

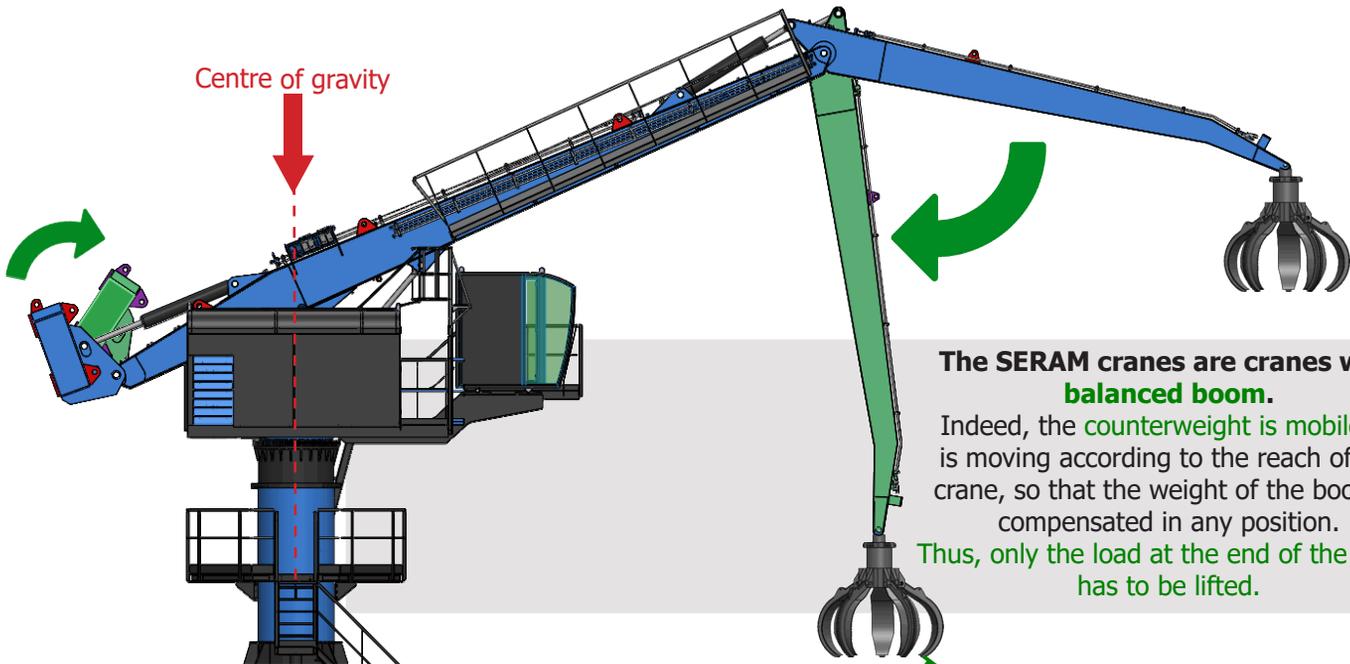


EQUILIBRIUM HANDLING CRANE

Equilibrium
SERIES 4
ES420, ES422, ES425

SERAM
L'EXPERIENCE

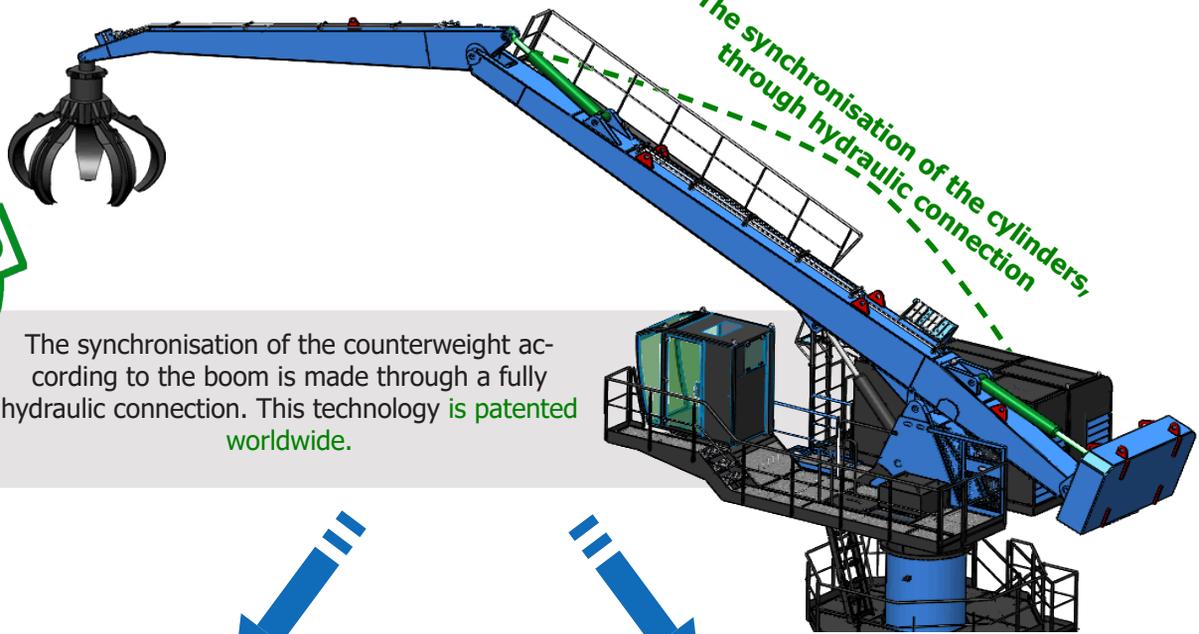
The Hydraulic Balance System



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.

Unequaled operating costs

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

Thermic excavator



Electrical non balanced excavator



Electrical balanced crane SERAM



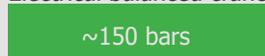
Low working pressure = Exceptional life-time

