

SERAM

LIFTING BALANCED
CRANES

S100

S100.20E / S100.25E / S100.30E



160 kW



20 m / 30 m
66 ft / 98 ft



78 t / 134 t
86 USt / 148 USt

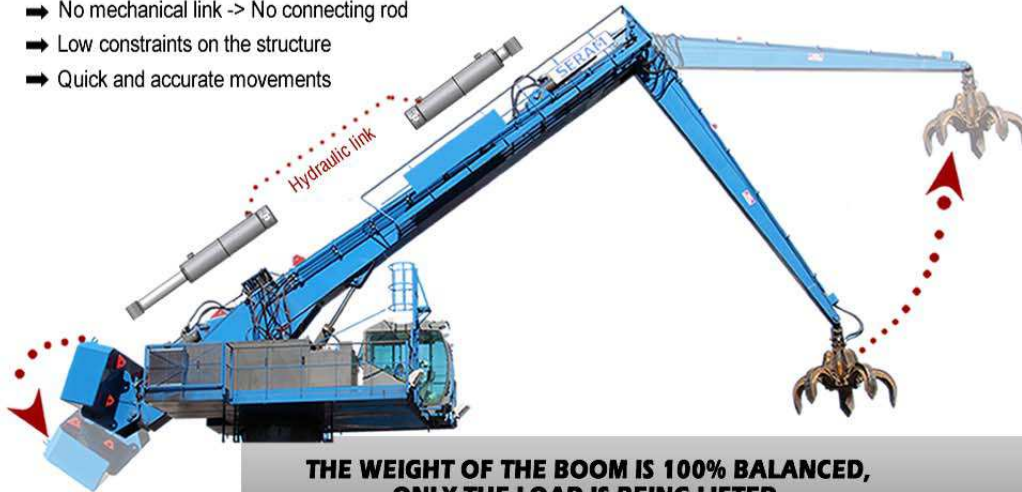
Courtesy of Crane.Market

THE SERAM HYDRAULIC BALANCING THE EASY AND EFFICIENT SOLUTION

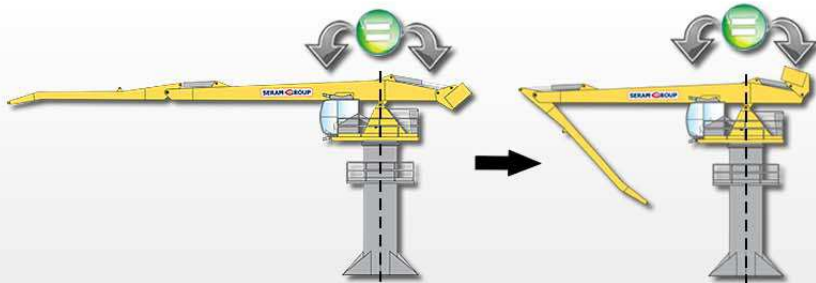
S100
S100.20E / S100.25E / S100.30E

The SERAM crane is the **only** balanced crane **by hydraulic system**

- ➔ No mechanical link -> No connecting rod
- ➔ Low constraints on the structure
- ➔ Quick and accurate movements



**THE WEIGHT OF THE BOOM IS 100% BALANCED,
ONLY THE LOAD IS BEING LIFTED.**



Enjoy the **unique advantages** of the balanced crane

Unequaled operating costs

Up to **80% energy consumption** compared to a diesel conventional crane

Diesel Conventional Crane

- 50%

Electric Conventional Crane

- 80%

SERAM Electric Balanced Crane

An exceptional lifetime of the hydraulic components

The average working pressure of a SERAM crane is **55% lower** than a conventional crane.

**~ 320 bars
~ 4650 psi**

Conventional Crane

**~ 140 bars
~ 2030 psi**

SERAM Balanced Crane

THE SERAM TECHNOLOGY

THE SERAM STRUCTURE THE RELIABILITY

World Reference...

