

Portable Stone Crusher

Technical parameters, configuration boundaries and model-selection inputs



CONFIGURATION AT A GLANCE

CRUSHER TYPE

Jaw

Impact

Cone

MOBILITY

Wheel-mounted

Crawler-mounted

PROCESSING STAGE

Primary

Secondary

Tertiary

OPTIONAL MODULES

Feeder

Screen

Magnetic separator

Return conveyor

Wheel-mounted jaw crushing plant

Relocatable primary crushing on a prepared quarry or project site

EQUIPMENT BOUNDARY

A portable crusher combines the selected crushing unit with a relocatable chassis and matched material-handling modules. Wheel-mounted plants normally move between prepared positions by towing; crawler-mounted plants support frequent on-site movement on uneven ground. The crusher model does not by itself define the total plant capacity, transport size or final aggregate grading.

Crusher Configuration Selection

Select by crushing stage, feed character and downstream duty



Portable Jaw PRIMARY

Large hard or medium-hard feed



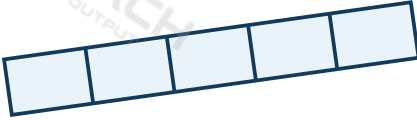
Portable Impact SECONDARY

Medium-hard, lower-abrasion feed



Portable Cone SECONDARY / TERTIARY

Hard and abrasive pre-crushed feed



Screening Plant CLASSIFICATION

Crushed material for size separation

Configuration	Crushing stage	Suitable feed	Main function	Important boundary
Portable Jaw Crusher	Primary	Large hard or medium-hard stone	Coarse size reduction	Product normally requires screening or secondary crushing
Portable Impact Crusher	Secondary	Medium-hard, low-to-moderate abrasive rock	Reduction and particle shaping	Wear rises sharply with highly abrasive feed
Portable Cone Crusher	Secondary or tertiary	Hard and abrasive pre-crushed stone	Controlled compression crushing	Requires suitably sized, stable and evenly distributed feed
Portable Screening Plant	Classification	Crushed material	Separates specified product fractions	Classifies material but does not replace a crushing stage

CONFIGURATION CHECK

- 1 Largest feed lump**

Must remain safely below the selected feed-opening limit.
- 2 Required product**

Crusher discharge and finished screened fractions are different specifications.
- 3 Wear duty**

Hardness, silica and abrasiveness influence crusher type and wear cost.
- 4 Plant interface**

Feeder, conveyor, screen and recirculation loads must be matched together.

PE Series Jaw Crusher Technical Parameters

Article parameter set - crusher-unit data, not complete portable-plant dimensions

PE jaw crushers are used primarily for coarse reduction. Feed opening, maximum feed, discharge setting, capacity and motor power must be reviewed as one operating system.

Model	Opening (mm)	Max feed (mm)	Discharge (mm)	Capacity (t/h)	Speed (r/min)	Power (kW)	Weight (t)	Overall L x W x H (mm)
PE-150x250	150x250	125	10-40	1-3	285	5.5	0.8	720x660x850
PE-200x300	200x300	180	15-50	2-6	260	7.5	1.2	910x750x990
PE-200x350	200x350	180	18-70	3-10	260	11	1.5	1000x870x990
PE-250x400	250x400	210	20-60	5-20	300	15	2.8	1300x1090x1270
PE-400x600	400x600	350	40-100	15-60	275	30	6.5	1730x1730x1630
PE-500x750	500x750	425	50-100	40-110	275	55	10.3	1980x2080x1870
PE-600x900	600x900	500	65-160	50-180	250	75	17	2300x2290x2400
PE-750x1060	750x1060	630	80-180	110-320	250	110	29	2660x2430x2800
PE-900x1200	900x1200	750	95-225	220-450	200	132	50	3780x3050x3025
PE-1200x1500	1200x1500	1020	150-300	400-800	180	200	100.9	4930x3150x3700
PE-1500x1800	1500x1800	1200	210-360	500-1000	180	280	139	5100x4700x4300

PE SELECTION PRIORITIES

- Top feed size
- Discharge setting
- Material duty
- Mobile integration

Keep practical clearance between the largest expected lump and the feed opening; average feed size is not an adequate selection basis.

A tighter discharge setting normally reduces capacity and can increase wear, power demand and recirculating load.

Check hardness, toughness, bulk density, moisture, clay and silica-related abrasiveness before selecting the model.

Confirm hopper width, feeder duty, crusher inlet height, discharge clearance, conveyor width, maintenance access and transport limits.

Reference values for initial comparison. Confirm the approved crusher and portable-plant data sheets before procurement, transport or foundation design.

PEX Series Jaw Crusher Technical Parameters

Article parameter set - crusher-unit data, not complete portable-plant dimensions

PEX jaw crushers use a relatively long crushing chamber and are generally applied after primary crushing where a finer discharge range is required. They are not direct substitutes for large primary jaw crushers.