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

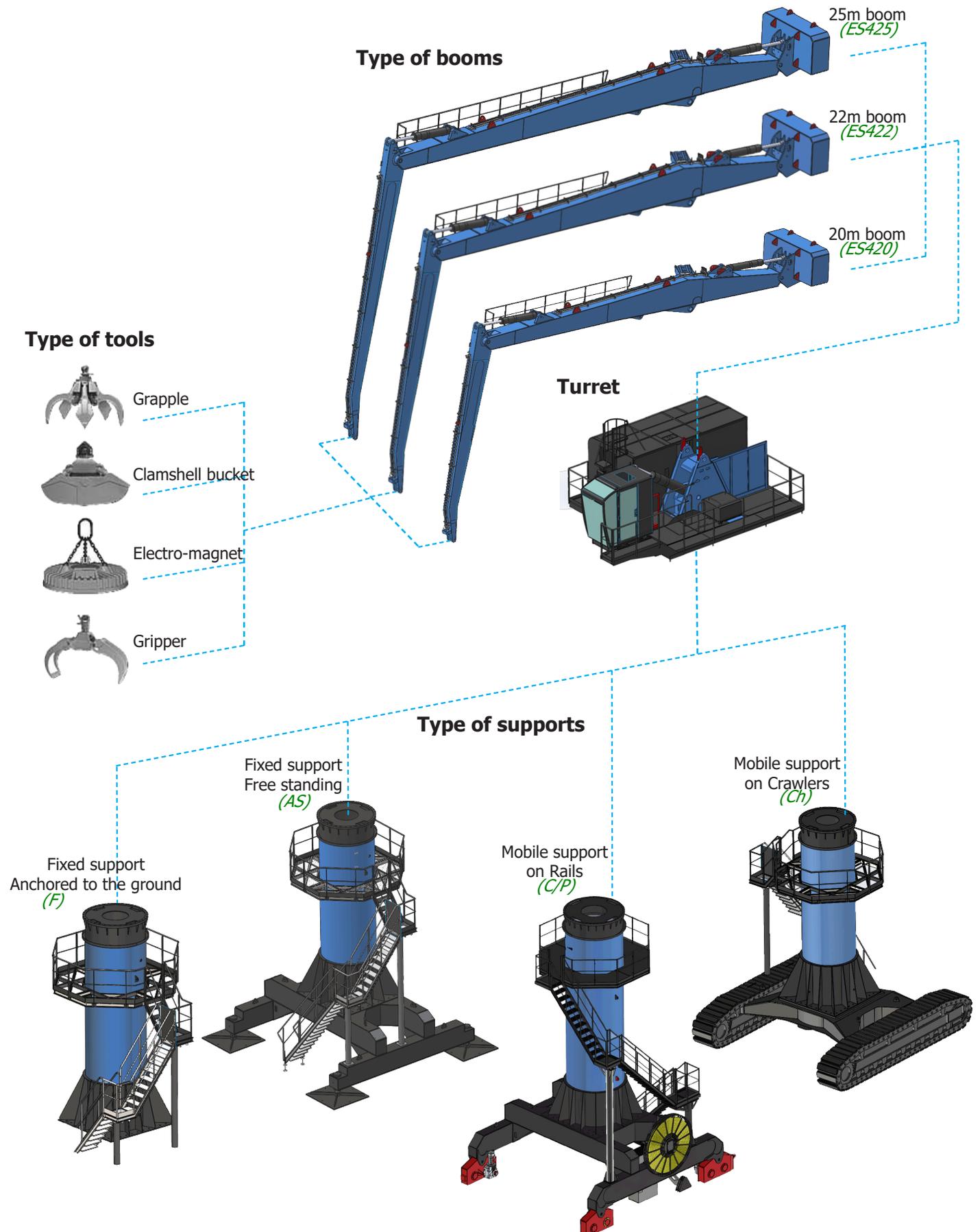
Non balanced excavator



