



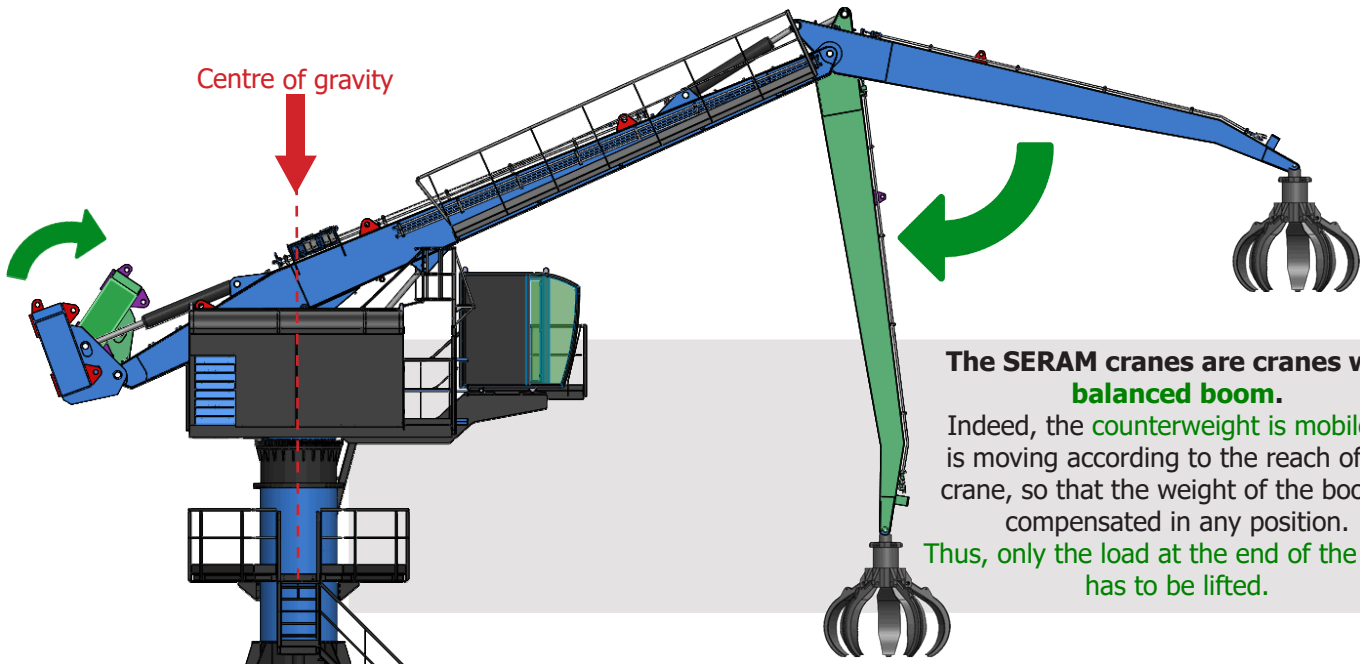
*EQUILIBRIUM HANDLING CRANE*

**Equilibrium**  
**SERIES 9**

ES925, ES930, ES935

**SERAM**  
L'EXPERIENCE

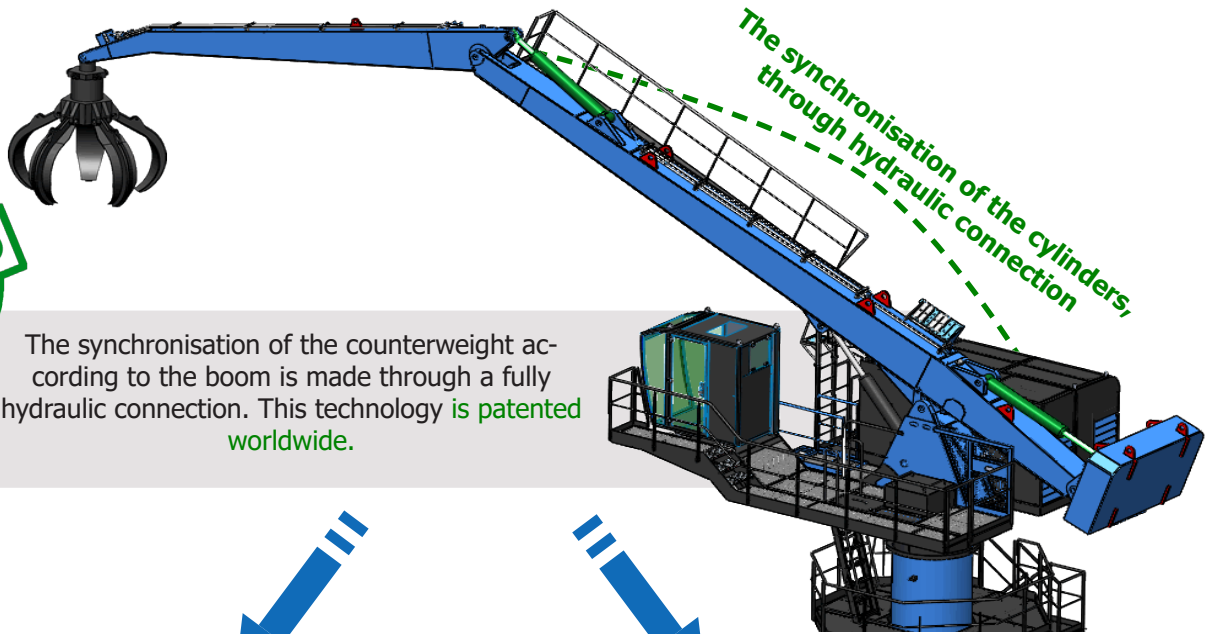
# The Hydraulic Balance System



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 cylinders, through hydraulic connection,



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*



*Electrical non balanced excavator*



*Electrical balanced crane SERAM*



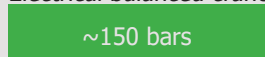
## Low working pressure = Exceptional life-time