FEM CLASSIFICATION*
A8M8

The most performing grade on the market



+ of 2 Millions of lifting cycles

+ of 20 Years of operating

+ of 40 000 Hours of working operation

*FEM: European Federation of Materials Handling

THE SERAM MAINTENANCE THE SIMPLICITY

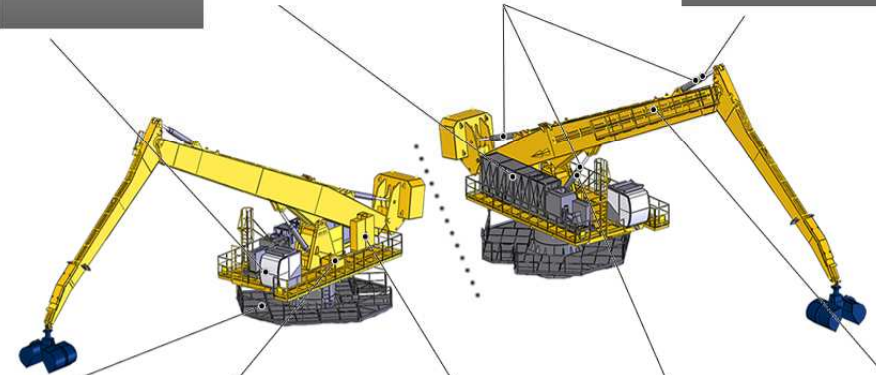
All the main components of the crane have an **easy access**

The SERAM DATA
(System of assistance to diagnosis)
Direct location on the dashboard of the cabin

THE HYDRAULIC UNIT
Direct access from the lateral platform

A SINGLE CYLINDER
(The 3 cylinders are identical and interchangeable)

DIPPER ARM CYLINDER
Direct access from the maintenance walkway



THE RING GEAR
(External toothing / 100% visible)
Direct access from the intermediate platform

THE SWING MOTOR
Direct acces from the lateral platform

THE ELECTRIC CABINET
(Raised cabinet to have an easier access to the cables)
Direct acces from the lateral platform

MAIN ARM CYLINDER
Direct access from the central platform

LUBRICATION
(Centralized manual lubrication points on the maintenance walkway)



SPECIFICATIONS

MAIN FEATURES

	S100.20E		S100.25E		S100.30E	
Power	100 t.m	33.6 USt.ft	100 t.m	33.6 USt.ft	100 t.m	33.6 USt.ft
Maximum horizontal outreach	20 m	66 ft	25 m	82 ft	30 m	98 ft
Length of the main arm	11.5 m	38 ft	14 m	46 ft	17 m	56 ft
Length of the dipper arm	8.5 m	28 ft	11 m	36 ft	13 m	43 ft

ELECTRIC MOTOR

Power	160 kW (400 volts - 50 hertz) / (480 volts - 60 hertz)
Type of starting	By variable frequency drive

DIESEL GENERATOR

(For crawlers only)

Power	350 kVA
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HYDRAULIC SYSTEM

Type of the hydraulic system	Load Sensing
Hydraulic pumps	Regulating pumps with Load Sensing regulation
Pump flow for the movements	510 l/min / 135 gal/min
Average working pressure	140 Bars / 2030 psi
Pump flow for the rotation	380 l/min (dedicated closed circuit) / 100 gal/min
Maximum rotation speed	3.5 tr/min
Hydraulic tank	1600 l / 422 gal
Cooling	Oil/Air heat exchanger

WORKING EQUIPMENT

Hydraulic cylinders	250 x 140 x 1750 mm / 9.8 x 5.5 x 68.9 in
Swing motors	Double radial piston engine with hydraulic safety brake
Ring gears	Crossed rollers with external toothing

SUPPORT

Fixed support (F)	Support fixed on a concrete base		
Dimensions of the anchoring base	5000 x 5000 mm / 16.4 x 16.4 ft		
Forces applied on the ground	Fz= 850 kN; Mx=2150 kN.m* 191.1 kipf; 528586 lbf.yd*	Fz= 960 kN; Mx=2250 kN.m* 215.8 kipf; 553172 lbf.yd*	Fz= 1070 kN; Mx=2350 kN.m* 240.5 kipf; 577757 lbf.yd*
Total weight of the machine	78 t / 86 USt	91 t / 100 USt	104 t / 115 USt

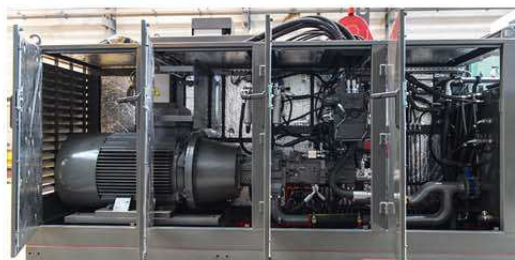
Free Standing support (AS)	Support on 4 shoes - No ground anchoring needed - Can be moved if needed		
Dimensions	Base: 6500 x 6500 mm / 21.3 x 21.3 ft 4 shoes: 1500 x 1500 mm / 4.9 x 4.9 ft		
Maximum forces applied on a shoe	Fz= 545 kN* / 122.5 kipf	Fz= 575 kN* / 129.3 kipf	Fz= 600 kN* / 134.9 kipf
Total weight of the machine	93 t / 103 UST	105 t / 116 USt	117 t / 129 USt

