

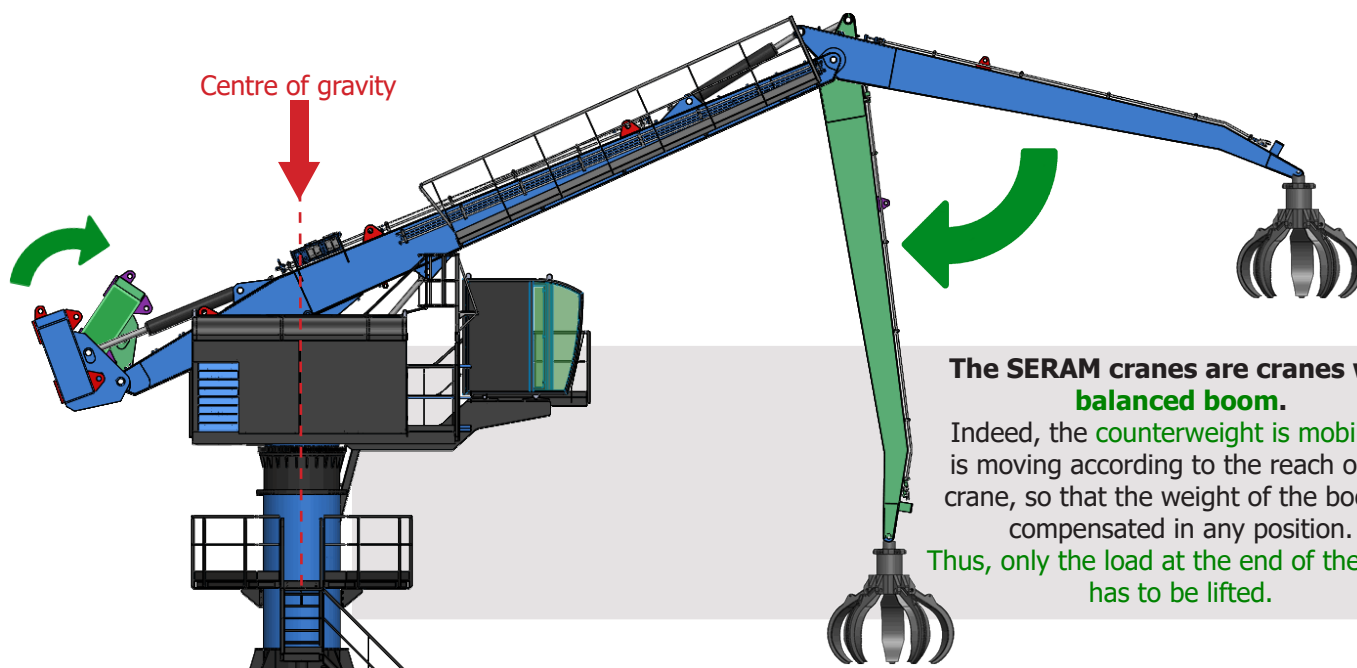


EQUILIBRIUM HANDLING CRANE

Equilibrium
SERIES 2
ES215, ES216, ES217, ES218

SERAM
L'EXPERIENCE

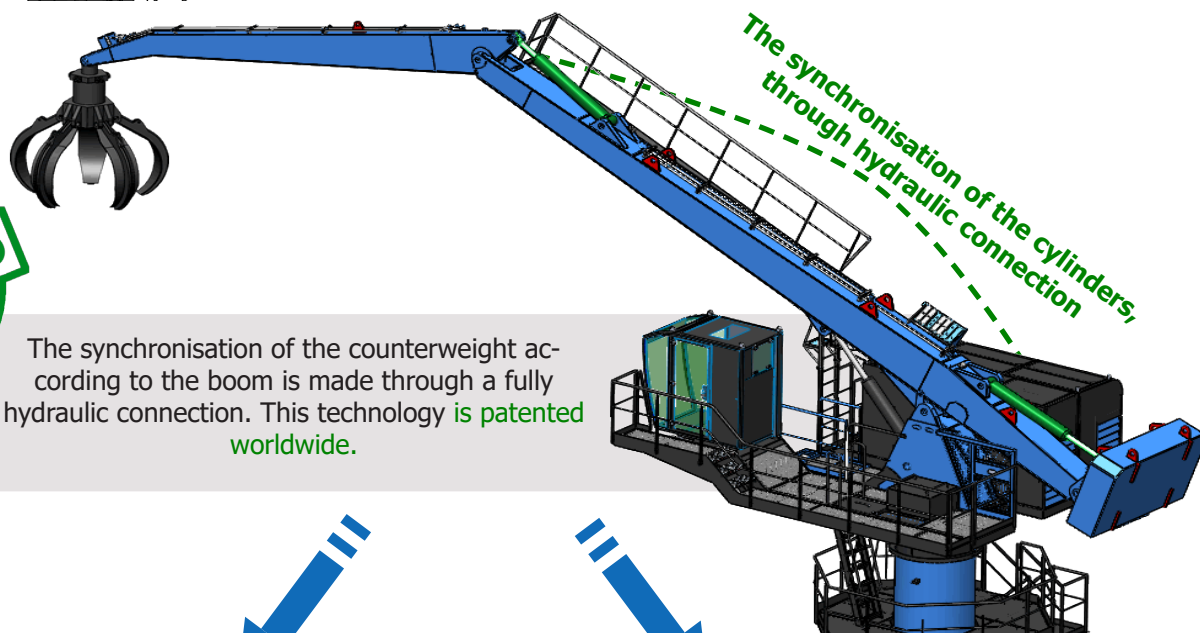
The Hydraulic Balance System



The SERAM cranes are cranes with **balanced boom**.

Indeed, the **counterweight is mobile**. It is moving according to the reach of the crane, so that the weight of the boom is compensated in any position.

Thus, only the load at the end of the boom has to be lifted.



The synchronisation of the counterweight according to the boom is made through a fully hydraulic connection. This technology is **patented worldwide**.