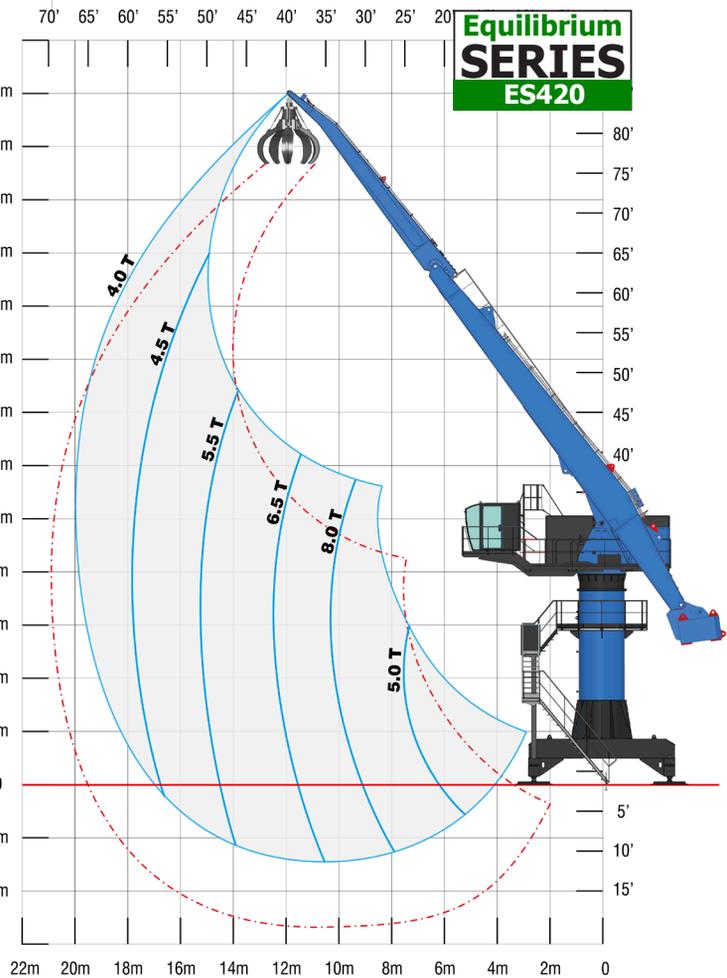
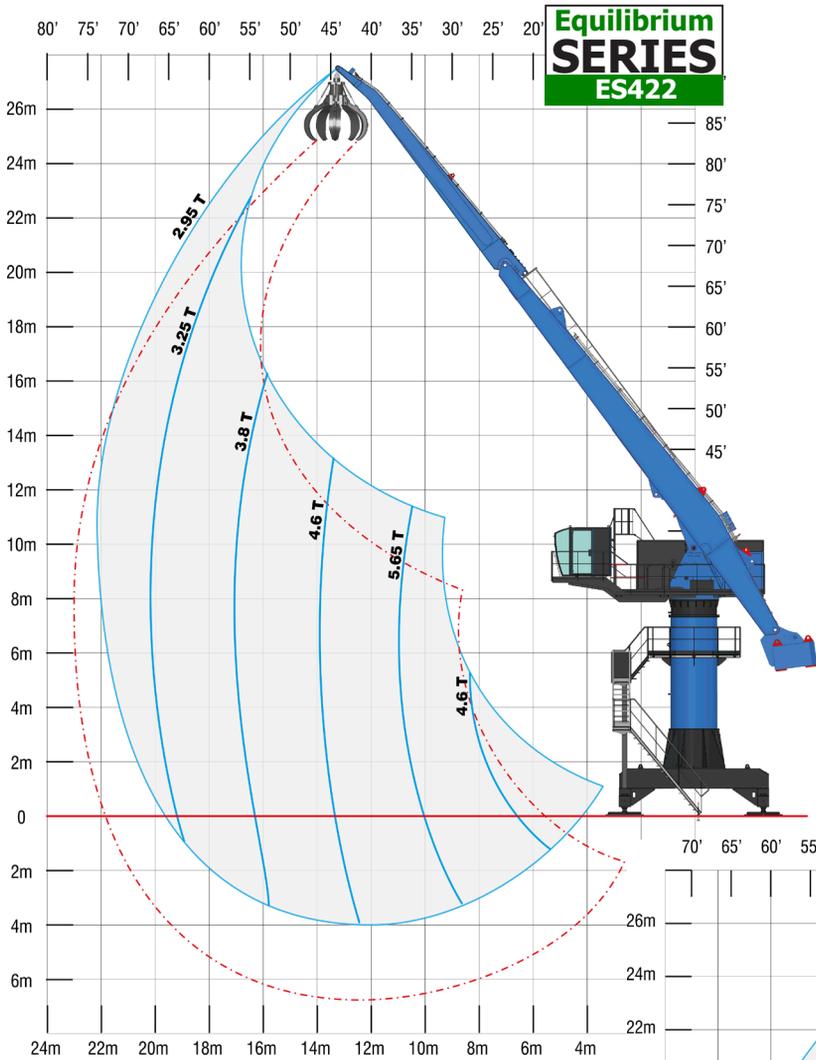
Electrical balanced crane SERAM