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

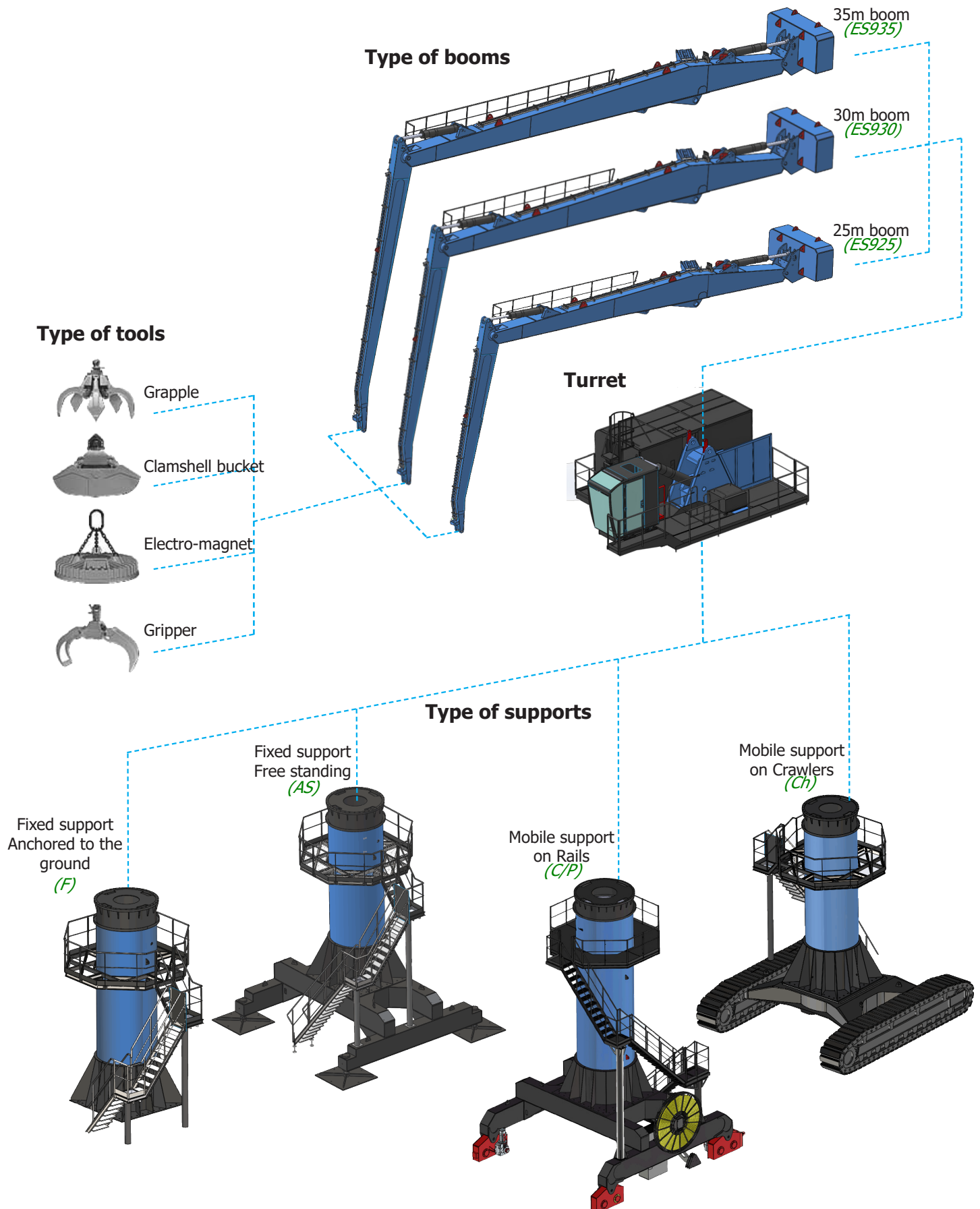