Unequalled operating costs

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

Thermic excavator

100%

Electrical non balanced excavator

50%

50% of savings

Electrical balanced crane SERAM

25%

75% of 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

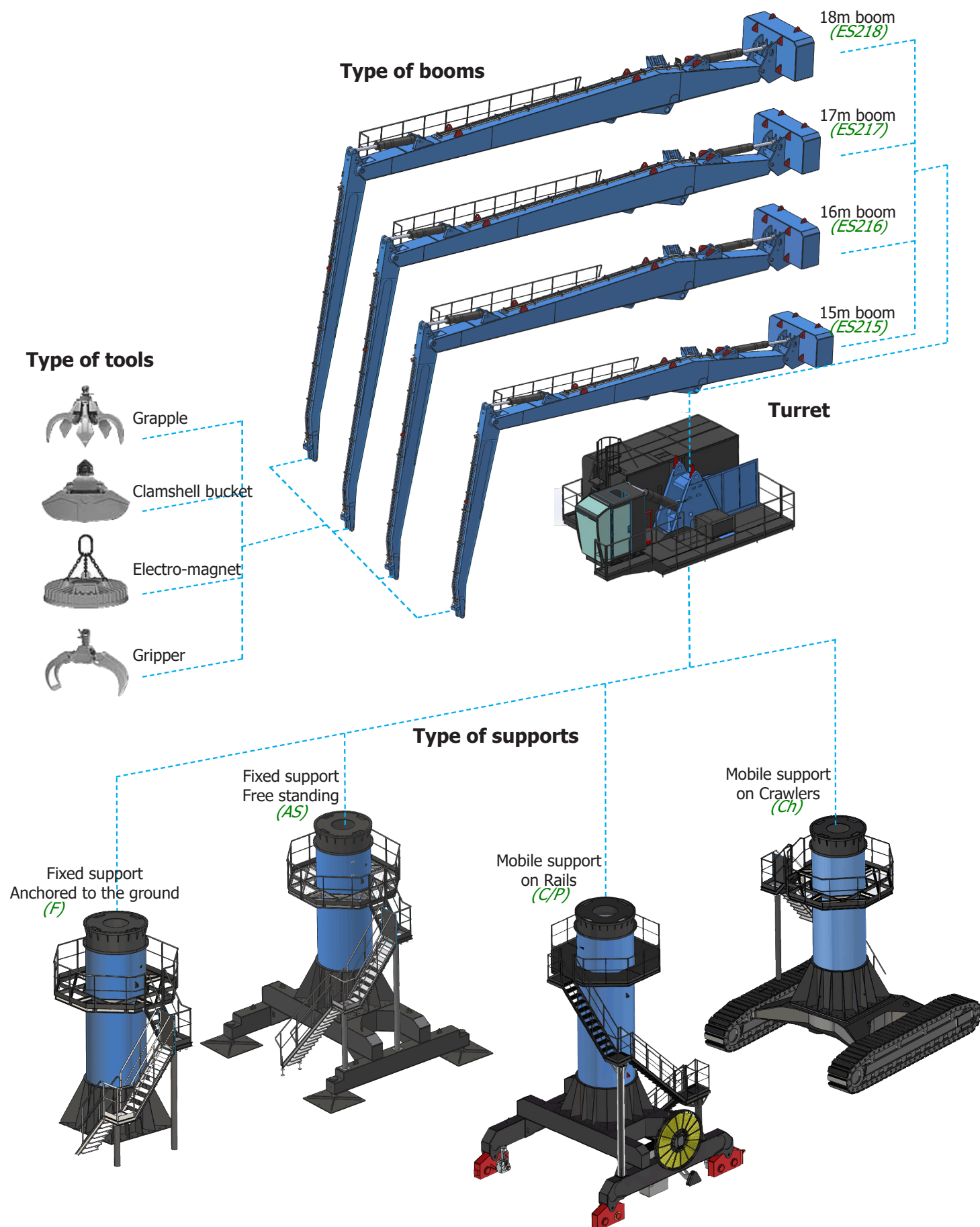
Non balanced excavator

~320 bars

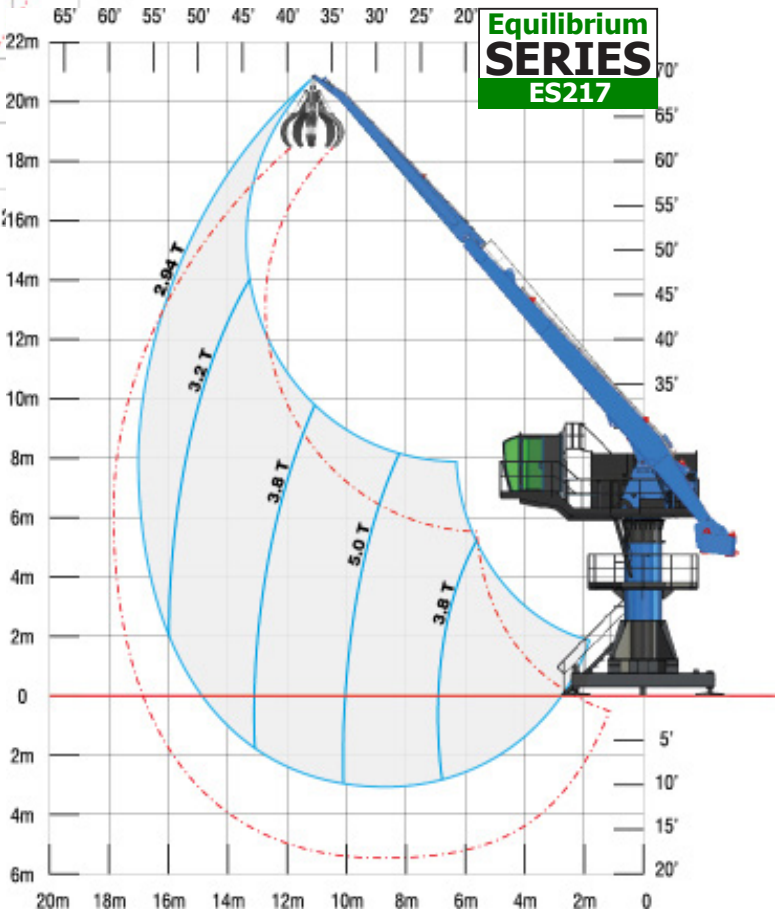
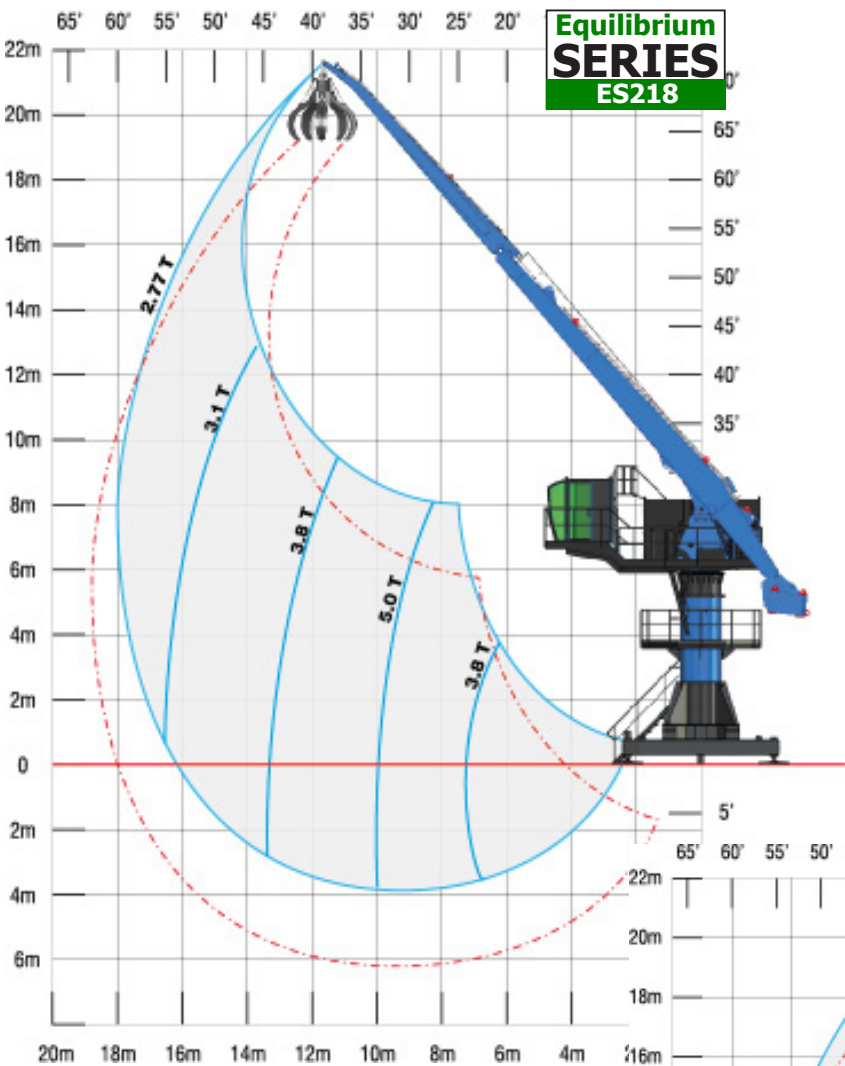
Electrical balanced crane SERAM

