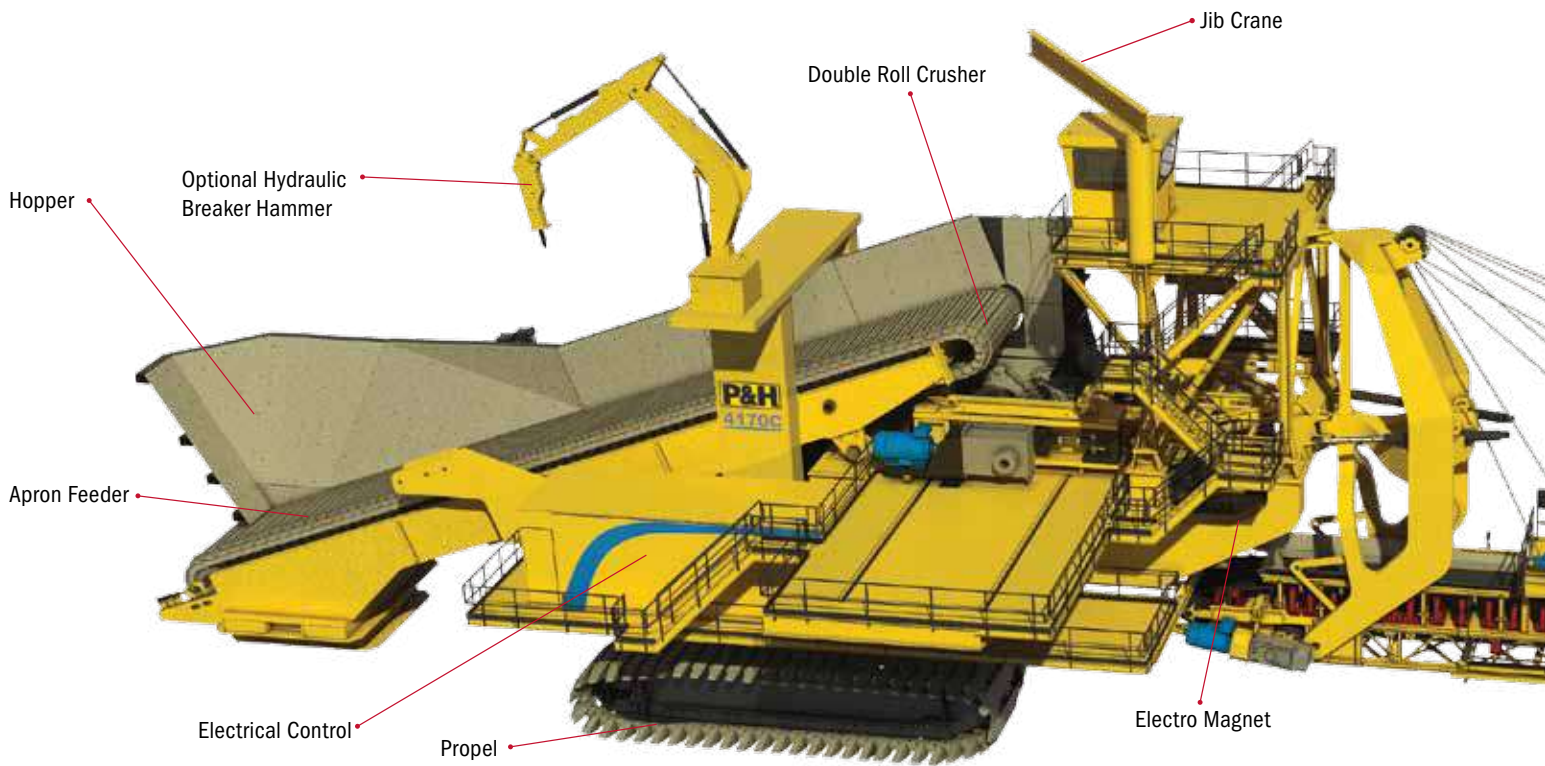


## 4170C

Mobile Mining Crusher  
Product Overview



# P&H 4170C Mobile Mining Crusher



## Electrical Control

- P&H Centurion® Supervisory Controller provides direct integrated communication with motor drives giving precise motor control and fast cycle times. Real-time multi-tasking capability allows for optimal machine logic sequencing, monitoring and control.
- Centurion I/O System uses 'Profibus' communication protocol for seamless integration of all shovel subsystems and future expandability. Low-voltage 24V DC I/O drop points feature open and short circuit detection for improved diagnostics and troubleshooting.

## Hopper

- Combine consistent productivity with high durability and maintainability
- Ground supported during loading
- Configured to the mine specific conditions and capacity requirements
- Specific wear packages can be cooperatively specified
- Accepts Run Of Mine material that is directly dumped by Shovel
- Walls funnel to the attached apron plate feeder
- Shovel can approach at 270° for loading material

Maximum height of hopper	7.9 m	26 ft
Volumetric Capacity Struck	170 m <sup>3</sup>	222 yd <sup>3</sup>
Nominal Capacity	170 m <sup>3</sup>	303 ST
Dipper Loads		3

## Propel

- Two rugged planetary gear cases of proven design independently transmit torque to the drive sprockets. This produces the tractive effort required for fast, efficient propel and positioning operations contributing to greater digging time.
- P&H DELTA Drive low tension sprocket drive system with heavy duty cast crawler shoes
- Spring set air release disc brakes - one per motor

