



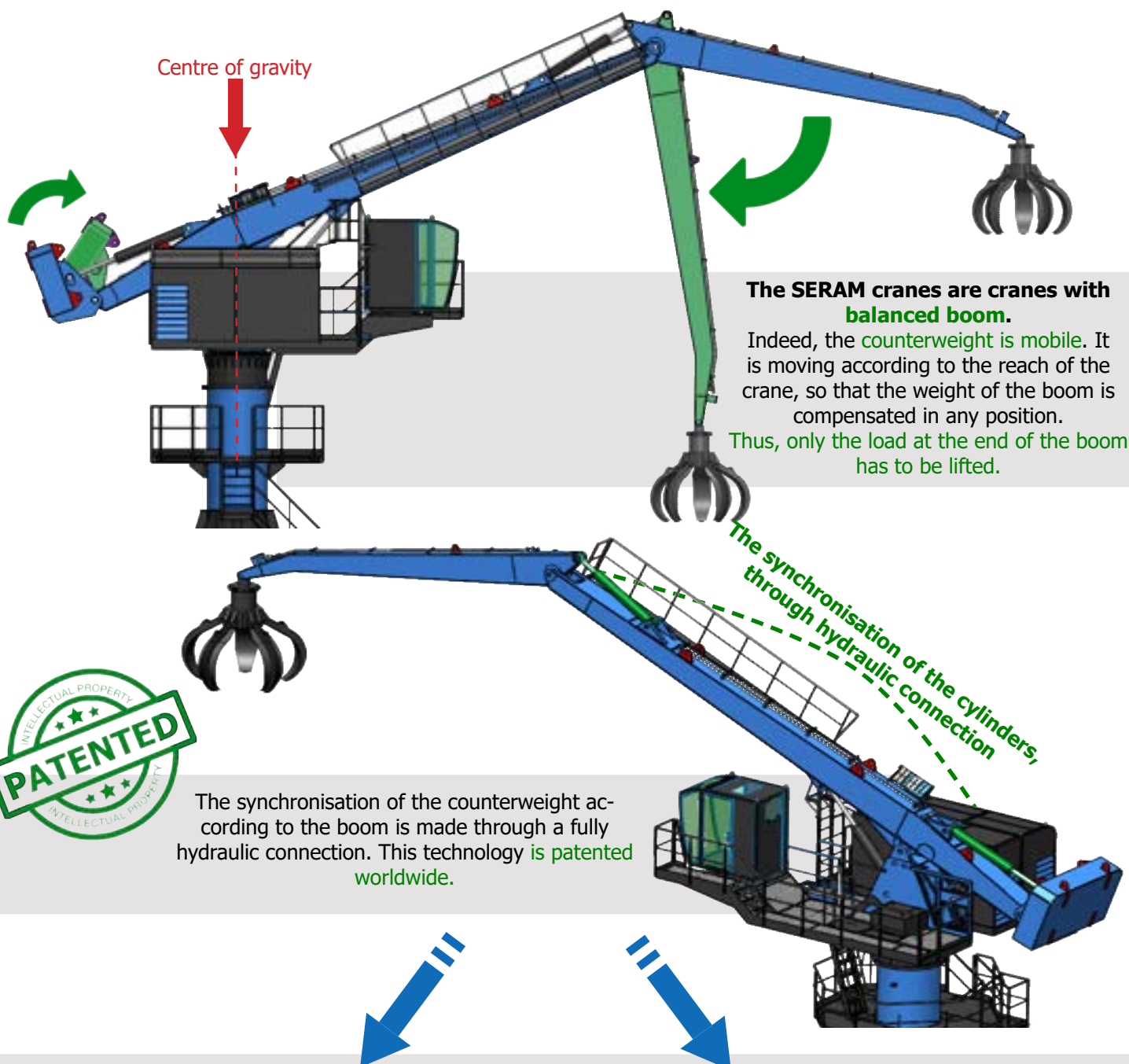
***EQUILIBRIUM HANDLING CRANE***

# **Equilibrium** **SERIES 4**

ES420, ES422, ES425

**SERAM**  
L'EXPERIENCE

## The Hydraulic Balance System



### Unequalled