Trolley on rails (C)	Trolley equipped with 4 boggies, with 2 wheels each		
Dimensions	Wheel base: 6500 x 6500 mm / 21.3 x 21.3 ft Wheels of Boggies Ø630mm / 2.1 ft		
Maximum forces applied on a boggie	Fz= 550 kN* / 123.6 kipf	Fz= 580 kN* / 130.4 kipf	Fz= 605 kN* / 136 kipf
Total weight of the machine	102 t / 112 USt	115 t / 127 USt	127 t / 140 USt

Crawlers (Ch)	Base: 6500 x 6500 mm / 21.3 x 21.3 ft Width of the crawlers: 800 mm / 2.6 ft Speed: 0 to 2 km/h / 0 to 1.2 mph		
Dimensions			
Presson on the ground	12.3 N/cm ² * / 17.8 psi	13.5 N/cm ² * / 19.6 psi	14.8 N/cm ² * / 21.5 psi
Total weight of the machine	128 t / 141 USt	141 t / 155 USt	154 t / 170 USt

EQUIPMENTS

ACCESS	
Access ladder to the intermediate platform	●
Access stairway to the intermediate platform	Opt
Maintenance walkway	●
HYDRAULIC UNIT	
Lateral and upper openings allowing a total access to the hydraulic unit	●
Motor pump support equipped with an anti-vibration system - Noise mitigation	●
Enhanced cooling	Opt
Sound insulation	Opt
HYDRAULIC EQUIPMENTS	
Cylinders - Single piece chrome steel rods	●
Cylinders - equipped with safety valves and with load limiters	●
Automatic lubrication of the joints and cylinders	●
Automatic lubrication of the tracks and rollers of the gear	●
Automatic lubrication of the toothing of the gear	Opt



OPERATING CABIN

VISIBILITY	
Panoramic windshield	●
2 Pantograph wipers + windshield washer	●
Adjustable sun shades	●
COMFORT	
Reversible air conditioning on the roof of the cabin	●
Additional fan heater	●
Heat-insulating laminated glass type Securit	●
Lateral polycarbonate glazing	Opt
Interior lighting	●
FM radio station / MP3 player	●
Briefcase	●
Hydrocarbon resistant, textured floor mat	●
Electrical outlets 220 volts / 110 volts	●
12V cigare lighter socket	Opt
Communication radio	Opt
Starting with breath test	Opt
Pressurization system of the cabin	Opt
Customer's logo on the arm	Opt

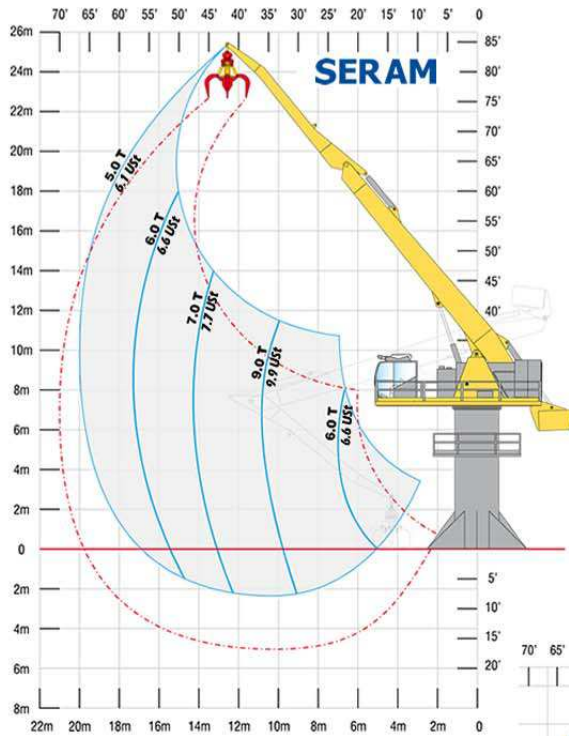


ELECTRICAL EQUIPMENTS	
Hydraulic collector - 4 power slip rings 3ph+t	●
Hydraulic collector - Additional switching ring	Opt
High Voltage / Low Voltage transformer	Opt
OPTIONS	
Handling tools (grapple, clamshell, etc)	Opt
Automatic Weighing system	Opt
Fire hose protection	Opt



