



Mine + Tunnel Constructions

12CM12 CONTINUOUS MINER SPECIFICATION



Plant Number: MOB-086

GENERAL

Machine Serial Number:	JM4952
Last Rebuild	September 2021
Overall Length	11020 mm
Overall Width	3130 mm
Overall Height	1800 mm
Track Centres	2210 mm
Ground Clearance	300 mm
Conveyor width	38" (965mm)
Cutting Height (Max)	3755 mm
Cutting Width	3000 mm
Machine Mass	65 tonnes approx
Machine Width for transport	3200 mm

Conveyor:

The main conveyor chain comprises a single strand centre flight design driven by 2 water cooled electric motors mounted on the shovel. These supply drive to the chain via the front sprocket and shaft assembly.

Discharge Width	965 mm
Nominal Depth	300 mm
Speed	480 F.P.M

Motors

50HZ

Cutting	2@	155 HP	(230kW) (Voltage 950)
Pump	1@	53 HP	(40kW) (Voltage 950)
Gathering	2@	50 HP	(37kW) (Voltage 950)
Traction	2@	35 HP	(26kW) (Voltage 250)
Scrubber	1@	30HP	(22kW) (Voltage 950)
	<u>Total</u>	563 HP	

Standard Equipment - Electrics

- **AS 4240-2009 Compliant** Remote controlled miner (3 x Transmitters & 1 x Charge station) Pempek System.
- Emergency Stop Switch(s) – Both Sides at Rear
- Circuit Breakers to Shut - Off Power to complete machine

Standard Equipment – Hydraulics

- Hose ends - JIC female fittings
- Rexroth A11VLO190 load sense type pump
- Return line filtration - 10 micron - spin on element
- Injector power fill oil tank
- Oil tank capacity – 510 Lt
- Header tank capacity – 200 Lt
- Wash down hose valve and connection.
- Stabilizer Jack
- All hoses manufactured to MDG.41 Guidelines.

Standard Safety Features

- Dust suppression water sprays
- Methane Monitor (Gasguard)
- Approved face lighting.
- MSHA Spec. Load Locking Valves (Conveyor & Cutter Boom)
- Bumper mounting plates fitted to rear of machine.
- Twin Banshee alarms

New Design Incorporated into Build:

1. Hydraulic pump changed from gear style to a Rexroth load sense unit.
2. Valve Bank, changed from original Danfoss to a Rexroth unit. New build to incorporate Pempek 5-Shooters
3. Electrical Enclosures. Changed from multiple Joy enclosures to a single main enclosure.
4. Remote System. New Pempek system to AS4240-2009. The internal levels of electronic redundancy, the system incorporates additional layers of protection with electrical redundancy, via the isolation Contactor and hydraulic redundancy, via the isolation Spool. Accordingly, these LOPS mitigate combined system risk to acceptable levels that allow the designer to claim a maximum qualitative low demand SIL2 for the identified functions where applicable.

Dust Scrubber System

1. PM10 Laboratories T10E-V3 scrubber.
2. 22kW WEG 1000V Fan motor
3. Dual side intake ducting fitted
4. Directional water sprays fitted and set-up to suit your exact mining conditions