operating costs

Up to **80% of energy savings** compared to a thermic excavator

*Thermic excavator*

100%

*Electrical non balanced excavator*

50%

50% savings

*Electrical balanced crane SERAM*

25%

75% savings

### Low working pressure = Exceptional life-time

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

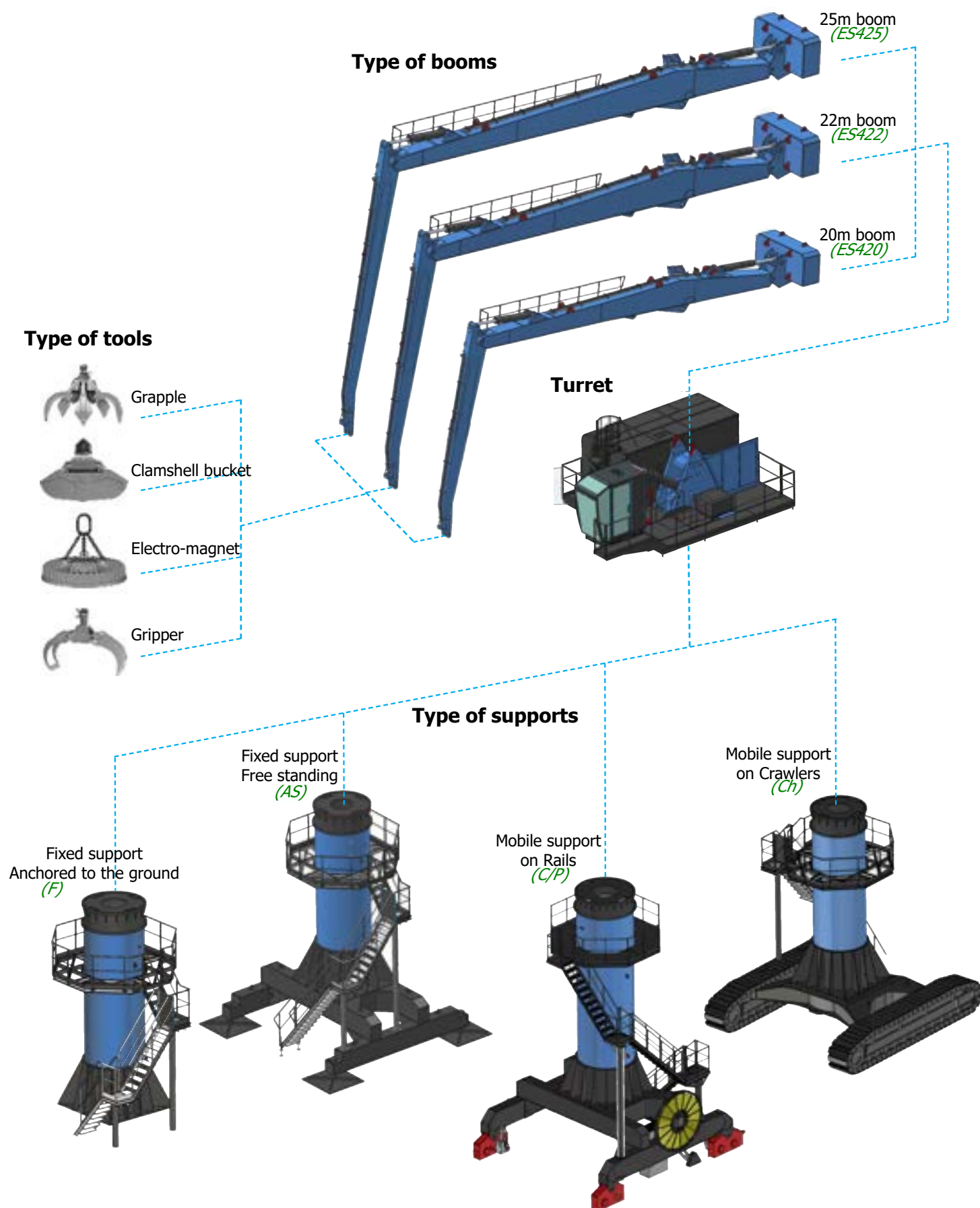
*Non balanced excavator*

~320 bars

