



# MGL EX1

# **Primary Scalping Screen**



Designed and manufactured at MGL Engineering Inc. in Lakeland, FL, U.S.A.

# **Overall Dimensions**

•	Total weight	33,400 lbs (approx)
•	Width	8' 5-3/4""
•	Length	37' 7"
•	Overall working height	11' 5"
•	Loading height	11' 5"
•	Transport Height	12'
•	Screen area	80 sq ft
•	Stock piling height	9'

# **Benefits**

- High capacity 800 TPH (depending on material and mesh sizes)
- Single 8' x 10' screen box for high amplitude vibration (1/2" of throw depending on flywheel weight configuration)
- Interchangeable lower deck screen panels
- Easy transport/set up with fifth wheel, 20k axle, air brakes, independent hydraulic jacking legs, springs and mudguards
- Heavy-duty construction
- Quick and easy maintenance access

# **Applications**

- Sand and gravel
- Crushed stone
- Demolition
- Recycling
- Topsoil

The MGL EX1 is a heavy-duty high-capacity portable primary scalping and conveying unit. Used in many applications from aggregates and top soils to C&D recycling the MGL EX1 is designed and built for versatility. (See the MGL EX2 for a higher production option).

#### Screening Unit:

The MGL EX1 features an 8' x 10' two-deck high-amplitude screenbox.

The upper deck consists of heavy-duty ½" abrasion resistant punchplate/grizzly fingers to withstand the rigors of demolition concrete. A 4" split on the top-deck is standard, however, a heavy-duty welded mesh screen option of any size is available.

The lower deck consists of interchangeable mesh screen panels.

Vibrating action is provided by eccentric screen shafts and adjustable flywheel weights.

#### **Power Unit:**

Power is provided by a 74 HP Cummins turbo diesel engine. The engine, hydraulic/fuel tanks, hydraulic valves, and battery are enclosed and mounted above the front chassis assembly near the fifth wheel end of the machine. Multiple panels make for easy maintenance access. A 12-volt twin fan oil cooler also comes standard.

#### Hopper and Conveyor:

Material is directed from the lower screen deck to the collection/stockpiling conveyor via steel plate and heavy skirting to prevent spillage. The screened material is collected and stockpiled by a 60" wide, 3-ply, vulcanized belt moving at 250-300 ft/min. The fully-skirted conveyor stockpiles to 9' and is fit with a urethane scraper.

## Transport:

The MGL EX1 is outfitted with a single 20k axle, fifth wheel, air brakes, mud guards and running lights for road transport. It also features hydraulic jacking legs for easy hook-up. Transport height is 12'.

#### Operation:

High production rates of 800 TPH can be achieved when loading material correctly. There are many applications and variations which can alter production results. Independent hydraulic jacking legs for quick accurate set up come standard.

#### Warranty:

The MGL EX1 comes with a 12 month or 1000 hour warranty (whichever comes first).

# Diesel / Hydraulic Drive

#### Engine:

- Cummins QSF 2.8, 74 HP, turbo diesel
- 45 gallon fuel capacity

#### Hydraulic pump:

Permco P257 pump (2-stage)

#### **Hydraulic Motors:**

Screen motors :

Permco M257 Sauer-Danfoss OMV-800 Conveyor motor :

#### Control Valves:

 Screen circuits: Walvoil SD16, single-spool (set at 3200 psi)

Conveyor/Jacking legs circuit: Youli MB-5, 3-spool (set at 3200 psi)

#### Recommended Hydraulic Oil:

Chevron AW 64

#### Hydraulic System Capacity:

• 95 gallons

#### Screen Drive Belts:

5VX1080 (2x)

#### Jacking Leg Cylinders:

• 3" bore x 12" stroke (2x)

#### Typical Operating Pressures:

1000-1500 psi Screen: Conveyor: 1500-2000 psi

# Screen Shaft Speed:

• Nominal shaft speed of 850 rpm

### Conveyor:

Belt: 3-ply, 60" wide, vulcanized
Drive drum: 16" diameter, 63" wide
Tail Drum: 12" diameter, 63" wide

#### Wheels:

• Single 20k axle

• Tires: 255/70R22.5

