



# Pennsylvania Crusher<sup>®</sup> Jaw Crusher



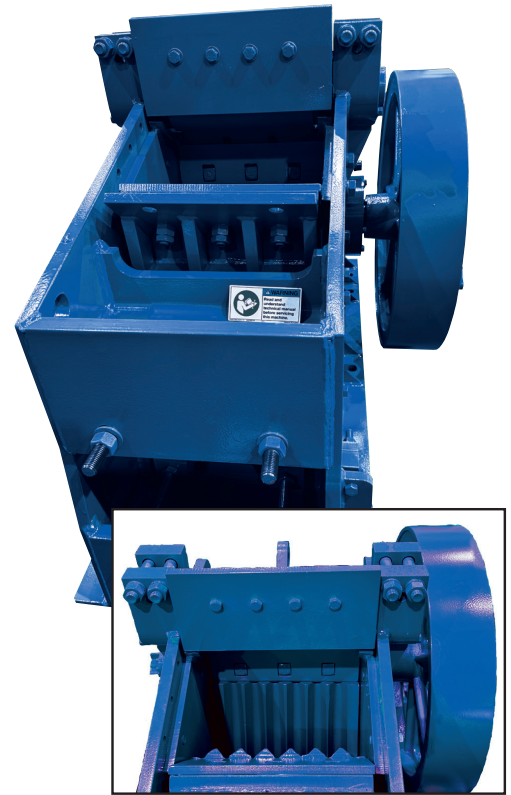
Industry leader in the world of crushing equipment  
with unique double toggle design.

## Operation

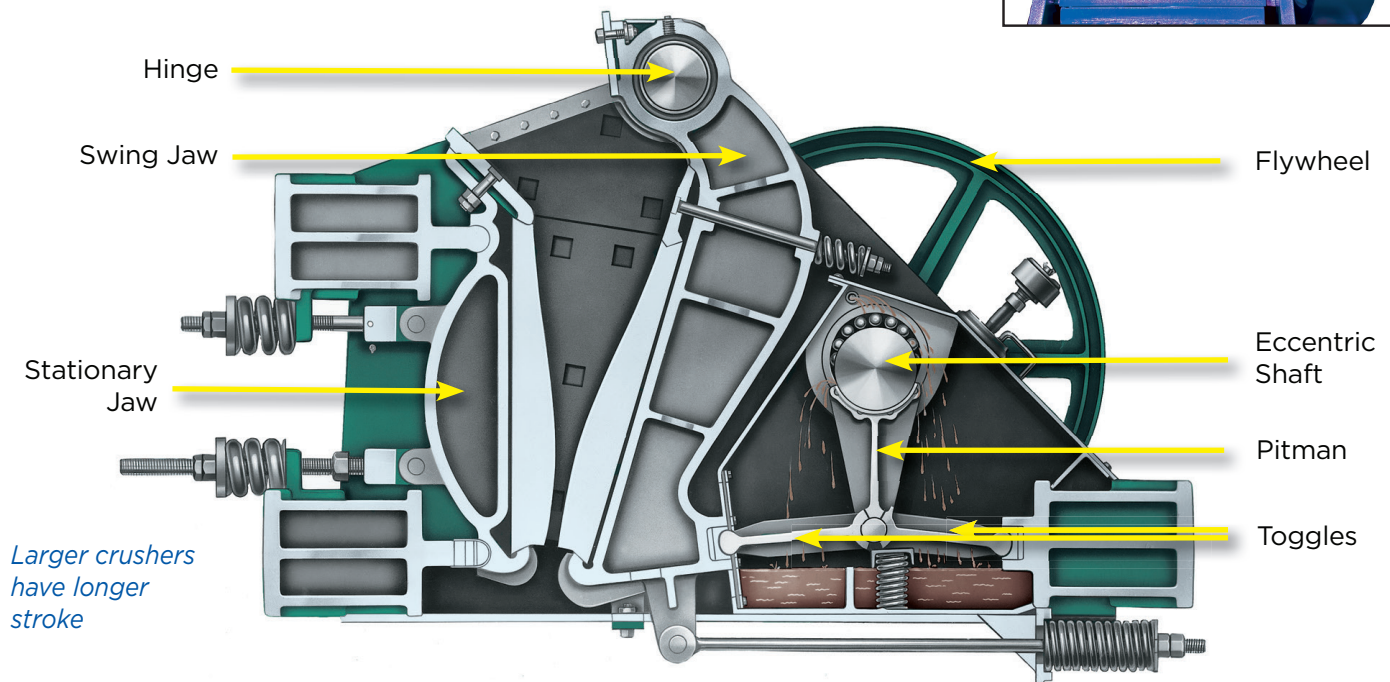
Jaw crushers are ideal for tough, abrasive materials like ferroalloys and glass, which cause excessive wear in other crushers. Many crushers, on the market today, use rotating hammers and other elements to reduce materials by impact, shear, or attrition. Jaw crushers, however, work by compressing material between two jaws. The moving jaw (swing jaw) presses the material against the stationary one.

