

Mobile Cone Crusher Plant



SECONDARY DUTY

Controlled hard-rock reduction

TERTIARY DUTY

Finer product preparation

OPEN CIRCUIT

Separate downstream screening

CLOSED CIRCUIT

Screen oversize returned

SYSTEM OVERVIEW

A mobile cone crusher plant integrates compression crushing, conveying, hydraulic controls and optional screening on a movable chassis. It is normally installed after primary crushing to process hard and abrasive rock.

Selection basis: allowable feed > continuous capacity > required product grading > circuit load > transport envelope

KEY LIMIT Published ranges support preliminary comparison only. Chamber selection, liner profile, screen efficiency and return load must be checked before a model is confirmed.

Complete Technical Parameters

Standard Model	Corollary Equipment	Cone Crusher Model	Max Feed (mm)	Capacity (t/h)	Transport Dimensions L x W x H (mm)
S-CS75	3YZK1848	CS75	<=160	59-163	12600 x 2800 x 4400
S-CS110	3YZK1860	CS110	<=178	100-200	13800 x 3000 x 4400
S-CS160	3YZK2160	CS160	<=188	132-253	13800 x 3000 x 4400
S-CS220	3YZK2160	CS220	<=230	215-330	14500 x 3000 x 4500
S-Q300	3YZK1848	SQ300	<=160	105-205	12600 x 2800 x 4400
S-Q400	3YZK1860	SQ400	<=230	235-575	13800 x 3000 x 4400
S-Q500	3YZK2160	SQ500	<=240	304-640	14500 x 3000 x 4600
S-H420	3YZK1848	SH420	<=240	85-170	12600 x 2900 x 4400
S-H430	3YZK1860	SH430	<=360	120-345	13800 x 3000 x 4500
S-H440	3YZK2160	SH450	<=450	255-605	14800 x 3200 x 4600
S-HP100	3YZK1860	SHP100	<=140	75-140	13800 x 2900 x 4300
S-HP200	3YZK2160	SHP200	<=185	145-250	14200 x 3000 x 4500
S-HP300	3YZK2160	SHP300	<=230	220-440	16500 x 3200 x 4600

FEED LIMIT

Verify every feed lump against the selected chamber, not only the plant designation.

OUTPUT BASIS

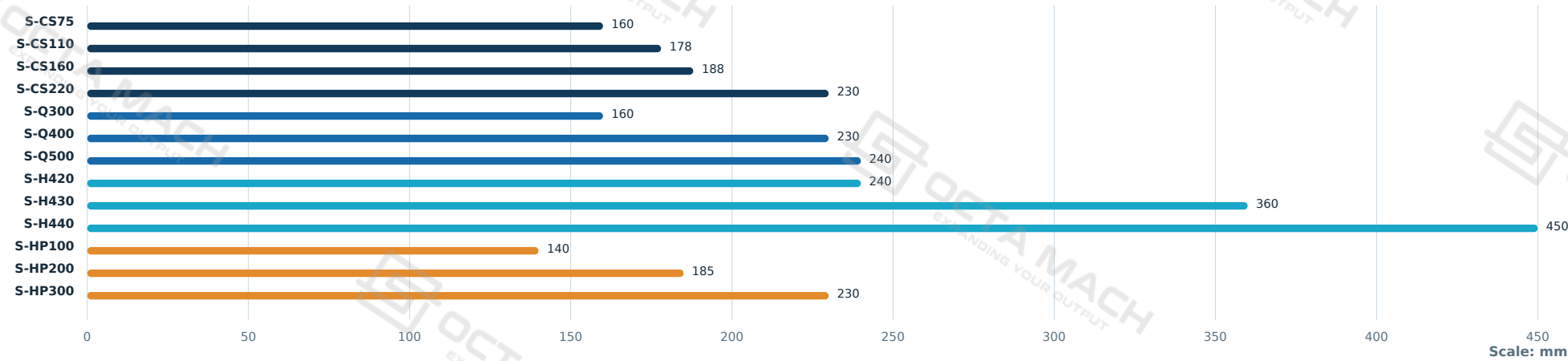
Capacity changes with feed grading, hardness, CSS, liner condition and screen duty.