*Non balanced excavator*



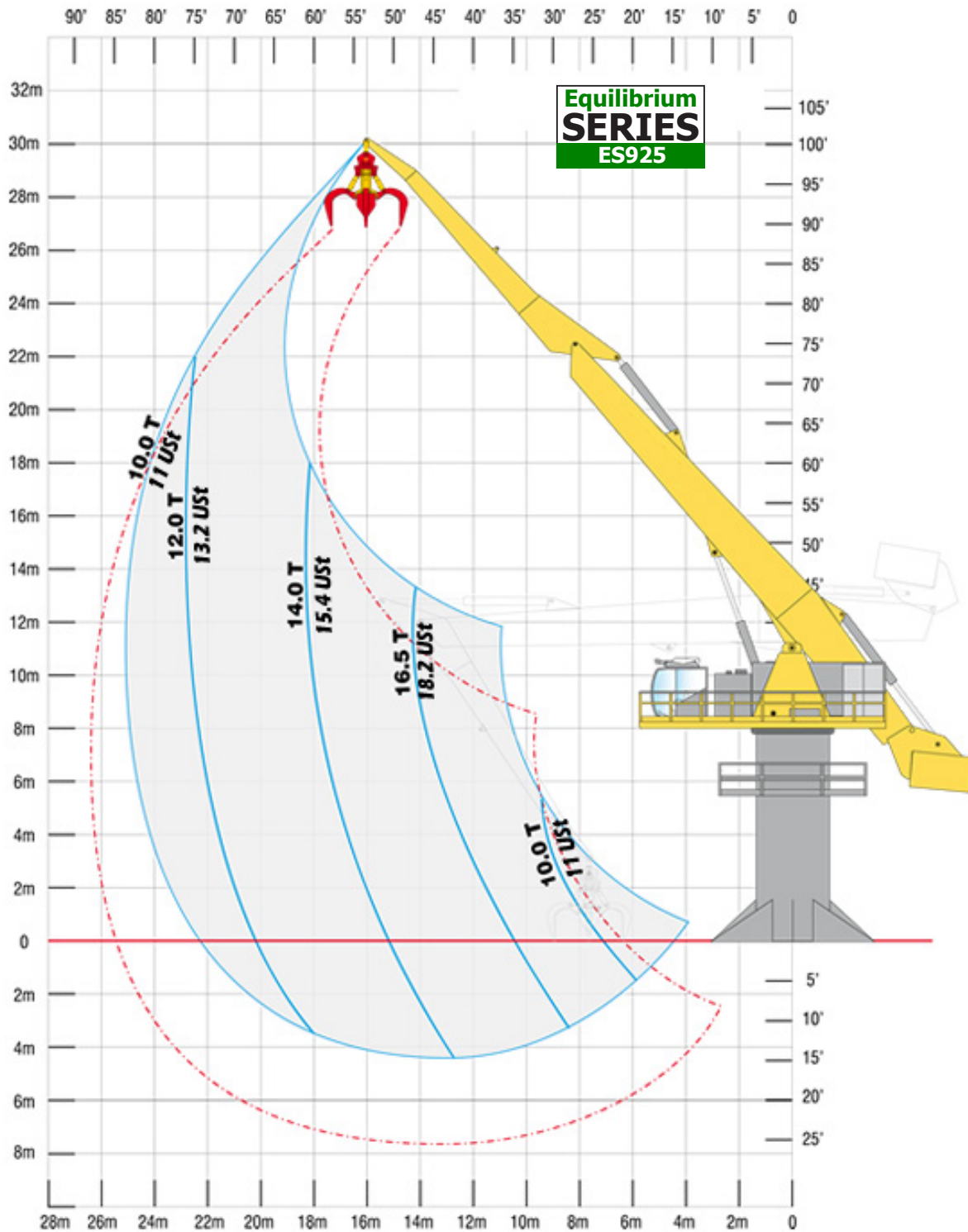
*Electrical balanced crane SERAM*