ERGONOMICS	
Ergonomic suspension seat	●
Adjustable backrest and armrests	●
Adjustable footrest	●
Operating and control panel of the crane	●
Hydraulic joysticks on the armrests	●
SERAM DATA : Control and defect recording module	●
SERAM DATA : GSM module for remote supervision	Opt
SERAM VISION : camera support	Opt
Anti-collision system: driving assistance	Opt
Cabin extension	Opt
Guard screen for the windshield	Opt
Lighting of the working area: 2 x 400W	●
Additional lighting	Opt

S100.20E

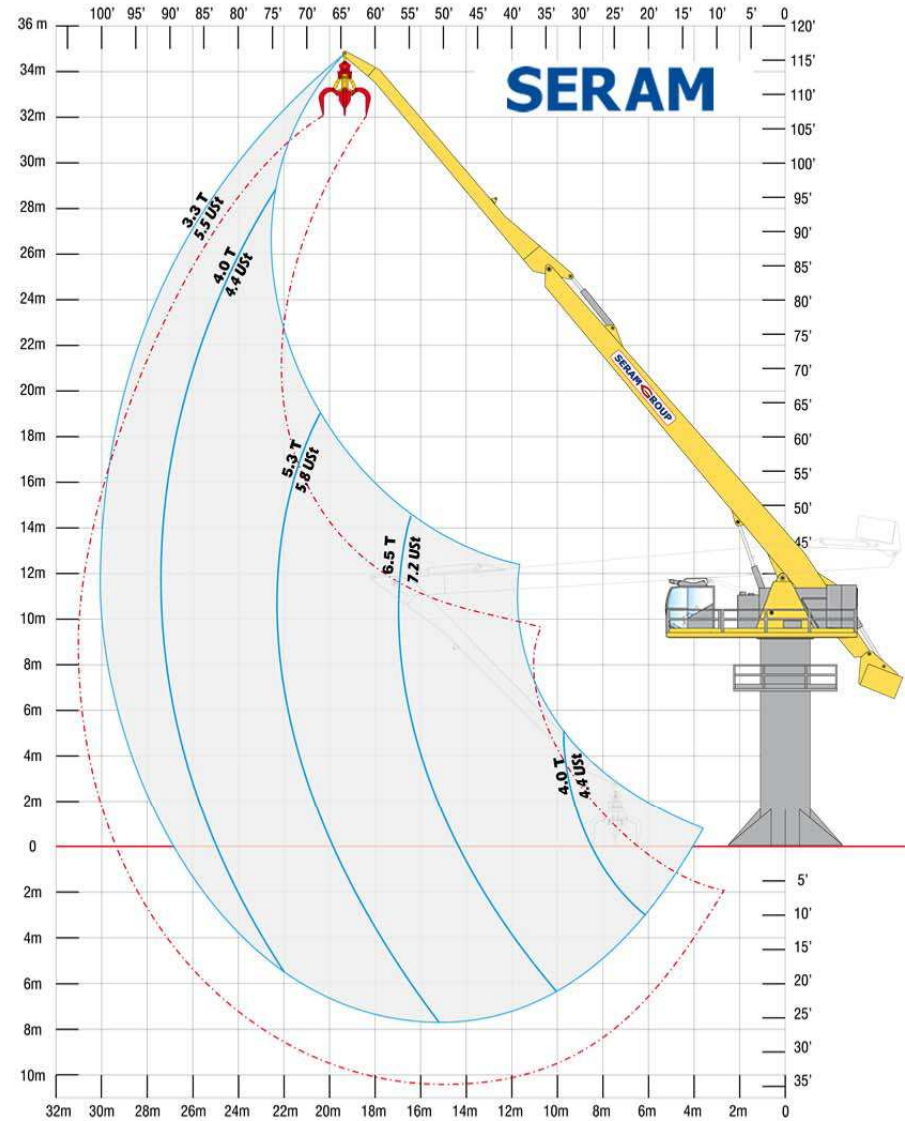


