

BRITISH IMPERIAL UNITS (INCHES)

BC	Approx. Ship.		_	-	_	_	_								
 Size	Wt. Ibs	A	В	С	D	E	F	G	Н	J	K	L	М	Ν	
 9-38	10,115	37³/₃"	10"	46³/8"	33"	27"	39³/ ₈ "	66"	4³/8"	16"	49"	44³/ ₈ "	58"	80"	
11-44	21,000	44"	12"	50 ⁷ /8"	38³/4"	34"	49 ¹ / ₂ "	77 ⁷ /8"	4³/8"	20"	66"	61 ¹ / ₂ "	74 ¹ / ₂ "	97"	
15-44	31,000	73"	12"	63"	54³/4"	66"	78³/₄"	109 ¹ / ₂ "	4 ¹ / ₂ "	20"	66"	61 ¹ / ₂ "	74 ¹ / ₂ "	97"	
19-44	35,000	871/2"	12"	71"	62"	75"	93¹/₄"	138"	5"	20"	66"	61 ¹ / ₂ "	74 ¹ / ₂ "	97"	
23-44	40,300	102"	12"	78¹/₄"	69¹/₄"	89"	107³/₄"	160 ¹ /4"	6"	20"	66"	61 ¹ / ₂ "	90"	97"	
707	89,000	106"	19"	91³/₄"	68¹/₂"	90"	108"	160 ¹ / ₄ "	7 ¹ / ₂ "	43"	1041/4"	105"	126"	147"	

	INTERNATIONAL METRIC UNITS (MM)													
BC	Approx. Ship.													
Size	Wt. kg	Α	В	С	D	Е	F	G	Н	J	К	L	М	Ν
9-38	4,588	949	254	1178	838	686	1000	1676	111	406	1245	1127	1473	2032
11-44	9,525	1118	305	1292	984	864	1257	1978	111	508	1676	1562	1892	2464
15-44	14,062	1854	305	1600	1391	1676	2000	2781	114	508	1676	1562	1892	2464
19-44	15,876	2223	305	1803	1759	1905	2369	3150	127	508	1676	1562	1892	2464
23-44	18,280	2590	305	1988	2029	2260	2737	3505	152	508	1676	1562	1892	2464
707	40,370	2692	483	2330	1740	2286	2743	4070	191	1092	2692	2667	3200	3734



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THE PENNSYLVANIA COALPACTOR®







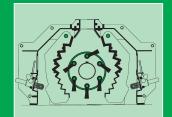
The Most Choices, The Most Experience

PENNSYLVANIA COALPACTOR





The Pennsylvania Test Lab for test crushing of materials from around the world.



The Coalpactor is available with or without extended breaker blocks.

APPLICATIONS

This rugged model has compiled an extensive performance record within the power industry because it's so highly effective for the size reduction of coals and ideally suited for fluid bed boiler plants. Its design stems from models originally developed for the steel industry. The Coalpactor's popularity is the result of its ability to maintain top size and provide low cost-per-ton crushed, while keeping fines at a minimum. Unlike some crusher types, the Coal- pactor accomplishes these results at high reduction ratios and at high capacities, using far less horsepower than other crushers performing the same reduction.

Time-saving improvements include doors that open more widely than previous models, enabling maintenance or inspections to proceed more quickly and easily. As a result, it has enjoyed growing popularity with fluid bed boiler plant operators.

It is also suited for other applications including coking coals, waste coals such as bituminous gob or culm, and for lignite or other solid fuels.

CAPABILITIES & GENERAL DESIGN CONCEPT

This powerful crusher handles the requirements for plants of any size. For example, it crushes petroleum coke to the desired product size, typically 95% minus 1/4" (minus 6 mm). Our applications engineering staff can determine what other output sizes can be achieved, depending on individual circumstances.

The crushing chamber is formed by a pair of curved breakers plate assemblies on opposites sides of the rotor assembly. This rotor assembly includes several rows of forged steel swing-hammers.

The rotor is reversible, enabling the operator to change its direction. This equalizes wear on the opposite face of the hammer and thereby maintains each hammer at maximum sharpness and crushing effectiveness. Reversing also divides wear equally between the two sets of breaker plate assemblies.

BASIC CRUSHING FUNCTION

As material enters the crushing chamber, it is struck in mid-air by the hammers. Most size reduction occurs at this stage by what is termed "free-air impact".

The broken material is then driven against the breaker plates and ricochets repeatedly between the plates and the hammers as it is swept downward.

Properly sized material then exits through the open bottom of the crusher. This prevents over-crushing of material and consequent waste of power that often occurs in crushers having grates, while also eliminating a source of wear.

SIZE CONTROL

As the hammers rotate downward, the clearances between the hammer tips and the breaker plates grow progressively smaller until, at the lowest point, a critical clearance exists that produces the desired final size.

This gradual reduction of the clearance produces a smooth flow and gradual size reduction of material through the crusher. This results in low horsepower demand and – because the crushing action is almost entirely by impact, with only minor material attrition between hammer tip and breaker plate – there is minimal generation of fines. The breaker plates will handle high moisture-content materials with no problem.

The entire breaker plate assembly is fully adjustable. This adjustment is accomplished by means of synchronous gear jacks. This permits rapid adjustment of clearances in order to change product size or to compensate for normal wear. Finer sizes can also be produced through the addition of extended breaker blocks.

Further adjustment of output size may be done by removal of the lower breaker blocks. Consult our staff for details.

FRAME

The frame is fabricated of thick steel plates and shapes and is equipped with replaceable, abrasion-resistant steel liners. When the doors on either side of the rotor are swung back, the rotor assembly, breaker plates and liners are almost totally exposed for maintenance.

BREAKER PLATE ASSEMBLIES

These consist of carbon-manganese steel plates mounted on an adjustable frame. Synchronous gear jacks are supplied as standard in order to control the hammer tipbreaker plate clearances.

ROTOR SHAFT

The shaft is machined from forged steel and is drilled to enable hydraulic removal of the bearing from the shaft to expedite bearing replacement.

HAMMER SUSPENSION DISCS & BARS

These massive discs are cut from carbon-manganese steel. They are keyed to the rotor shaft and securely clamped with a massive lock nut. All discs are drilled to permit alternate hammer arrangements.

The suspension bars extend the entire length of the rotor assembly and support the hammers. Both ends are drilled and tapped to facilitate their removal when changing hammers.

HAMMERS

Maximum service life is achieved because Coalpactor hammers are forged of tough alloy steel, then differentially heat-treated. This produces maximum hardness in the hammer face but creates ductility in the shank to better absorb shock without breaking.

BEARINGS AND BEARING HOUSINGS

Spherical roller bearings with tapered bore are standard. These are mounted in split pillow-block housings with seals. The rotor shaft is drilled to enable hydraulic loosening of the bearing from the rotor shaft for replacement.

MAJOR ADVANTAGES OF THE COALPACTOR DESIGN

- Lower cost-per-ton-crushed than comparable crushers.
- Lower horsepower demand than comparable crushers.
- Control over product size, with minimum fines.
- Little or no loss of capacity or crushing efficiency when crushing high-moisture-content materials.
- Less chance of damage to the crusher from uncrushables. Tramp iron clears the crushing zone immediately and exits through the open bottom of the crusher. Crusher models having grates can retain such materials and may require shutdown.
- Hammers normally last longer than in crushers with grates.

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