The different components



Load chart



Technical data

	ES420	ES422	ES425
GENERAL FEATURES			
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	132 kW	132 kW
Type of start of the main motor	Star-delta or speed drive	Star-delta or speed drive	Star-delta or speed drive
Voltage	400V / 480V / 600V - 50Hz/60Hz	400V / 480V / 600V - 50Hz/60Hz	400V / 480V / 600V - 50Hz/60Hz
HYDRAULIC SYSTEM			
Pumps for the movements of the boom	210 cc	280 cc	280 cc
Average working pressure	180 bars	180 bars	180 bars
Pump for rotation	105 cc	105 cc	105 cc
Capacity of the tank	1000 liters	1000 liters	1000 liters
Filtration	2 filters of 10 microns	2 filters de 10 microns	2 filters de 10 microns
Cooling system	In line	In line	In line
Lubricating system	1 group with 3 separated circuits	1 group with 3 separated circuits	1 group with 3 separated circuits
ROTATION			
Rotation motor	1 motor MS50	1 motor MS50	1 motor MS50
Ø of the ring gear	Ø 1790mm	Ø 1790mm	Ø 1790mm
Rotating speed	4 rpm	4 rpm	4 rpm
CYLINDERS			
Type of cylinders	220mm x 120mm x 1450mm	220mm x 120mm x 1450mm	220mm x 120mm x 1450mm
TYPE OF SUPPORT			
Fixed support anchored to the ground	Base of 4m x 4m - Ht: 8m	Base of 4m x 4m - Ht: 8m	Base of 4m x 4m - Ht: 8m
Fixed support, free standing	Chassis of 5.5m x 5.5m - Ht: 8m	Chassis of 5.5m x 5.5m - Ht: 8m	Chassis of 5.5m x 5.5m - Ht: 8m
Mobile support on rails	Trolley of 5.5m x 5.5m - Ht: 8m	Trolley of 5.5m x 5.5m - Ht: 8m	Trolley of 5.5m x 5.5m - Ht: 8m
Mobile support on crawlers	Upon request	Upon request	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...