Pennsylvania Crusher's double toggle jaw crushers outperform standard Overhead Eccentric and single toggle types by using pure compression, avoiding the inefficient rubbing action of others. The swing jaw pivots on a central hinge, providing a strong crushing force at the top and moderate force at the bottom. This direct, square compression minimizes wear—often less than 25% of other designs—and reduces fine material production.

Our design requires no heavy foundations or oversized flywheels due to balanced moving parts, making them lighter and ideal for portable use.

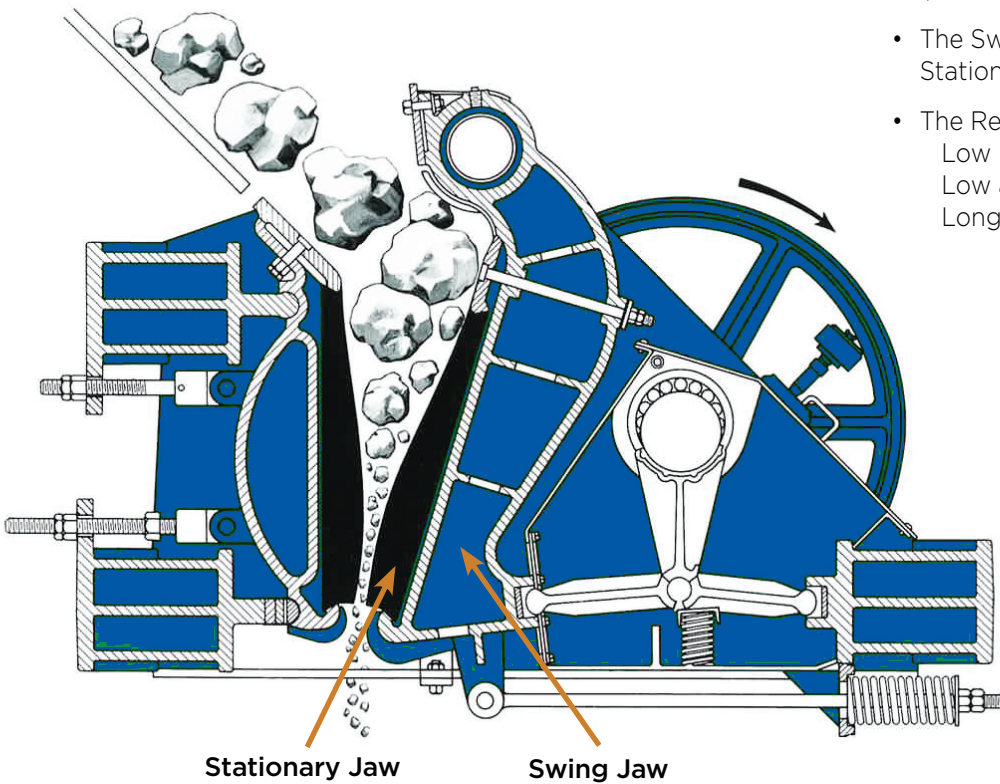


## Primary Components



- Swing jaw top-hinged
- Flywheel turns via motor which turns eccentric shaft
- Eccentric Shaft pushes down on pitman
- Pitman flattens toggles
- Toggles push swing jaw forward
- Swing jaw stroke\* varies depending on crusher size from 1/2" (13mm) to 1" (25mm)

## Method of Reduction



- Compression Crushing (no rubbing)
- The Swing (movable) Jaw moves toward the Stationary Jaw in a perpendicular direction
- The Result:
  - Low power
  - Low abrasion
  - Long jaw plate life



## Notable Applications

Pennsylvania Crusher double toggle jaw crushers have won worldwide acceptance from the glass industry where they are recognized as the standard due to these important features:

- Positive crushing of virtually all shapes and sizes of cullet to the desired particle size. Our cullet plates are specially designed for cullet crushing and configured to prevent any glass from falling through without being crushed.
- Strictly compression crushing which provides jaw service life several times longer than with other methods.
- Minimal dusting due to the absence of rubbing actions, minimizing the need for protective devices for employees as well as shielding for nearby equipment.
- Enclosed lubrication for complete protection from damage by contamination.
- Tramp protection via a safety release mechanism which protects both the crusher and the motor from damage if uncrushable material should enter the crushing chamber.

Primary metal industries also make extensive use of our crushers for the reduction of ferroalloy additives — materials which have high compressive strengths and are very abrasive.

As previously noted, because our double toggle jaw crushers crush strictly by compression, with no rubbing action, the jaw plates are not significantly affected by abrasion and the jaw strength of our crushers is more than adequate to crush even the toughest ferroalloys, including low carbon ferrochromium.