# The different components

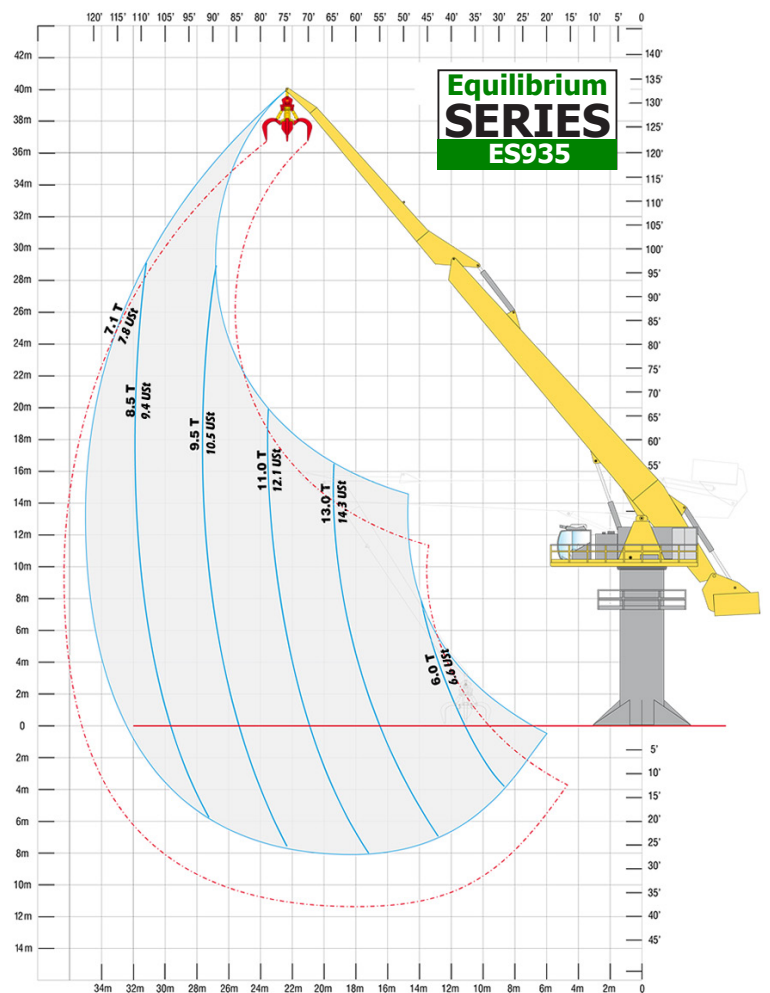
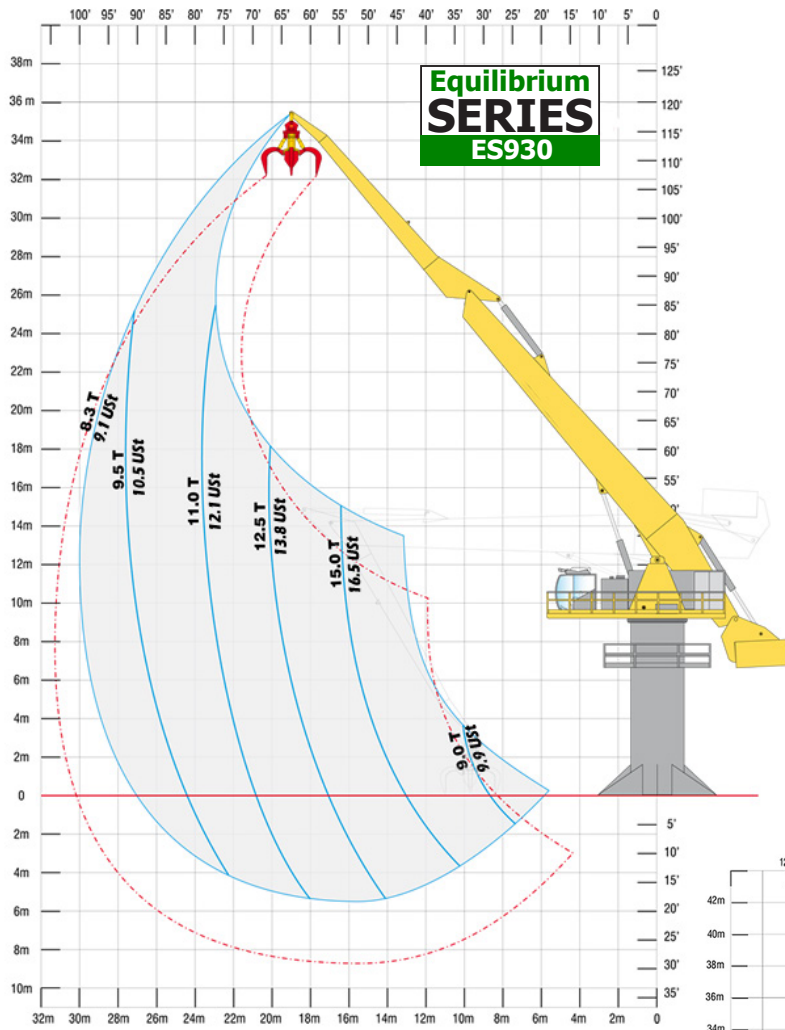