## Apron Feeder

- Heavy duty and able to withstand an impact of material dumped directly by the EMS
- Equipped with dual drive variable speed control
- D10 tractor-type chain and roller
- Can be raised with hydraulics, even when partially full, for propelling

Width between skirts	2.9 m	114 in.
Drive type	Electric	

## Slewing & Luffing Discharge Conveyor

Length	up to 39 m	up to 128 ft
Belt speed	up to 2.4 m/s	up to 467 ft/min
Belt width	2400 mm	94.5 in
Inclination	Up to 14 degrees / Down 5 degrees	
Slewing Angle	+/-55° from within line of plant	

P&H Mobile Mining Crushers (MMC) are designed to reduce your production cost per ton.

As part of our commitment to helping you optimize the life cycle management of your equipment, you can count on a comprehensive array of products, services and technical support through the Joy Global service network. You can also count on built-in parts commonality

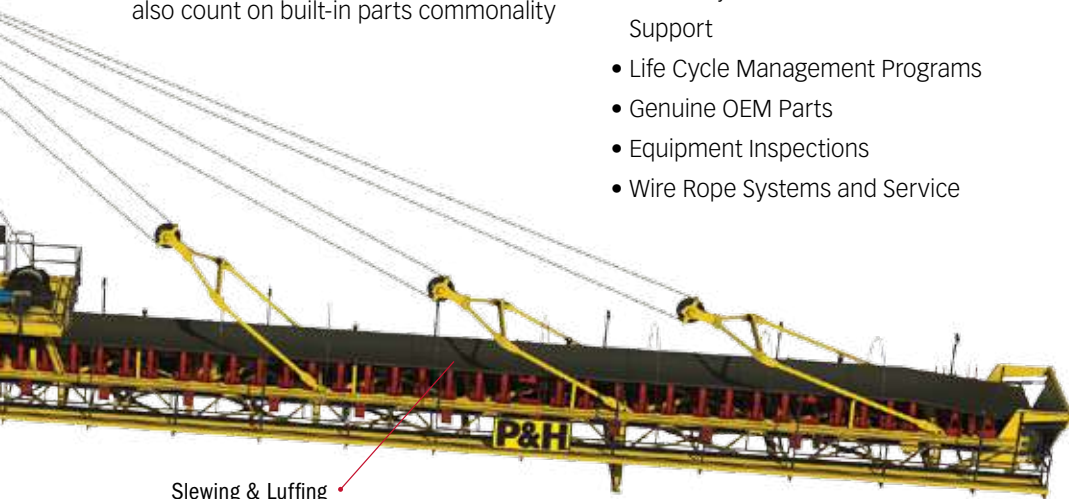
with P&H shovels for simplified, cost-effective inventory management.

From fully-equipped parts and service centers worldwide, to world class training for operators and maintenance personnel, we're here to provide productive, profitable solutions for your mine, including:

- Reliability Centered Maintenance Support
- Life Cycle Management Programs
- Genuine OEM Parts
- Equipment Inspections
- Wire Rope Systems and Service

- Maintenance and Repair
- Component Rebuilds and Exchanges
- Lubrication Management
- Predictive Diagnostics
- Operator and Maintenance Training
- Remote Health Monitoring

Joy Global strives for effective understanding of your requirements for efficient, safe mining operations. In fact, important insights into what might constitute a sound and effective Mobile Mining Crusher system were obtained with the help of our Joy Global teams who listen carefully to the recommendations of mine operations and maintenance managers.



Slewing & Luffing  
Discharge Conveyor

### Optional Hydraulic Breaker Hammer

- Breaker provided with 9.1 m (30 ft) boom and 170° swing angle to break material both on the apron feeder and in the size feed chute.
- The hammer is a 6780 joules (5000 ft-pounds) of energy and 135 mm (5.3 in) wedge tool. It operates at up to 2755 psi and 52 gpm. A 75 kW (100 HP) hydraulic power unit is provided.

### Electro Magnet

- This magnet is capable of picking up dipper teeth and steel liner material off the discharge conveyor belt. The design allows the operator to move it over an open area and drop the tramp iron.

### Power Requirements

Supply Voltage*	7200V or 13800V	6000 6600 or 11000V
	3 Phase, 60 Hz	3 Phase, 50 Hz.
Supply Transformer (Minimum)		5000 kVA
Minimum Short Circuit VA Available		25 MVA
*Voltage per customer requirements		
Transformer		
Auxiliary Transformer		450 kVA
Control/Lighting Supply Winding		50 kVA

Note: Transformer capacities may vary depending on options

### Double Roll Crusher

- Has a modular design with an easy access for maintenances
- Wheel mounted roll out for quick shaft/teeth replacements
- Design accommodates properties of the material i.e. abrasiveness, stickiness
- Equipped with dual VFD control reversible drives

Capacity		
Nominal	9K MT/h	10K ST/h
Maximum	10.8K MT/h	12K ST/h
Finished product size		
Nominal	360 mm	14 in
Maximum	400 mm	16 in
Roll center distance	1575 mm	62 in
Crusher tooth pattern		Scroll
Method of securing tooth segment		Quick disconnect
Wear material on tooth segment		Application dependent
Wear material in sizing chamber		Application dependent





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