sled Facility

Testing Performed		Testing Performed		Testing Performed	
Seats	ECE R17/25	Child Seats	ECE R44	Seat Belts	FMVSS 208
	ECE R60		ECE R129		ECE R16
Interior Component Crash Development	FAA Parts 23, 25, 27, and 29	Rear Impact	FMVSS 213	Battery	ECE R100
	ECE R80		CMVSS 213		Custom Pulse
	ECE/Taiwan Type Approval		NCAP 213		
	FMVSS 208 Simulation		FMVSS 202a		
	NCAP Simulation		EuroNCAP Whiplash		
	FMVSS 301 Simulation		IIHS - IWPG		
	Side Impact				

System Specifications

Pulses

Features (Continued)

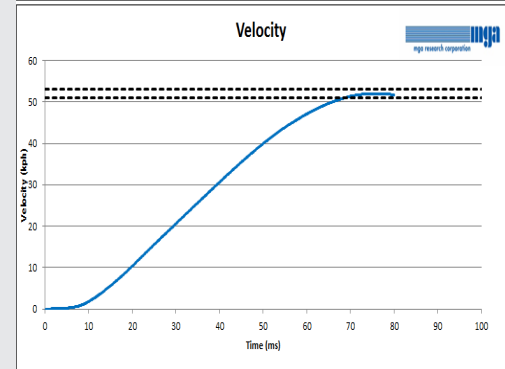
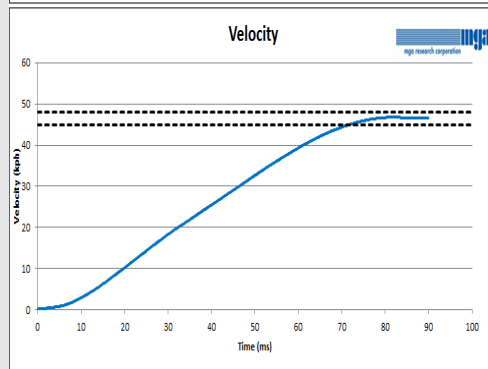
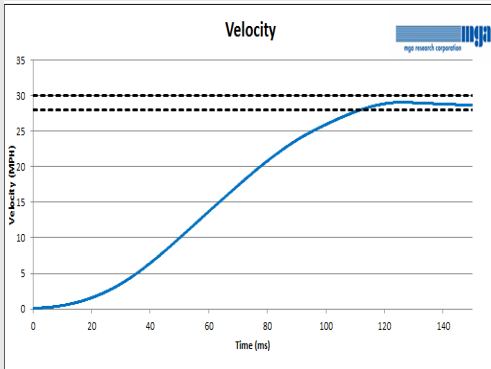
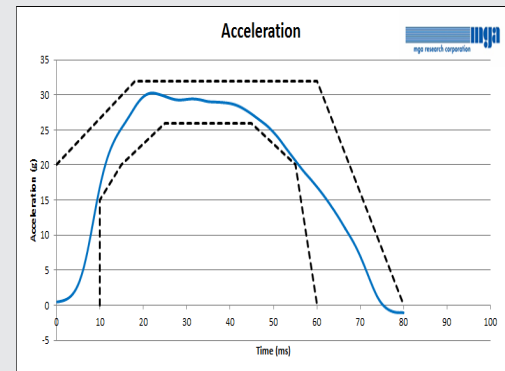
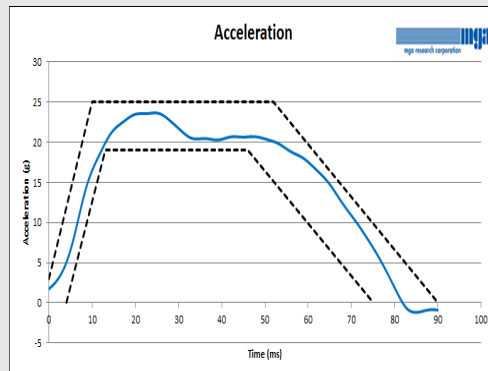
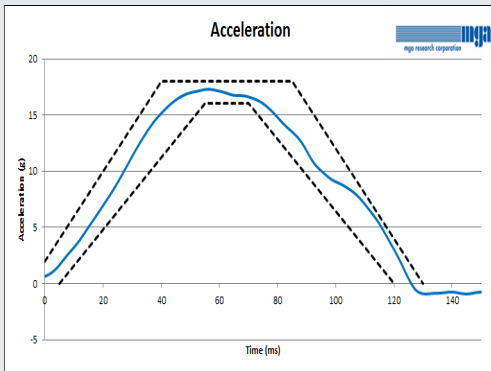
Safety

- System can be configured to control safety lighting/alarms
- Security door locks can be operated through control panel
- Integrated safety interlocks to prevent unintentional system discharge

>100g Pulse

>10G/ms Jerk

Pulses



FMVSS 208

FMVSS 213

ECE R16 Pulse