*Electrical balanced crane SERAM*

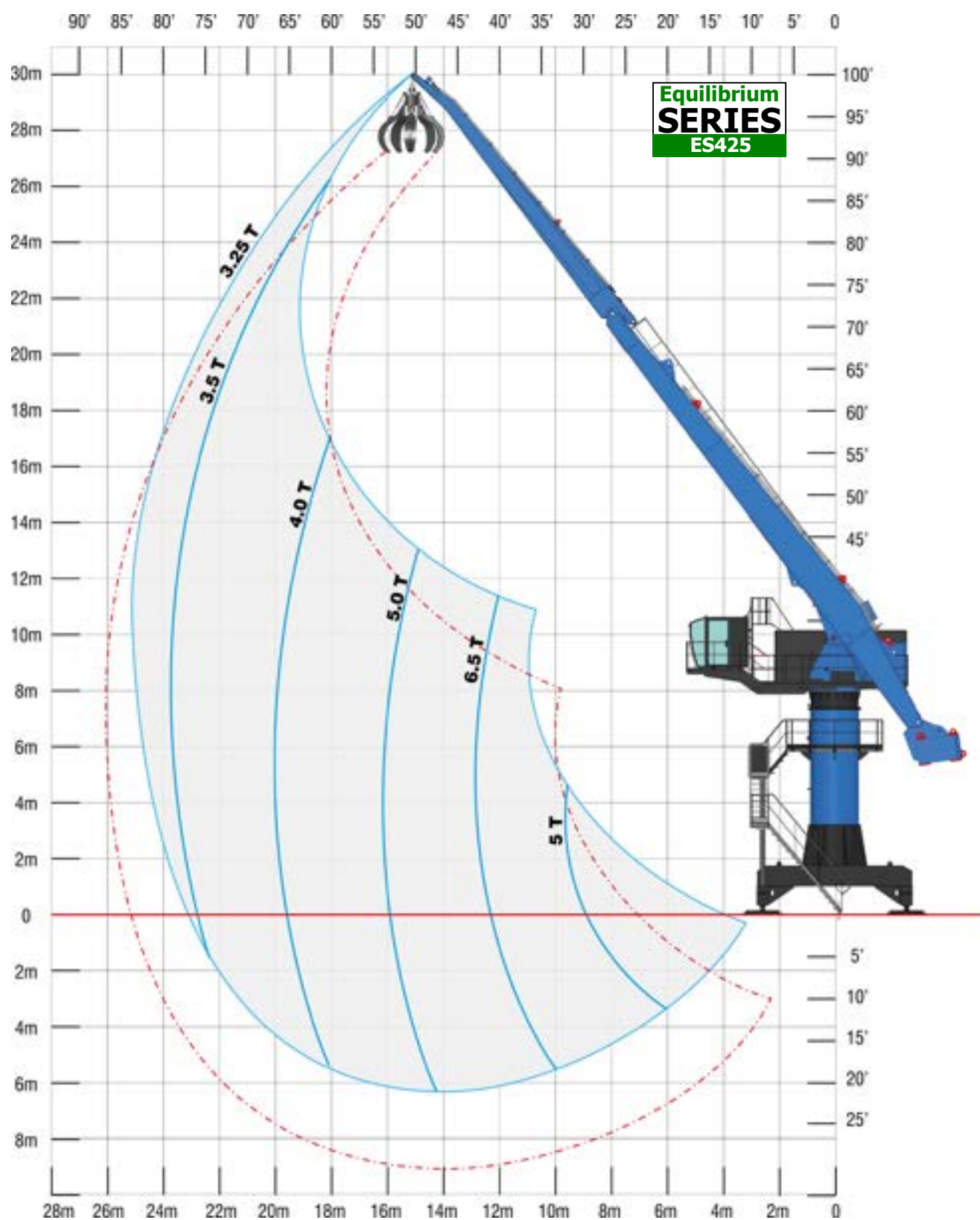
~150 bars

## The different components

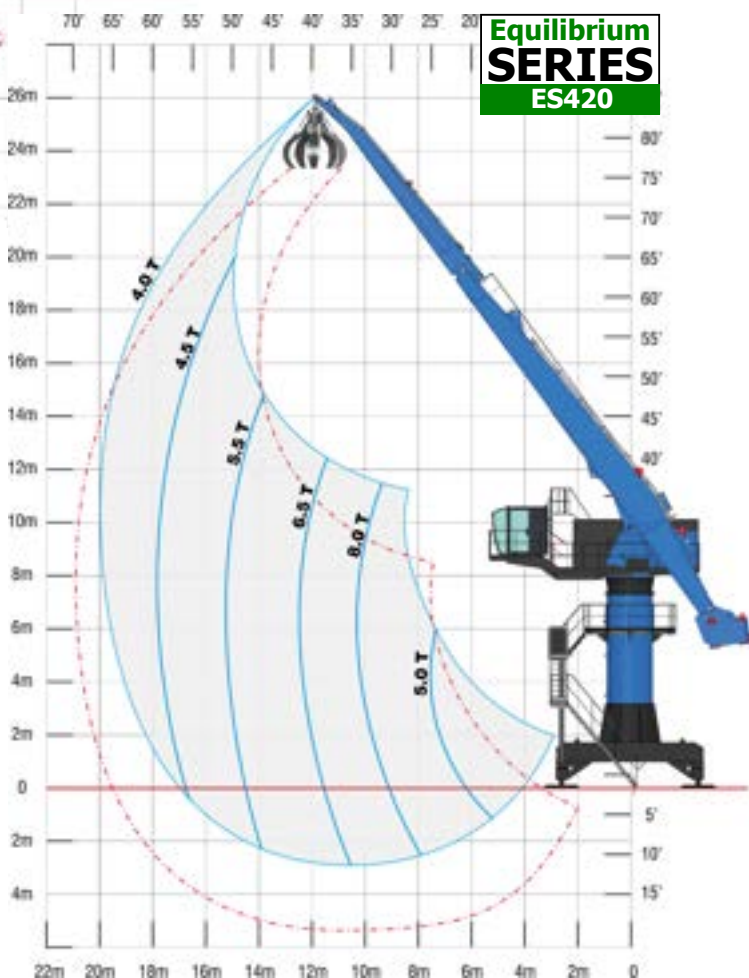
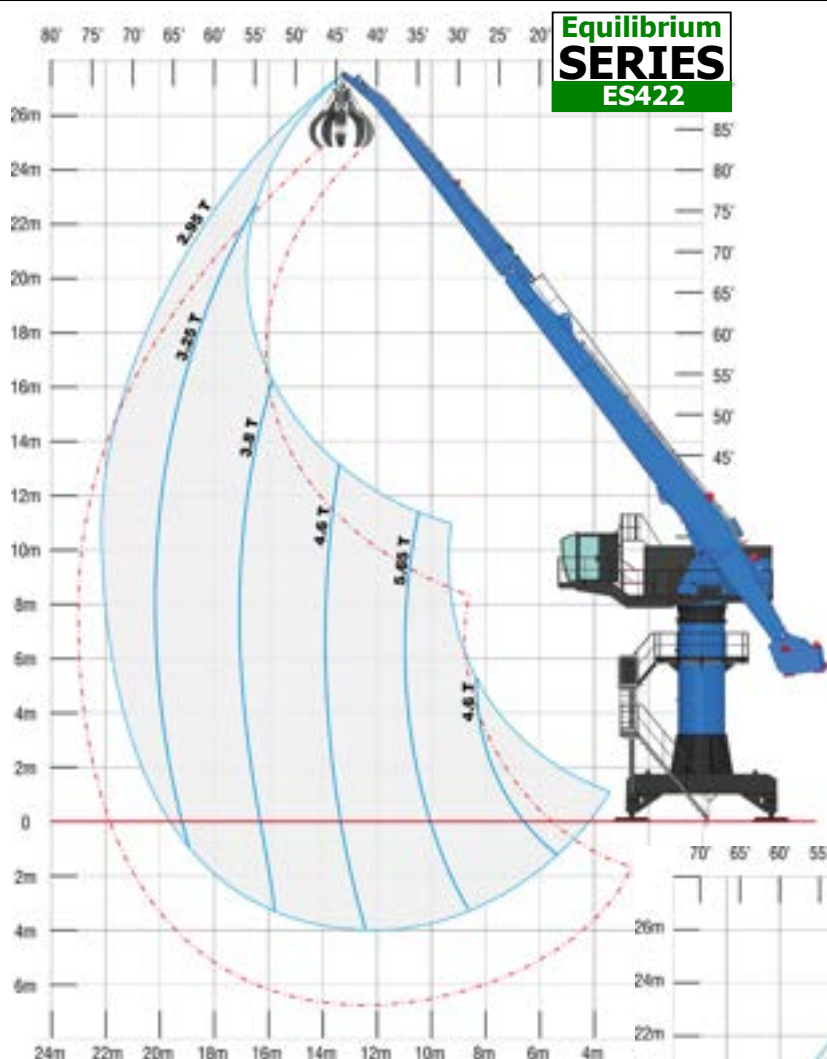




