

MINE & TUNNEL CONSTRUCTIONS PTY LTD

ABN: 92 096 246 436

12CM30 CONTINUOUS MINER



Plant Number: MOB-017

EQUIPMENT SPECIFICATIONS

GENERAL

Machine Serial Number:	6650
Last Rebuild/Code	August 2010
Overall Length	10500 mm
Chassis Width	2900 mm
Chassis Height	1080 mm
Bumper to Face Length	7289 mm
Ground Clearance	300 mm
Ground Pressure	204 kPa
Mining Rate (Shear cycle)	12 – 18 tonnes per min.
Loading Rate	0 – 36 tonnes per min
Machine Mass	67 tonnes approx
Manoeuvrability radius	6400 mm approx

Conveyor:

The main conveyor chain comprises a single strand centre flight design driven by 2 water cooled electric motors mounted on the tail of the conveyor boom. These supply drive to the chain via the tail sprocket and shaft assembly. This is adjustable and is spring loaded to hold tension on the chain when the conveyor is swung, raised or lowered.

Discharge Width	762 mm
Nominal Depth	300 mm
Conveyor Chain Pitch	67 mm
Speed	122 m / min or 145 m / min

Conveyor Discharge:

Min height above ground	880 mm approx
Max height above ground	2340 mm approx

Gathering Head

The east west gathering chains run across the front of the shovel and load the cut coal onto the main conveyor.

Drive to the gathering chains is supplied by the rear conveyor chain via the bottom foot shaft and gear box arrangement housed within the shovel.

Max gathering head undercut	152 mm
Max gathering head lift	506 mm
Extended Gathering Head Width	5200 mm
Retracted Gathering Head Width	4800 mm

Cutter Drums

Torque at cutter drive shaft:	132,300 Nm
Bit tip speed:	2.8m/s
Cutter drum lacing:	76mm – double scroll
Cutting Width	4800 to 5200 mm
Cutting Height	2500 mm to 3250 mm
Maximum Undercut	203 mm

MOTORS

50HZ

Cutting	2@	155 HP (130kW)	(Voltage 950)
Pump	1@	60 HP (42 kW)	(Voltage 950)
Conveyor	2@	45 HP (33 kW)	(Voltage 950)
Traction	2@	35 HP (26 kW)	(Voltage 250)
	<u>Total</u>	595 HP (462 kW)	

STANDARD EQUIPMENT - ELECTRICS

- **AS 4240 – 1994 Compliant** Remote controlled miner (3 x Transmitters & 1 x Charge station) Pempek System.
- Tram safety switch - Foot operated
- Tram Control Levers - Spring return to neutral
- Emergency Stop Switch - Opposite Operator
- Circuit Breakers to Shut - Off Power to complete machine
- Circuit Breakers to Shut - Off Power to Cutter Motors
- Voltmeter
- Reversing Conveyor
- Automatic Feedback Loop Control to provide infinitely variable sump speed while Cutter Motors are running.

STANDARD EQUIPMENT - HYDRAULICS

- Hose ends - JIC female fittings , pressed on
- Gear type pump - 2000 psi max Pressure
- Return line filtration - 10 micron - spin on element
- Injector power fill oil tank
- Oil tank capacity – 510 Lt
- Header tank capacity – 160 Lt
- Wash down hose valve and connection.
- Stabilizer Jack
- All hoses manufactured to MDG.41 Guidelines (Where necessary)

STANDARD SAFETY FEATURES

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

BOLTING CONFIGURATION

- 4 x Hydramatic Roof Drill Rigs (1850 4000 Series)
- 2 x Hydramatic Rib Drill Rigs (1150 or 1500, 5000 Series)