

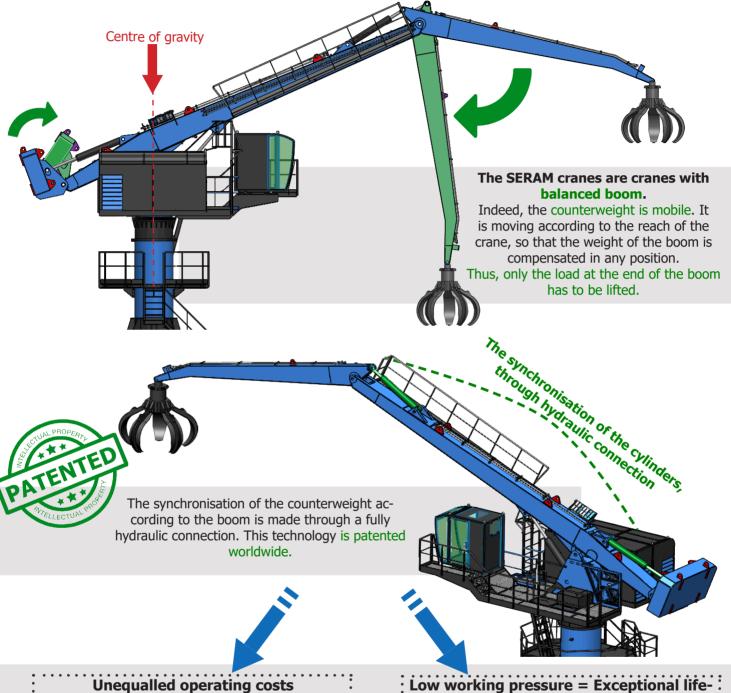
**EQUILIBRIUM HANDLING CRANE** 



### **SERAM**

L'EXPERIENCE

### The Hydraulic Balance System



#### Up to 80% of energy savings compared to a thermic excavator Thermic excavator 100% Electrical non balanced excavator 50% savings Electrical balanced crane SERAM

#### Low working pressure = Exceptional lifetime

The average working pressure is half lower than for a conventional excavator, the components are then less sollicitated, for the same performances