TRANSPORT DATA

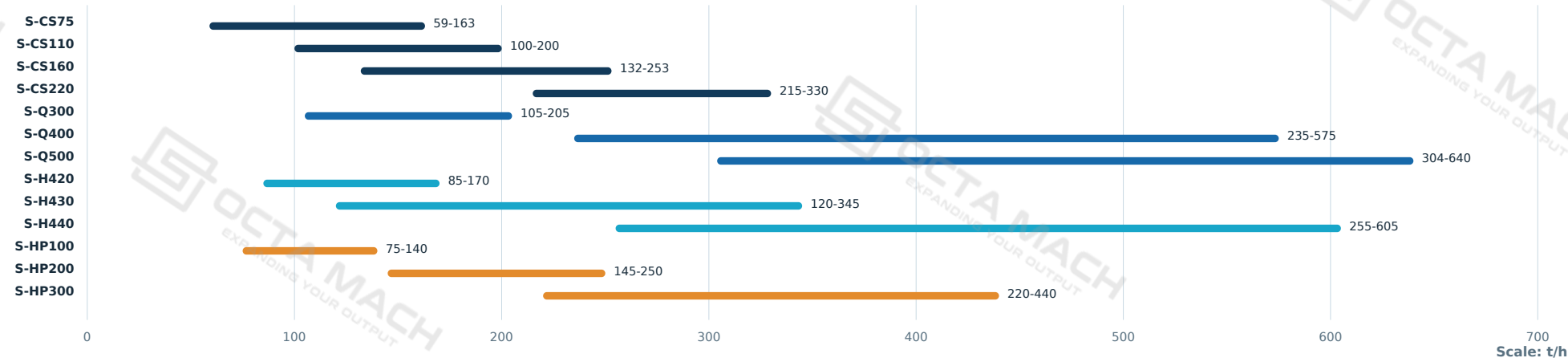
Dimensions describe the published transport envelope; legal route checks remain separate.

Feed Size and Capacity Comparison

Maximum Feed Size



Nominal Capacity Range



COMPARISON LIMIT A wider nominal range does not guarantee higher site output. Feed distribution, chamber selection, screen efficiency and circulating load determine achievable production.

Transport Dimensions and Site Access



TRANSPORT ENVELOPE

The published L x W x H values describe the plant in transport configuration. They do not confirm legal road transport or replace a route survey.

LENGTH**12.6-16.5 m**Longest: S-HP300

WIDTH**2.8-3.2 m**Widest: H440 / HP300

HEIGHT**4.3-4.6 m**Highest: Q500 / H440 / HP300

Series	Length Range (mm)	Width Range (mm)	Height Range (mm)	Primary Review
S-CS	12,600-14,500	2,800-3,000	4,400-4,500	Route height
S-Q	12,600-14,500	2,800-3,000	4,400-4,600	Q500 height
S-H	12,600-14,800	2,900-3,200	4,400-4,600	Width and height
S-HP	13,800-16,500	2,900-3,200	4,300-4,600	HP300 length

ROAD
Lane width, turning radius, gradients and bridge limits

CLEARANCE
Bridges, tunnels, overhead lines and gate height

SITE ENTRY
Gate width, ground bearing, unloading and setup area

RELOCATION
Folding sequence, permits, escort and crane need

Model Selection Inputs

Selection Input	Minimum Information	Direct Design Influence
Feed size and gradation	Maximum lump, typical grading, fines and oversize frequency	Chamber, feed distribution and stable loading
Rock properties	Hardness, abrasiveness, density, moisture and clay	Liner profile, wear rate, power and chute design
Required products	Final sizes, top size, permitted oversize and number of fractions	CSS, apertures and open- or closed-circuit duty
Capacity basis	Required net t/h, peak feed, operating hours and availability	Crusher, screen, conveyor and surge sizing
Screen efficiency	Aperture, screen area and expected separation efficiency	Oversize carryover and circulating load
Site and logistics	Power, altitude, climate, access, transport and relocation limits	Plant configuration and transport feasibility

SELECTION SEQUENCE

- 1 Define feed envelope
- 2 Define finished products
- 3 Select chamber and circuit
- 4 Size screen and conveyors
- 5 Verify transport and site access

SELECTION CHECKLIST

- ☐ Maximum feed size
- ☐ Product fractions
- ☐ Feed gradation
- ☐ Screen aperture
- ☐ Rock hardness
- ☐ Return-load basis
- ☐ Moisture and clay
- ☐ Power supply
- ☐ Required net capacity
- ☐ Transport limits

SELECTION RELATIONSHIP Feed data + product grading + continuous capacity + screen duty + return load + site limits = recommended mobile cone crusher plant.