### Excelling in Applications for Various Industry's:

- Cement Production
- Glass Production
- Chemical Processing
- Manufactured Products Preparation
- Mining Operations (Aggregate, Sand & Gravel, Potash, and Other Minerals)

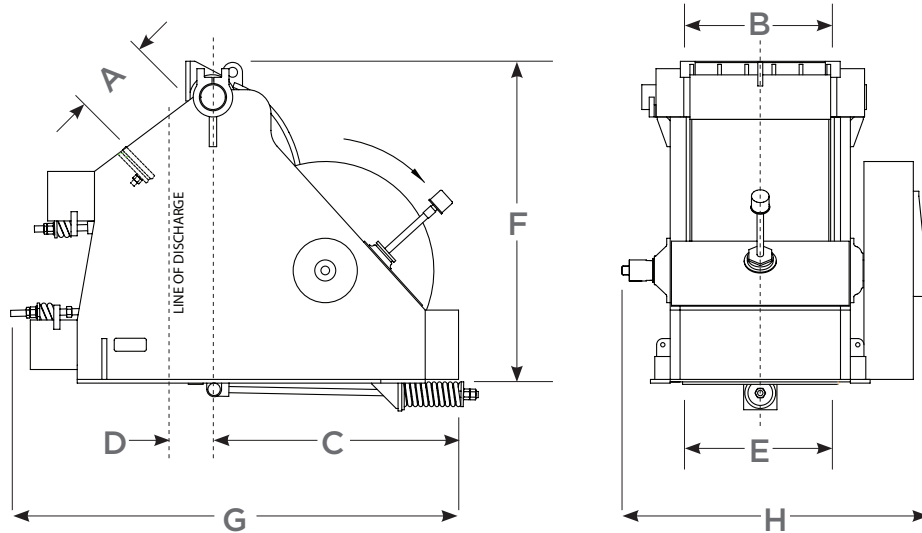
*Double toggle jaw crusher are designed with balanced moving parts that eliminates the need for heavy, oversized flywheels and castings in the frame.*





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## Dimensions and Weights



Model No:	Inches (mm) Input Opening		Discharge Opening*			Height	Length	Width	Weight
	A	B	C	D	E	F	G (Max.)	H	LBS (KG)
<b>DT 9 x 16</b>	9" (229)	16" (406)	38-1/2" (978)	7-1/2" (191)	17-1/2" (445)	44-3/16" (1123)	80-5/16" (2040)	44-5/8" (1133)	5,600 (2,540)
<b>DT 12 x 24</b>	12" (305)	24" (610)	40" (1016)	10" (254)	25-1/2" (648)	49-5/16" (1252)	82-3/8" (2092)	53" (1346)	7,700 (3,493)
<b>DT 15 x 30</b>	15" (381)	30" (762)	49-3/4" (1264)	9" (229)	28" (711)	65" (1651)	94-3/4" (2407)	62-9/32" (1582)	15,000 (6,804)
<b>DT 20 x 36</b>	20" (508)	36" (914)	51" (1295)	16" (406)	36-1/2" (927)	74-1.2" (1892)	106-5/16" (2700)	68-5/16" (1735)	22,000 (9,979)
<b>DT 24 x 36</b>	24" (610)	36" (914)	51-3/4" (1314)	20" (508)	34-1/2" (876)	88-1/4" (2242)	113-1/2" (2883)	68-5/16" (1735)	27,000 (12,247)

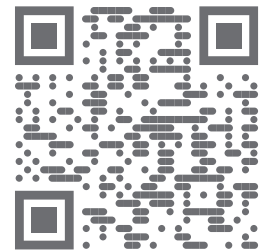
Model No:	Speed (rpm)	HP**	Heaviest*** Piece Lbs (kg)
<b>9 x 16</b>	390	20	1,040 (472)
<b>12 x 24</b>	390	30	1,450 (658)
<b>15 x 30</b>	370	30	3,100 (1,406)
<b>20 x 36</b>	370	50	6,000 (2,722)
<b>24 x 36</b>	370	50	6,600 (2,994)

\* Certified drawings will be furnished for installation. Installation supervision is available.

\*\* Indicates horsepower size of electric motors for ordinary conditions. Gasoline or diesel engines should be approximately 15 to 25% larger than electric motors.

\*\*\* Approximate average weight of heaviest piece for maintenance — includes the Swing, Jaw, Jaw Plate, and Keeper Plate Assembly.

**WATCH ON** YouTube



Check out the cool animation showing how Jaw Crushers reduce unusually hard, tough and/or abrasive rock, glass, and ferroalloys

Call +1 855-483-7721 or email [customer.service@astecindustries.com](mailto:customer.service@astecindustries.com) to find the sales representative nearest you.



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