## Load chart



# Load chart



## Technical data

### GENERAL FEATURES

	ES420	ES422	ES425
Power	80 t/m	80 t/m	80 t/m
Horizontal maximum reach	20 m	22 m	25 m
Lifting capacity at full reach	4 t	3.6 t	3.2 t
Length of the main arm	11.5 m	12.5 m	14 m
Length of the dipper arm	8.5 m	9.5 m	11 m
Weight (with free standing support)	78 t	80 t	83 t

### ELECTRICAL SYSTEM

Power of the main electrical motor	110 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	210 cc
Average working pressure	180 bars
Pump for rotation	105 cc
Capacity of the tank	1000 litres
Filtration	2 filters of 10 microns
Cooling system	In line
Lubricating system	1 group with 3 separated circuits

### ROTATION

Rotation motor	1 motor MS50
Ø of the ring gear	Ø 1790mm
Rotating speed	4 rpm

### CYLINDERS

Type of cylinders	220mm x 120mm x 1450mm
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### TYPE OF SUPPORT

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...



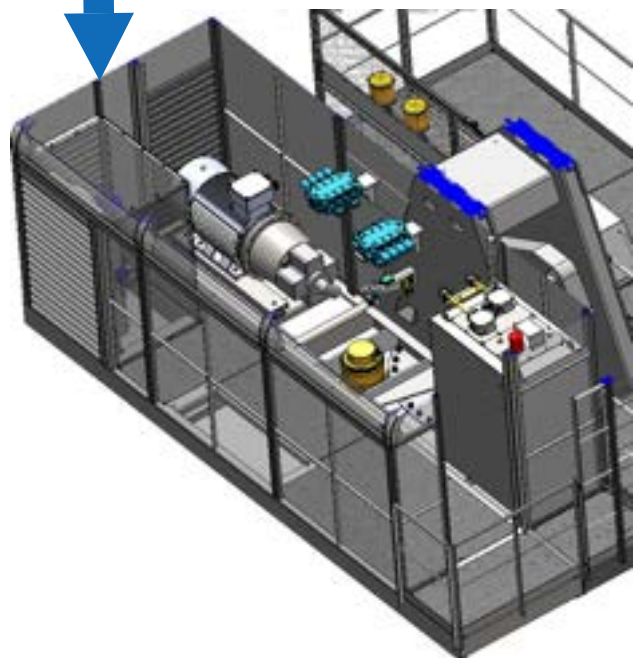
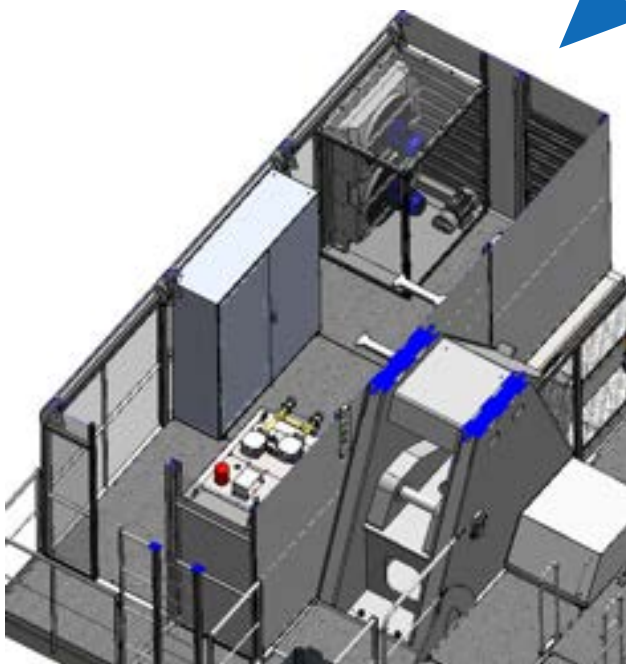


## Technical data

### 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.



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**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** 

**SERAM**

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