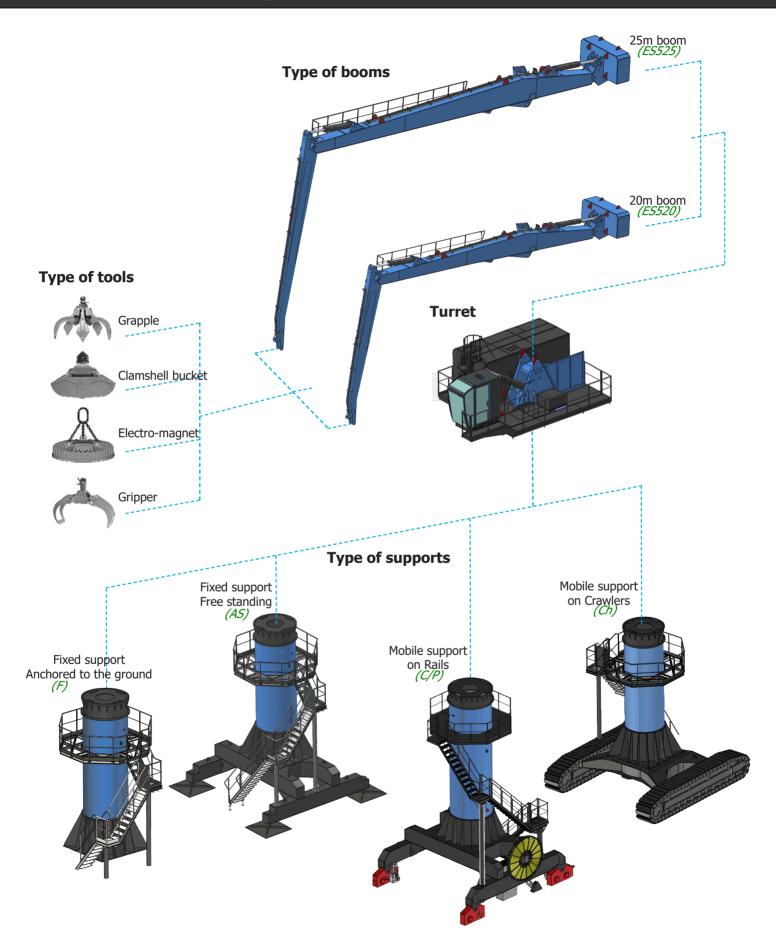
Non balanced excavator

~320 bars

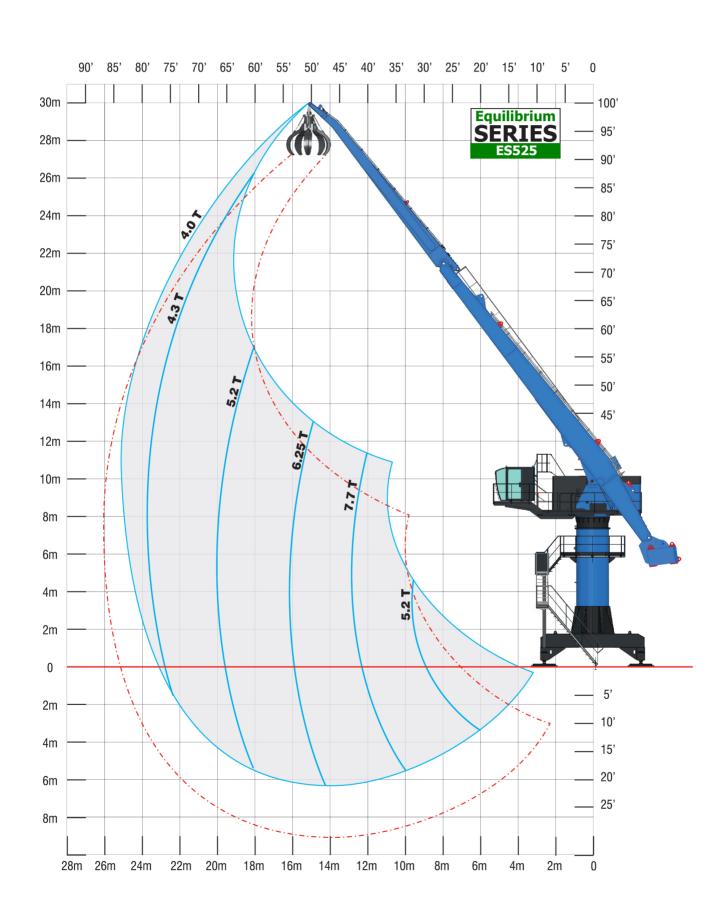
Electrical balanced crane SERAM

~150 bars

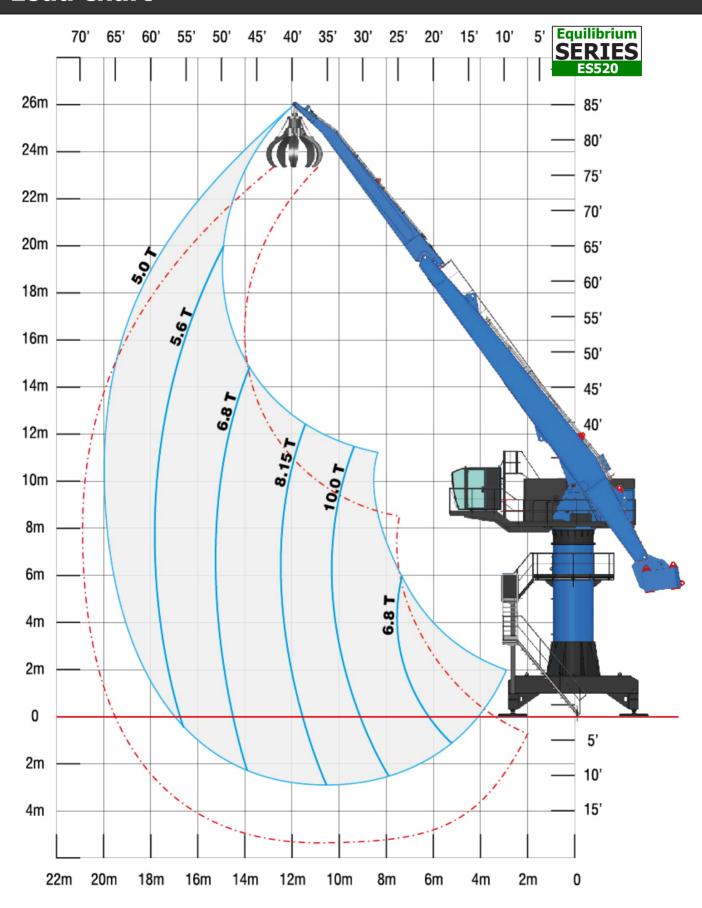
### The different components



### **Load chart**



### **Load chart**



### **Technical data**

GENERAL FEATURES	ES520	ES525
Power	100 t/m	100 t/m
Horizontal maximum reach	20 m	25 m
Lifting capacity at full reach	5 t	4 t
Length of the main arm	11.5 m	14 m
Length of the dipper arm	8.5 m	11 m
Weight (with free standing support)	93 t	101 t
weight (with free standing support)	95 (	ΙΟΙ τ
ELECTRICAL SYSTEM		نادد
Power of the main electrical motor	160 kW	
Type of start of the main motor	Star-delta or speed drive	
Voltage	400V / 480V / 600V - 50Hz/60Hz	
HYDRAULIC SYSTEM		
Pumps for the movements of the boom	280 сс	
Average working pressure	200 bars	
Pump for rotation	105 cc	
Capacity of the tank	1600 litres	
Filtration	2 filters of 10 microns	
Cooling system	In line	
Lubricating system	2 groups with separated circuits	
ROTATION		
Rotation motor	2 motors MS50	
Ø of the ring gear	Ø 1790mm	
Rotating speed	4 rpm	
CYLINDERS		
Type of cylinders	250mm x 140mm x 145	50mm
Type of cylinders	2501111 X 1 1011111 X 1 15	
TYPE OF SUPPORT	D 64 4 111	
Fixed support anchored to the ground	Base of 4m x 4m - Ht: 8m	