# Load chart





# Load chart



## Technical data

	ES925	ES930	ES935
<b>GENERAL FEATURES</b>			
Power	250 t/m	250 t/m	250 t/m
Horizontal maximum reach	25 m	30 m	35 m
Lifting capacity at full reach	10 t	8.3 t	7.1 t
Length of the main arm	14 m	17 m	20 m
Length of the dipper arm	11 m	13 m	15 m
Weight (with free standing support)	208 t	221 t	234 t
<b>ELECTRICAL SYSTEM</b>			
Power of the main electrical motor	315 kW		
Type of start of the main motor	Star-delta or speed drive		
Voltage	400V / 480V / 600V - 50Hz/60Hz		
<b>HYDRAULIC SYSTEM</b>			
Pumps for the movements of the boom	NC		
Average working pressure	220 bars		
Pump for rotation	NC		
Capacity of the tank	2500 litres		
Filtration	2 filters of 10 microns		
Cooling system	In line		
Lubricating system	1 groups with 3 separated circuits		
<b>ROTATION</b>			
Rotation motor	2 motors MS125		
Ø of the ring gear	Ø 3070 mm		
Rotating speed	4 rpm		
<b>CYLINDERS</b>			
Type of cylinders	320mm x 210 mm x 2750mm		
<b>TYPE OF SUPPORT</b>			
Fixed support anchored to the ground	Base de 5m x 5m - Ht: 10m		
Fixed support, free standing	Chassis of 10m x 10m - Ht: 10m		
Mobile support on rails	Trolley of 10m x 10m - Ht: 10m		
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...

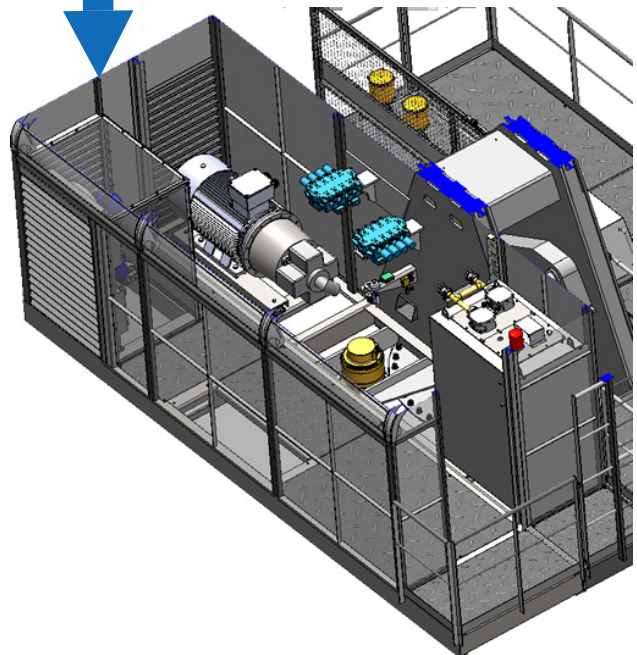
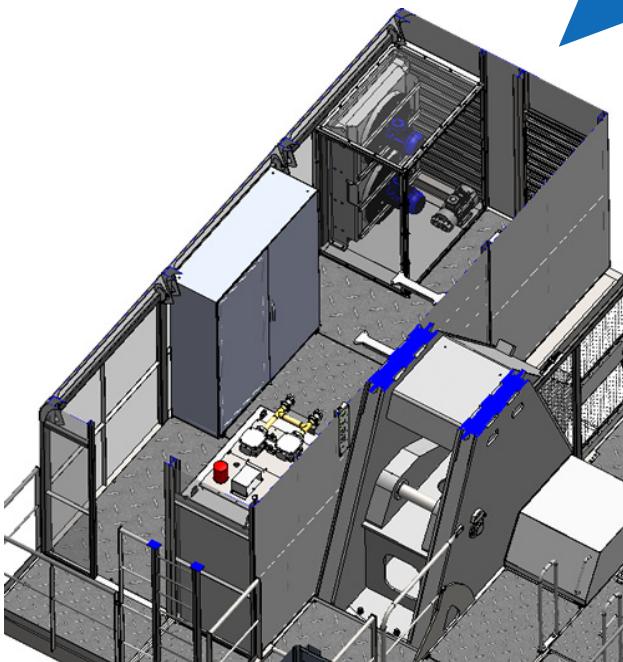


## Technical data

### 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 9**

ES925, ES930, ES935



**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 INDUSTRIES SAS  
817 blvd Marius Berliet - 66000 PERPIGNAN (France)  
Office: +33 4 68 61 02 28 - Mail: [seramsa@seram.net](mailto:seramsa@seram.net)  
[www.seram.net](http://www.seram.net)