S100

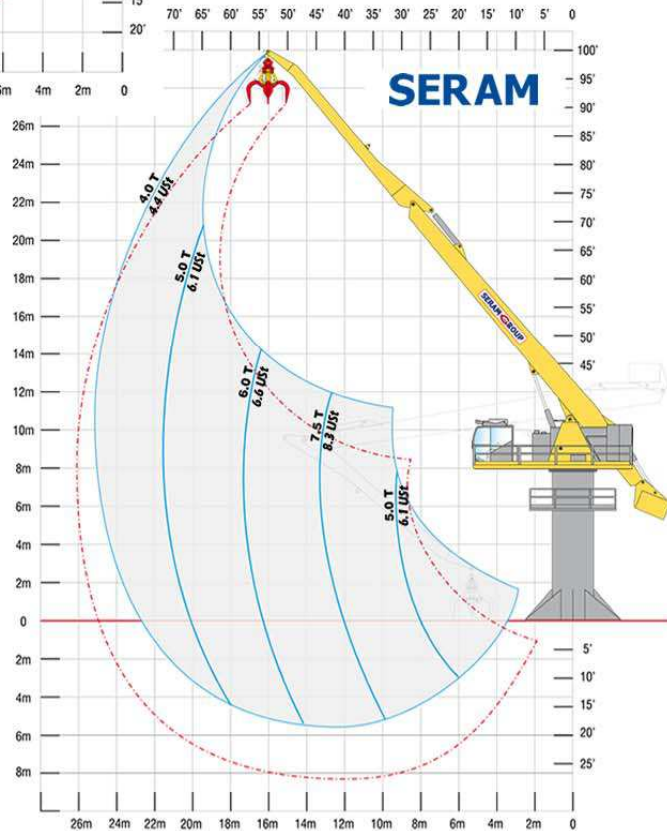
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LOAD CHARTS

S100.30E



S100.25E



Load charts in Metric Tons and US Tons, valid at the end of the crane's boom without handling tool. According to the A8M8 classification of the FEM (European Federation of Materials Handling). The loading capacities are valid on a 360° working area.


MODULAR SOLUTIONS

S100

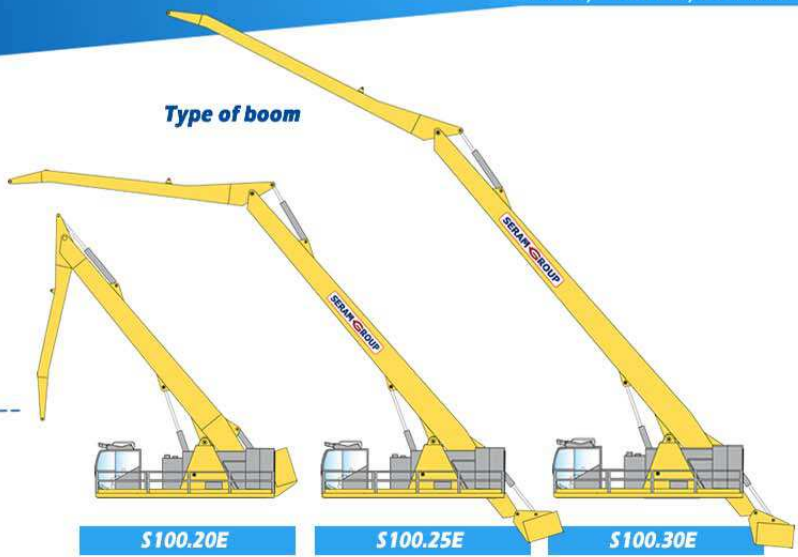
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DIMENSIONS