~150 bars

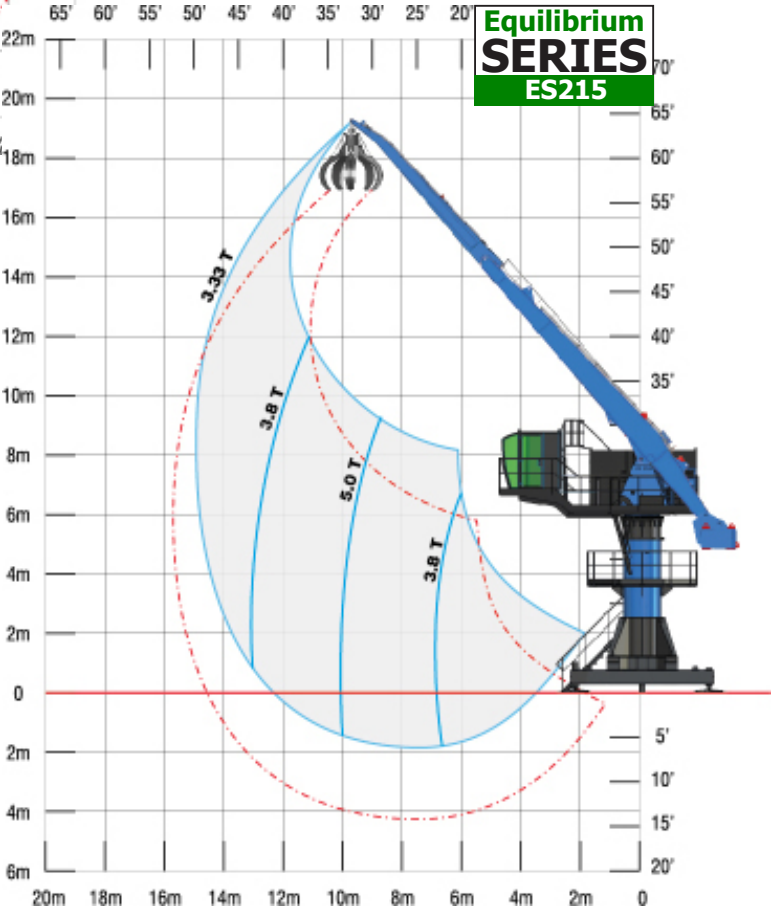
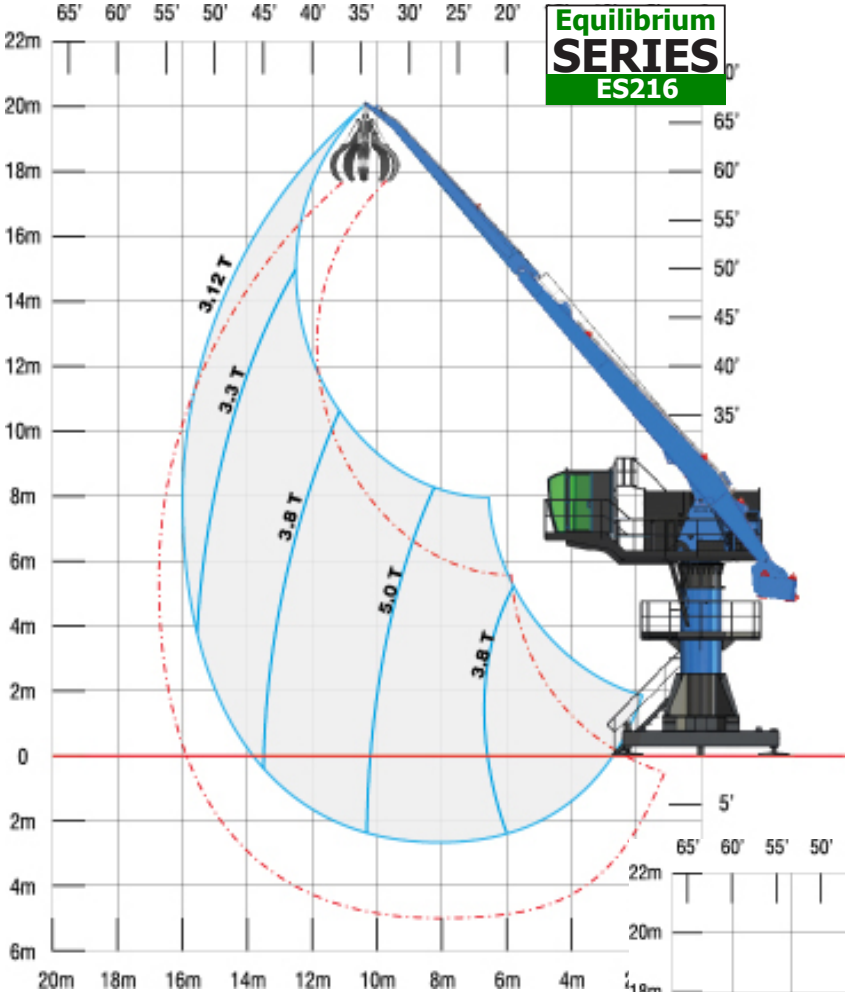
The different components



Load chart



Load chart



Technical data

GENERAL FEATURES		ES215	ES216	ES217	ES218
Power		50 t/m	50 t/m	50 t/m	50 t/m
Horizontal maximum reach		15 m	16 m	17 m	18 m
Lifting capacity at full reach		3.33 t	3.12 t	2.94 t	2.77 t
Length of the main arm		8.5 m	9 m	9.5 m	10 m
Length of the dipper arm		6.5 m	7 m	7.5 m	8 m
Weight (with free standing support)		40 t	42 t	44 t	46 t
ELECTRICAL SYSTEM					
Power of the main electrical motor		55 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		105 cc			
Average working pressure		130 bars			
Pump for rotation		75 cc			
Capacity of the tank		800 litres			
Filtration		1 filter of 10 microns			
Cooling system		In line			
Lubricating system		1 group with 3 separate circuits			
ROTATION					
Rotation motor		1 motor MS35			
Ø of the ring gear		Ø 1250mm			
Rotation speed		4 rpm			
CYLINDERS					
Type of cylinders		Ø170mm x Ø120mm x 1450mm			
TYPE OF SUPPORT					
Fixed support anchored to the ground		Base of 2.3m x 2.3m - Ht: 6m			
Fixed support, free standing		Chassis of 4.5m x 4.5m - Ht: 6m			
Mobile support on rails		Trolley of 4.5m x 4.5m - Ht: 6m			
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...