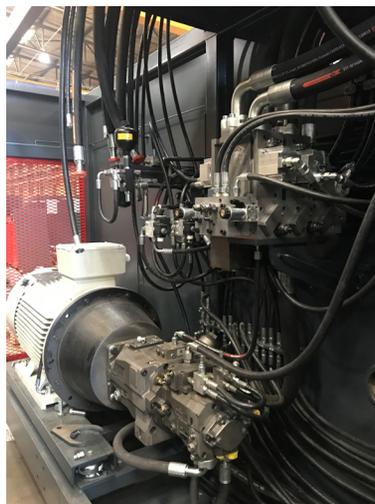
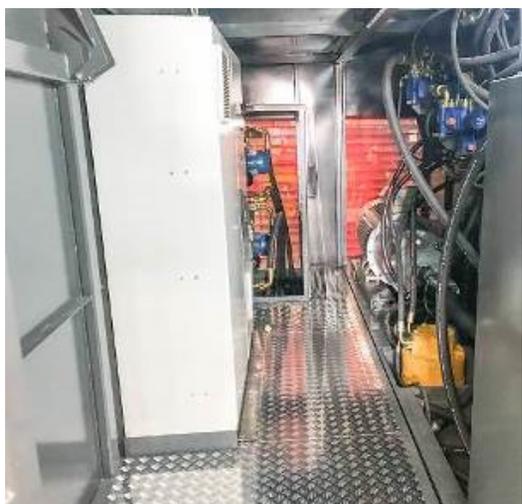
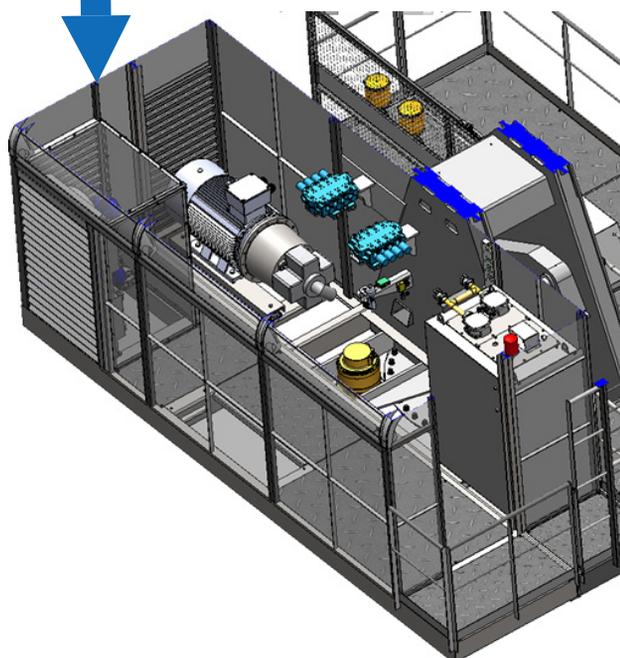
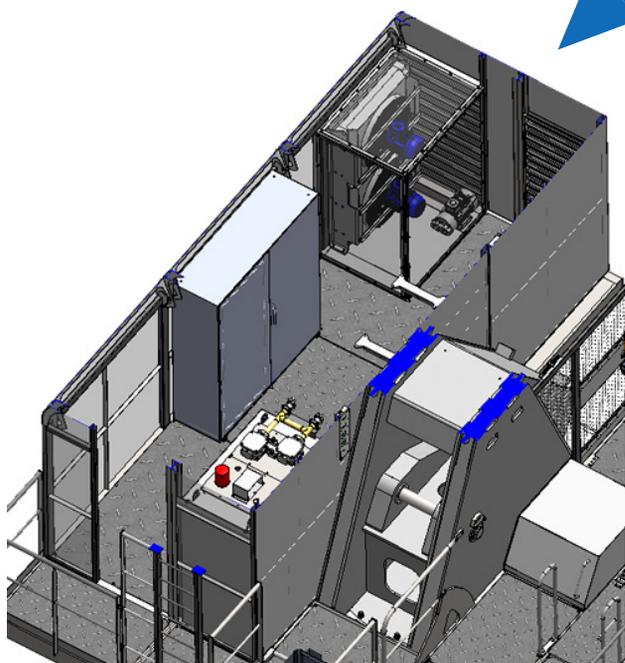


Technical data

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.



Photos of SERAM ES4 cranes



Photos of SERAM ES4 cranes



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Equilibrium SERIES 4

ES420, ES422, ES425



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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