Type of tools

-  Grapple
-  Clamshell
-  Electromagnet
-  Timber grapple

Type of boom






Type of cabin



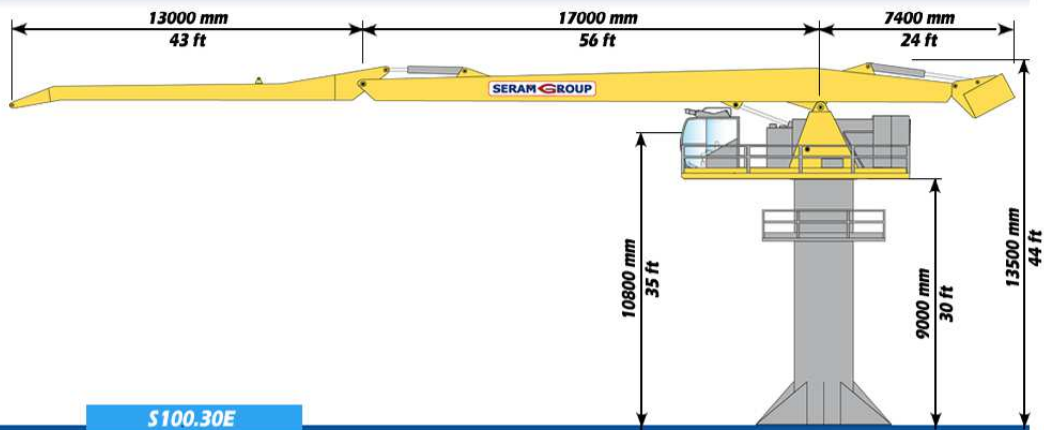
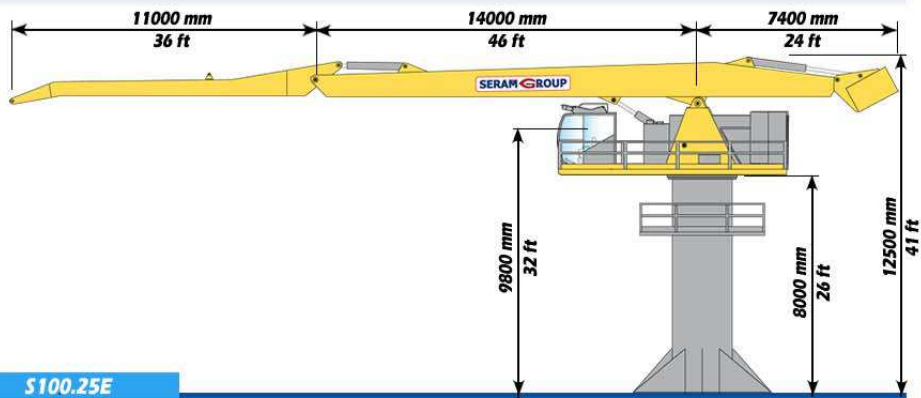
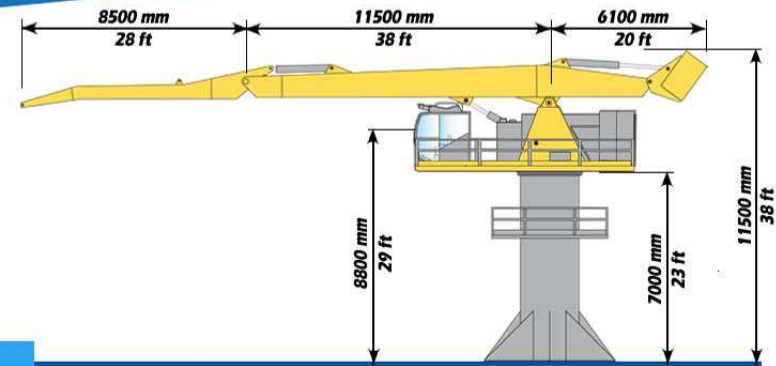
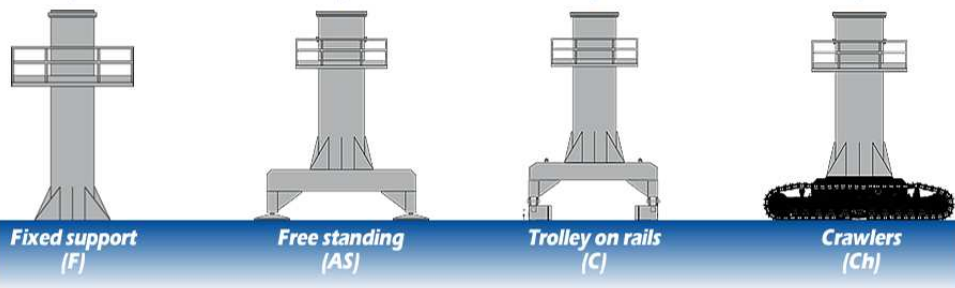
Type of engine



Power supply options

-  Diesel generator
-  Transformer
-  Cable reel

Type of supports



EXAMPLES

S100

S100.20E / S100.25E / S100.30E



S100

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Your dealer:

SERAM
SERAM SA

817 boulevard Marius Berliet - 66000 Perpignan (France)
Tél : 04 68 61 02 28 - seramsa@seram.net

WWW.SERAM.NET