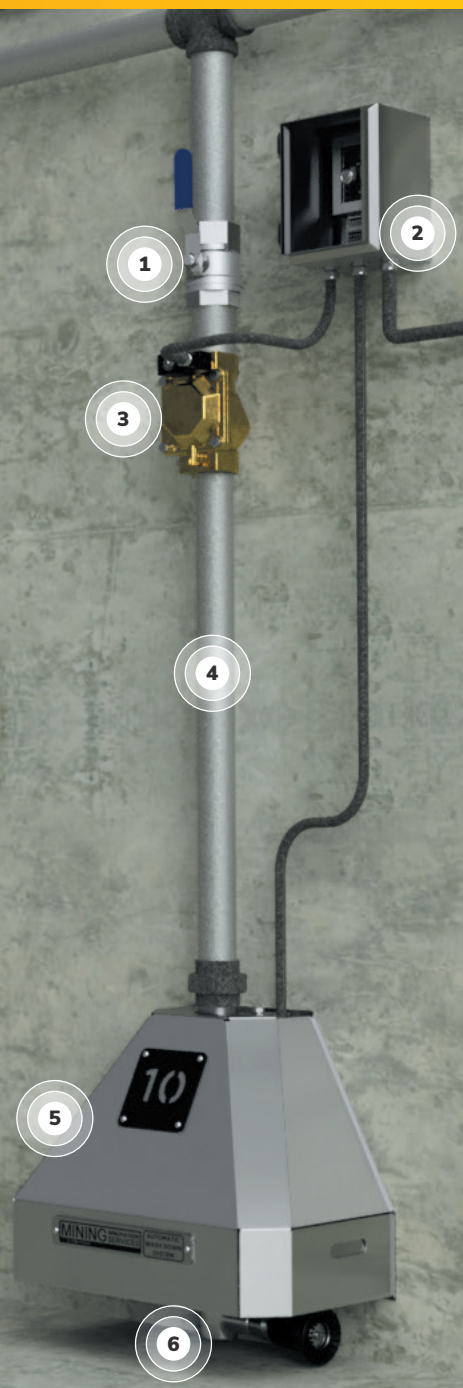
innovative
MINING SERVICES

GUARDIAN
G1E-PRO WASHDOWN SYSTEM

GUARDIAN
PRO SERIES
WASHDOWN SYSTEMS



G1E CANNON ASSEMBLY
PART NUMBER 10-22000

1. ISOLATION VALVE
2. LOCAL CONTROL UNIT TO SET CANNON RANGE & SPEED
3. 24VDC SOLENOID VALVE
4. WATER SUPPLY 1 $^{1}/_{2}$" - 2"
5. WASH DOWN CANNON & 316 STAINLESS STEEL GUARD
6. IMS V16 NOZZLE

LEASING OPTIONS AVAILABLE

For more information and other products, please contact us.

13000 MINING (13000 64 64 64)
info@innovativemining.com.au
www.innovativemining.com.au

G1E-PRO POWER AND CONTROL

POWER SUPPLY

The system requires a 24VDC 5amp power supply to drive the cannon oscillation and solenoid valve.

CONTROL UNIT

The Targa Nano control unit is housed in a 316 stainless steel IP66 enclosure and controls the brushless 24VDC wash down cannon and solenoid valve. Cannon oscillation limits and speeds are set via push buttons and potentiometers inside the targa nano enclosure.

CONTROL UNIT INTEGRATION

Once the cannon limits and speed have been set inside the Targa Nano, the system can be turned on by supplying a 24VDC start signal from the mines SCADA system. Once received the cannon will oscillate between the predetermined limits and rotational speed.

BENEFITS OF INTEGRATED SYSTEM

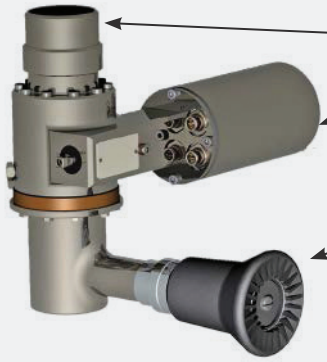
- The cannons are powered by brushless 24V DC motors with inbuilt position feedback.
- Automatability via local control or SCADA programmed control.
- The motors are housed in laser-welded 316 stainless steel IP68-rated enclosures.
- 2” high volume / high pressure capability
- The position feedback allows the controller to set accurate oscillation limits.
- High quality maintenance free unit.
- Suitable for use in high salinity, poor water and caustic environments.

For wash down systems not integrated into the mine control system, a local control unit can be supplied with essential timer functions, and local start/stops. These units are supplied as per customers requirements.

CANNON UNIT

WASH DOWN CANNON

This system sets the standard for washdown equipment precision and automation. Efficiently powered by a brushless 24VDC motor, this sophisticated cannon unit eliminates spillage and material buildup with laser accuracy. Seamlessly integrate with your mine control setup using the Targa Nano control unit, which offers adjustable oscillation limits speeds. Start or stop remotely, fine-tune timings, and interlock with plant infrastructure for optimal efficiency.



2” BSP MALE THREAD

BLDC MOTOR (10,000 HOURS)

IMS V16 NOZZLE TIP
WITH HEAVY RUBBER BUMPER
(500 LPM AT 10 BAR)

PART NUMBER
50-10060

WATER SUPPLY

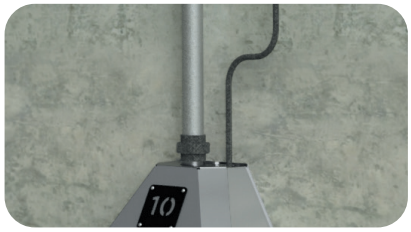
The wash down cannons have 2” BSP inlets and 1” BSP outlet fitted with industrial wash down fan/jet nozzle. 24VDC solenoid valves control/isolate the water flow. Recommended operating pressures from 2-10 bar. Refer to the table below.

INNOVATIVE MINING SERVICES
V16 JET / SPRAY NOZZLE

PRESSURE			JET	
Bar	kPa	psi	Flow (lit/min)	Reach (metre)
6	600	87	180	8
8	800	116	208	10
10	1,000	145	220	12
12	1200	174	220	14

CABLING

2 x m12 connectors control each cannon. These industrial fittings comply with IP68 standards and can be a maximum length of 25 metres between the control unit and wash down cannon.



SCAN TO WATCH VIDEO DEMONSTRATION

GUARDIAN G1E ELECTRIC FLOOR WASH CANNONS

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