

A jaw crusher should be selected from duty logic, not from model name alone.

The most important variables are maximum feed size, required capacity, discharge range, stage duty and plant configuration.



Factory reference image: equipment scale and industrial configuration.

Primary selection rule

Start with the real maximum feed lump size. Then review capacity and discharge size together. Final type selection should also consider whether the crusher is working as a primary, secondary, mobile or fixed unit.

Selection workflow**1 Define the duty**

Confirm whether the crusher will perform primary coarse crushing, secondary reduction or compact sample preparation.

2 Check maximum feed size

Select the feed opening from the real largest lump size, not only the average particle size.

3 Set capacity target

Use the required hourly throughput together with the expected feeding condition and rock hardness.

4 Confirm discharge range

Match the crusher setting with the downstream screen, cone crusher or final aggregate requirement.

5 Decide plant type

Choose stationary, mobile or mini configuration according to site layout, relocation frequency and installation conditions.

6 Review support items

Check power supply, spare parts, wear expectation, foundation and shipment condition before release.

Main selector

Maximum feed size

Capacity range

1-1000 t/h

Discharge window

10-350 mm

Primary type

PE jaw crusher

Secondary type

PEX jaw crusher

Configuration options

Mini / Mobile / Stationary

Use the tables below as a practical judgement tool before narrowing the model range.

The tables are directional selection guidance. Final model confirmation still depends on rock hardness, moisture, feeder condition and line balance.

How to read this page

First match the real maximum feed size. Then check the required capacity band. Finally confirm whether the target discharge band fits the selected crusher type and the downstream process.

Maximum Feed Size	Typical Material Condition	Suggested Model Direction	Engineering Note
≤120 mm	Small feed or already pre-broken material	Mini jaw crusher or PEX-150×750	Best for sample preparation or light secondary duty
121-210 mm	Small quarry stone or controlled secondary feed	PE-250×400 or PEX-250 series	Check whether the duty is primary or secondary before choosing PE or PEX
211-425 mm	General quarry and aggregate feed	PE-400×600 or PE-500×750	Common primary range for medium-capacity lines
426-630 mm	Larger blasted stone and higher-duty feed	PE-600×900 or PE-750×1060	Review feeder condition and structure loading
631-850 mm	Heavy primary crushing duty	PE-900×1200 or PE-1000×1200	Suitable where larger rock and higher output are both required
851-1200 mm	Very large blasted stone	PE-1200×1300 / PE-1200×1500 / PE-1500×1800	Use only with matching foundation, feeder and downstream line balance

Required Capacity	Typical Duty	Typical Model Direction
1-20 t/h	Pilot line, light contractor duty, sample crushing	Mini jaw crusher, PE-150×250, PE-250×400
20-60 t/h	Small quarry and compact line	PE-250×400, PE-400×600, PEX-250 series
60-180 t/h	Medium aggregate line	PE-500×750, PE-600×900, PEX-300 series
180-450 t/h	Heavy primary line	PE-750×1060, PE-900×1200
450-1000 t/h	Large quarry or mine primary section	PE-1000×1200 and larger PE models

Required Discharge Size	Interpretation	Typical Selection Direction
10-40 mm	Fine or compact output	PEX-150×750 or small PE model in light duty
20-60 mm	Controlled small output for secondary or screening stage	PEX-250 series or PE-250×400
40-100 mm	General aggregate preparation	PE-400×600 or PE-500×750
65-160 mm	Primary coarse crushing with moderate reduction	PE-600×900 and similar PE models
95-265 mm	High-throughput primary crushing	PE-900×1200, PE-1000×1200 and larger

Crusher type should match not only the feed and output requirement, but also the plant arrangement and mobility need.



Factory reference image: primary crusher assembly and inspection environment.

Type	Typical Role	Best-Fit Condition	When It Is Most Suitable
PE jaw crusher	Primary coarse crushing	Large feed lumps, quarry stone, mine ore	Best when the first crushing stage must accept larger rock and deliver high reduction in a fixed line
PEX jaw crusher	Secondary or fine crushing	Smaller feed and closer discharge control	Best when feed is already reduced and a tighter output band is required
Mini jaw crusher	Small-scale crushing	Sample preparation, small batches, compact sites	Best when low output, low power and easier handling are more important than large throughput
Mobile jaw crusher	Relocatable crushing	Temporary site, demolition recycling, multi-site work	Best when relocation speed and integrated feeder/conveyor arrangement are required
Stationary jaw crusher	Long-term production line	Quarry, mining and permanent aggregate plants	Best when stable foundation, continuous feed and easier integration with screens and conveyors are available

Quick interpretation

PE handles larger feed and primary duty. PEX is better for smaller feed and closer output control. Mini is chosen for compact low-output work. Mobile emphasizes relocation. Stationary emphasizes long-term line stability.

Type	Main Limitation / Review Point
PE	Not intended for close-control fine output where smaller feed is already available
PEX	Not suitable for very large feed lumps that should be handled by a primary PE model
Mini	Not suitable when sustained high capacity is required
Mobile	Check transport size, chassis layout, power arrangement and dust-control needs carefully
Stationary	Requires stronger civil foundation and less flexibility for relocation

Decision rule

If the material is large and the crusher is the first stage, the selection normally starts from PE. If the material is already reduced and a narrower discharge range is required, the selection normally moves toward PEX. Choose mobile only when relocation is a true project requirement, and choose stationary when the line is long-term and foundation conditions are stable.

A strong quotation request should define the duty clearly enough for technical matching, not only ask for price.



Shipment reference image: packing and loading context for export equipment.

RFQ objective
Provide enough technical information for the supplier to recommend a matched jaw crusher type, model direction, auxiliary-equipment scope and shipment arrangement.

Helpful supporting inputs

- 1

Feed material photo
Helpful for judging lump shape, moisture and contamination.
- 2

Material gradation
Useful for realistic capacity review and feeder sizing.
- 3

Plant layout or sketch
Useful for confirming installation footprint and conveyor direction.
- 4

Downstream product target
Helps align discharge size with final aggregate requirement.
- 5

Packing requirement
Needed when export packing, container loading or special shipment conditions apply.
- 6

Delivery expectation
Useful for planning standard scope versus urgent-delivery alternatives.

Required Information	Example	Why It Matters
Material type	Granite, limestone, basalt, ore, concrete	Determines wear rate, crushing duty and liner selection
Maximum feed size	210 mm, 500 mm, 750 mm, etc.	Drives feed-opening choice and crusher size
Required capacity	20 t/h, 100 t/h, 450 t/h, etc.	Defines model scale, motor power and line balance
Required discharge size	20-60 mm, 65-160 mm, etc.	Links the crusher setting with downstream process requirement
Crushing stage	Primary or secondary	Separates PE duty from PEX duty
Plant type	Stationary, mobile or mini	Affects structure, transport, footprint and auxiliary equipment
Power supply	Voltage, frequency and motor basis	Confirms local electrical compatibility
Site condition	Quarry, mine, recycling yard or road project	Affects dust control, mobility and service arrangement
Spare parts requirement	Jaw plates, toggle plate, bearings, liners	Improves maintenance readiness and start-up support

Final buying principle
Before asking for a quotation, confirm material type, maximum feed size, required capacity, discharge range, crushing stage and plant type. These six fields usually decide whether the recommendation should move toward PE, PEX, Mini, Mobile or Stationary configuration. Power supply, spare parts and packing requirement then complete the RFQ basis.