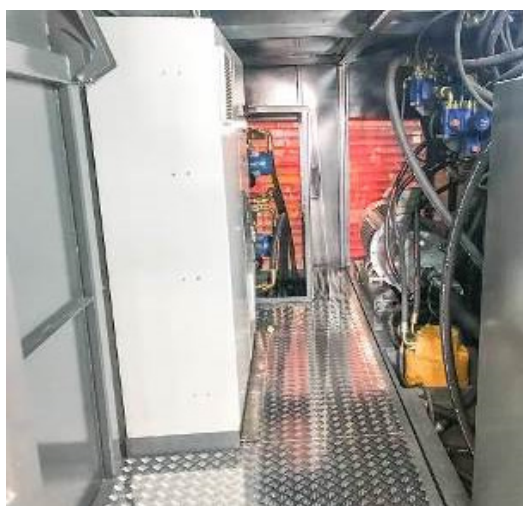
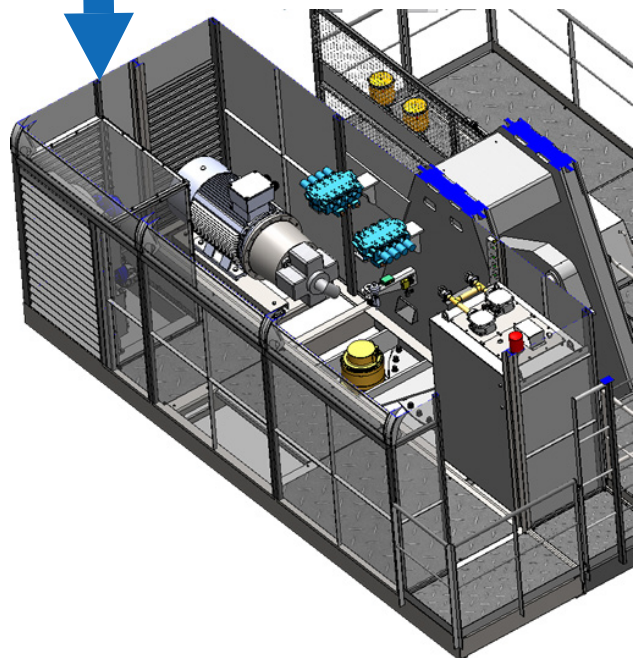
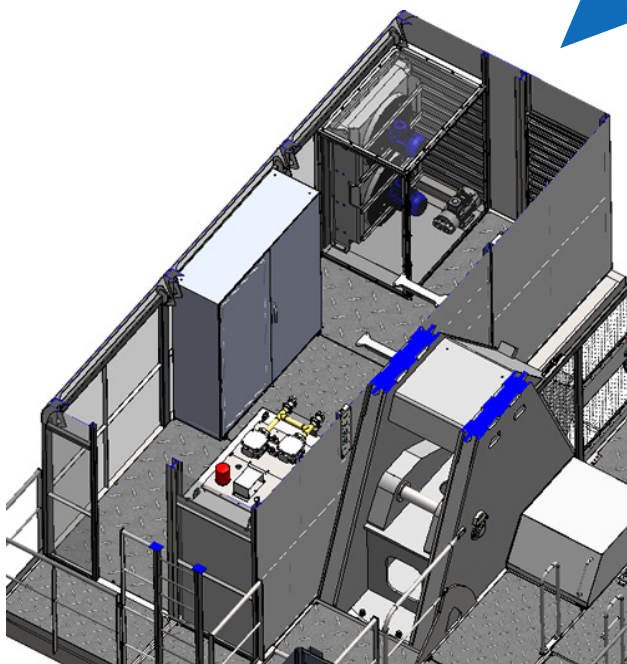


Technical data

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.



Equilibrium **SERIES 2**

ES215, ES216, ES217, ES218



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

SERAM SA
817 blvd Marius Berliet - 66000 PERPIGNAN (France)
Office: +33 4 68 61 02 28 - Mail: seramsa@seram.net
www.seram.net