Fixed support, free standing	Chassis of 5.5m x 5.5m - Ht: 8m	
Mobile support on rails	Trolley of 5.5m x 5.5m - Ht: 8m	
Mobile support on crawlers	Upon request	

#### **OPERATING CABIN**

- New raised and advanced operating cabin, in order to optimize the overview in the different feeding areas (shears, shredders, vessels, etc...).
- Large glazed area, athermic and safety type.
- Comfortable standard equipment: manipulators with control console, reversible air conditioning, control and monitoring screen, adjustable driver seat, MP3 player, etc...



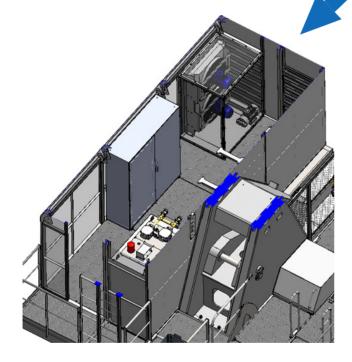
### **Technical data**

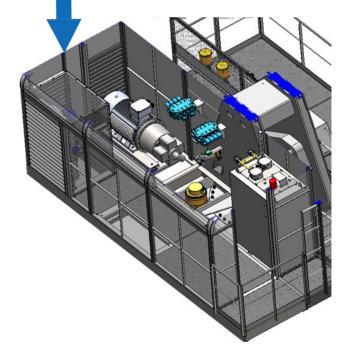
#### **MACHINE ROOM**

The machine room now includes the entire motor pump group, but also the coolers and the electrical cabinet. A set designed for easy and accessible maintenance.

This machine room can be thermally insulated and equipped with a heating system, for use in the cold countries.













ES520, ES525



SERAM did not wait for the climate emergency to manufacture clean machines, since **SERAM** has chosen electricity to power its cranes from 1973.

SERAM patented the balanced boom in 1984, saving 45% of electrical energy\*.

SERAM - An Ecological and Economic Awareness





