

# 5000 Pump Unit System



- **Houses Main Jacking Cylinders & Hydraulic Power Pack** •
- **Two Hydraulic Systems Powered By Electric Motors** •
- **Adapts To Any Jacking Pipe Lengths & Diameters** •



5000 Pump Unit System  
With TBM 720

## FEATURES

- Standard system includes the 5000 Pump Unit, skid base and thrust yoke.
- The 5000 Pump Unit cylinders advance the TBM and pipe along the skid base against the thrust yoke.
- Skid is the foundation of the pump unit, thrust yoke, haul unit, TBM and pipe, and transfers thrust to the reaction block.
- Thrust yoke provides a 360° surface to minimize point loading on the pipe and is matched to final product pipe diameter.
- Hydraulics supplied by the pump unit eliminates the need for high voltage electricity in the TBM.
- Pump Unit hydraulics; high pressure system (8,000 psi) supplies oil for the two jacking cylinders (and IJS cylinders, if used) and the low pressure system (2,800 psi) supplies oil to the TBM and conveyor.
- A 275 gal. (1,041 L) hydraulic reservoir is equipped on the 5000 pump unit.
- An optional auxiliary pump unit provides an extra 100 HP of power to the low pressure circuit.

## SPECIFICATIONS

### 5000 Pump Unit

#### Dimensions:

Height .....	90" (2,286 mm)
Width .....	93" (2,362 mm)
Depth .....	52" (1,321 mm)

#### Weight:

With Oil .....	12,600 lbs. (5,715 kg)
Without Oil .....	10,560 lbs. (4,790 kg)

#### Thrust:

Total .....	400 ton (363 t)
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(Two 200 ton, 36" stroke cylinders)

#### Hydraulic Supply

- A 5 HP electric motor provides 42 GPM for oil cooling & high pressure charge supply systems.
- Cooling water must be supplied for heat exchanger.

*Low Pressure* (TBM & conveyor) ..... 2,800 psi

- A 100 HP electric motor provides power for 60 GPM at no load or approx. 45 GPM at 2,200 psi.
- A 100 HP auxiliary pump unit will double the flow to 120 GPM.

*High Pressure* (jacking & IJS cylinders) ... 8,000 psi

- A 50 HP electric motor provides power for 9 GPM at 8,000 psi.

#### Electrical Supply

Standard .....	480V, 60 Hz, 3 Phase
Optional .....	415V, 50 Hz, 3 Phase

### Auxiliary Pump Unit

#### Dimensions:

H/W/D .....	25.5x59x32" (648x1500x813mm)
Weight .....	1,500 lbs (680 kg)

- A 100 HP electric motor provides power for 60 GPM at no load or approx. 45 GPM at 2,200 psi.

**Yoke** (dimension ranges include the 420, 480, 540, 600, 660, 720, and 780 yoke models)\*

Width .....	72.75" - 93" (1,848 - 2,362 mm)
Length .....	93.5" - 123.75" (2,375 - 3,137 mm)
Height .....	51" - 93" (1,295 - 2,362 mm)

**Skid** (dimension ranges include the 2.5', 7.5', 15', and 22.5' skid models)\*

Width .....	80" - 91" (2,032 - 2,311 mm)
Length .....	30" - 270" (762 - 6,858 mm)
Height .....	25.5" (648 mm)

Weight:	
Skid 2.5' .....	1,500 lbs. (680 kg)
Skid 7.5' .....	4,200 lbs. (1,905 kg)
Skid 15' .....	8,400 lbs. (3,810 kg)
Skid 22.5' .....	12,600 lbs. (5,715 kg)

\* Contact your Akkerman Sales Representative for model specific information.



5000 Pump Unit With 100 HP Auxiliary Pump Unit



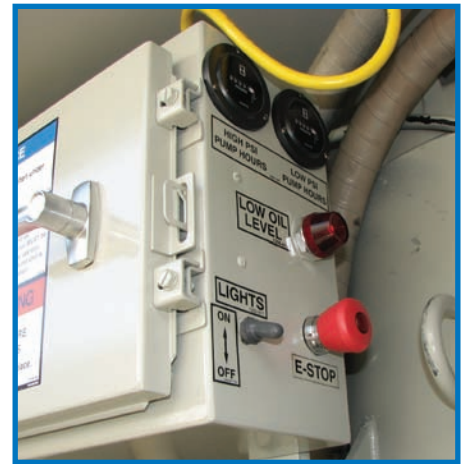
275 Gallon (1,041 L) Hydraulic Reservoir



Thrust yoke with 360° surface to minimize point loading on pipe.



Pump unit housed in a heavy duty metal cab with locking folded doors to prevent vandalism.



The 5000 Pump Unit is equipped with an E-Stop, operation lights, a low oil level indicator, and separate low and high pressure system hourmeters.



The dual ram & IJS control valve regulates the main jacking cylinders and the intermediate jacking station cylinders.



Dual valves control the hydraulic oil flow to the boring head components.

*Akkerman Inc. reserves the right to improve its product without notice or obligation.*