Model	Opening (mm)	Max feed (mm)	Discharge (mm)	Capacity (t/h)	Speed (r/min)	Power (kW)	Weight (t)	Overall L x W x H (mm)
PEX-150x750	150x750	120	18-48	8-25	320	15	3.8	1200x1530x1060
PEX-250x750	250x750	210	25-60	15-45	330	30	5.5	1380x1750x1540
PEX-250x1000	250x1000	210	25-60	16-52	330	37	7.0	1560x1950x1390
PEX-250x1200	250x1200	210	25-60	20-60	330	37	8.5	2190x2206x1430
PEX-300x1300	300x1300	250	20-90	30-105	300	75	15.6	2720x1950x1600
PEX-350x750	350x750	300	15-50	20-50	300	30	6.5	1600x1800x1600
PEX-500x1500	500x1500	425	40-120	80-200	250	110	35	Not stated

PEX SELECTION PRIORITIES

1 Upstream control
Primary-crusher discharge must remain within the PEX feed limit. Uncontrolled oversize can bridge the inlet or overload the chamber.

2 Product target
Confirm the intended closed-side setting and downstream screen aperture. Finer settings usually reduce available throughput.

3 Feed condition
Wet fines, clay or unstable feed distribution can restrict effective capacity and accelerate uneven jaw-plate wear.

4 Missing data
PEX-500x1500 overall dimensions are not stated in the confirmed article set and must be obtained from the approved project data sheet.

Reference values for initial comparison. Verify speed, motor, CSS, capacity basis and transport dimensions against approved project data.

Material and Process Selection

Material photographs identify feed character; the matrix defines the equipment duty



Granite Hard and abrasive



Basalt Dense, hard and abrasive



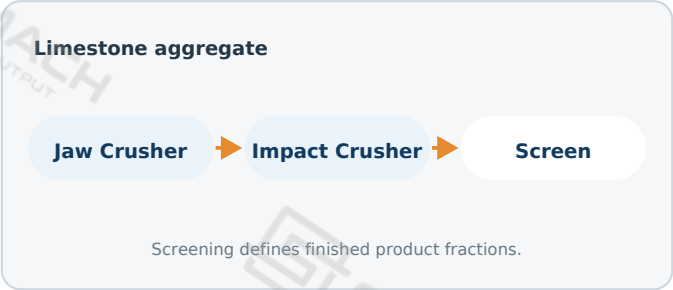
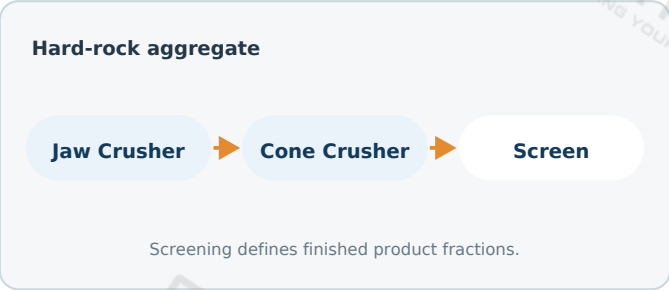
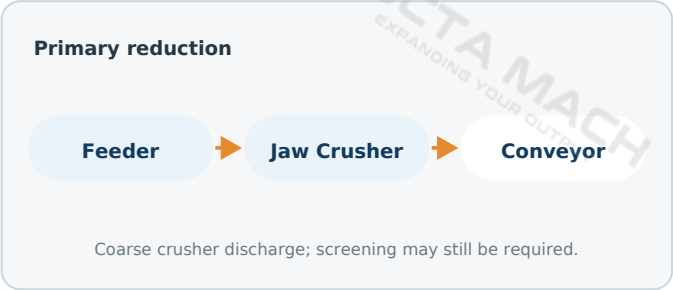
Limestone Variable hardness; clay possible



River Stone Hard, smooth and rounded

Material	Feed characteristics	Primary stage	Secondary stage	Main selection concern
Granite	Hard and abrasive	Jaw crusher	Cone crusher	Liner wear, installed power and stable feed
Basalt	Dense, hard and abrasive	Jaw crusher	Cone crusher	Wear resistance and even chamber loading
Limestone	Variable hardness; may contain clay	Jaw crusher	Impact crusher when required	Moisture, clay content and particle-shape target
River Stone	Hard, smooth and rounded	Jaw crusher	Cone crusher	Feed stability and silica-related wear

REPRESENTATIVE PROCESS CONFIGURATIONS



Model Selection Checklist

Confirm the project duty before final crusher and portable-plant release

01 Feed Material

- ☐ Material name and geological source
- ☐ Maximum lump size and feed gradation
- ☐ Hardness, toughness and abrasiveness
- ☐ Moisture, clay and wet-fines content

02 Production Duty

- ☐ Required capacity in t/h and operating hours
- ☐ Required crusher discharge range
- ☐ Final screened product fractions
- ☐ Expected recirculating load, if any

03 Plant Configuration

- ☐ One-stage or multi-stage crushing
- ☐ Screening and recirculation requirement
- ☐ Wheel-mounted or crawler-mounted chassis
- ☐ Magnetic separation requirement

04 Site Conditions

- ☐ Electrical supply or diesel-electric duty
- ☐ Site gradient and ground bearing condition
- ☐ Relocation frequency and towing access
- ☐ Dust control and environmental limits

05 Technical Confirmation

- ☐ Capacity basis and feed-test assumptions
- ☐ Wear-part material and spare-parts scope
- ☐ Installed motor power and starting method
- ☐ Transport dimensions and total plant weight

SELECTION SEQUENCE



Final release should confirm the crusher data sheet together with the feeder, conveyor, screen, chassis, power supply, transport envelope and actual material duty. Published capacity is a selection reference, not an unconditional production guarantee.