



MACHINE MOVERS

MODELS

MINIFORCE 30t
ST. 60 t - 100 t - 150 t
TBC. 60 t - 100 t



**YOUR TRUSTED
PARTNER FOR
HEAVY LIFTING
SOLUTIONS**



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Do you need more information?

Do you need more information? Looking for an official dealer or reseller? More load tables? More images or pictures?

Check out these websites

OX & RUD
Lifting Solutions
ox-rud.com

RUD KETTEN
(partner)
rud.com

CARGOFLET BLASANT
(partner)
cfblasant.com

WHAT IS AN OX SELF-PROPELLED TROLLEY SET



The OX self-propelled Trolleys (or Machine movers) consist of a motorised tool for loading and moving loads, usually to introduce or remove equipment from confined spaces without access to other means such as cranes and therefore represent an ideal equipment to complement a crane in a transport service or relocation of equipment.

The OX self-propelled trolley set consist of two parts which are supplied separately, the self-propelled trolley itself which consists of the load traction element (References ST, TBC or MINIFORCE) and on the other hand the rear trolleys (Reference CT), which are placed on the other side of the load parallel to each other forming a triangle with the trolley where the load rests.

The support points of the load are covered with rubber and the support point on the trolley is a free turning plate that allows partial or complete unlimited turning on itself, which allows it to turn with a small radius only limited by the adherence of the load on the rear carriages themselves.

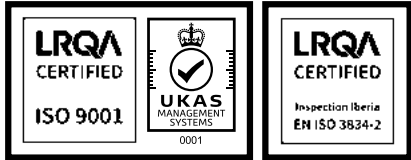
The trolleys can have different power sources, battery, main power (220V or 380V) or even both types according to need (TBC and MINIFORCE). Also, depending on the model, they can have an integrated load lifting system (TBC) or the lifting must be done by additional means (ST or MONIFORCE), either by crane or by hydraulic jacks (you can ask our sales team for further information about hydraulic jacks or hydraulic cylinders).

All self-propelled trolleys are controlled by means of a joystick control via radio control and, as an auxiliary, by means of a cable-operated push-button control.

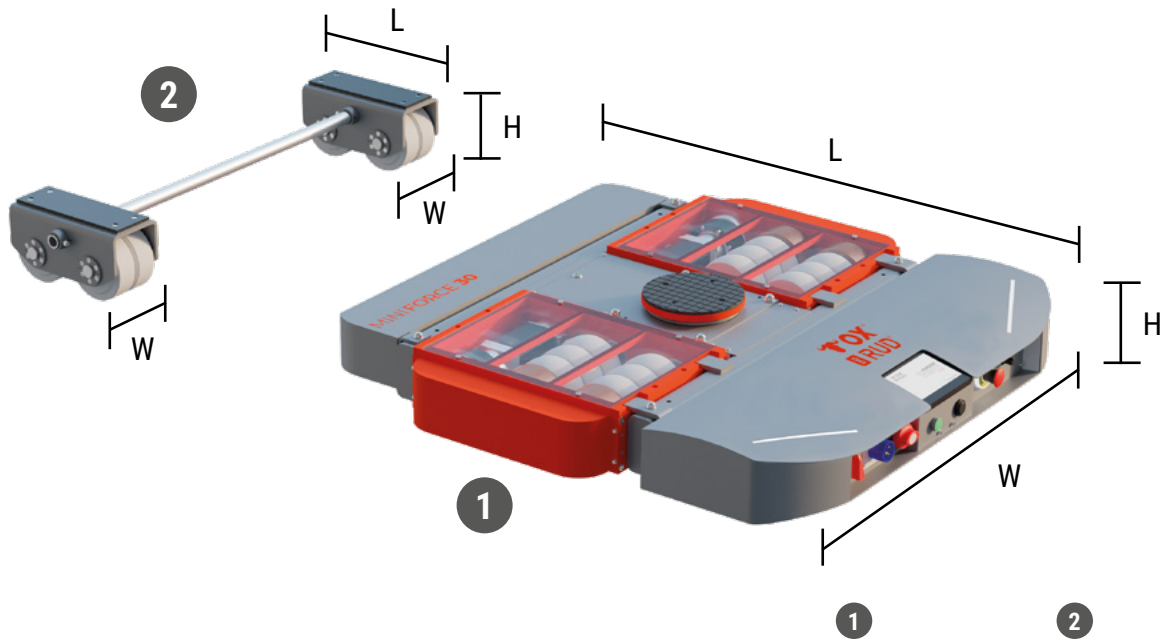
The maximum speed is slow for safety in order to allow a quick and smooth stop. The value is variable depending on the model and the type of power supply: battery or mains connection, and in this case it also changes whether it is connected to 50 or 60Hz.

The trolleys are designed for horizontal displacements, although due to their geometry and capacity they can face specific slopes of up to 2°, in which case additional load retention systems must be used to guarantee the complete safety of the manoeuvre and under the responsibility of the user of the equipment.

If you need more information, do not hesitate to contact our technical and commercial team.



MODEL	CAPACITY		POWER SUPPLY				INTEGRATED LIFT (distance)
	Pulling Capacity	Load Capacity	RED	BATERÍA			
				Type	Capacity	Autonomy	
MINIFORCE	30 t	15 t	220V Single-phase	48V Lithium	72Ah	300 minutes	NO
ST	60 t	30 t	400V Single-phase	NO	—	—	NO
	100 t	50 t					
	150 t	75 t					
TBC	60 t	30 t	400V Three-phase	24V Lead	180Ah	60 minutes	70 mm
	100 t	50 t					



NEW
MINI**FORCE30**

New model. Self-propelled Trolley with a towing capacity of 30 tons with a height of only 180 mm.

The only one in the market able to work either connected to 230V single-phase mains with only 4kw or wireless, by means of integrated lithium batteries.

It has a super-reduced height of only 180mm and is capable of a speed of up to 6.5 m/min with a battery autonomy of up to 5 hours that can be extended indefinitely connected to the mains, in addition, in the connected state, it recharges during standby periods. The full charge takes only 3.5 hours.

Equipped with double joy stick radio control that allows it to turn on itself as a tank without advance, or make turns with movement like a conventional vehicle. It has a tablet with LCD touch screen to manage and control parameters of the trolley, as well as Wi-Fi connection to monitor the status and maintenance remotely via Internet.

*PU: Polyurethane
**PA: Polyamide

MODEL	MINIFORCE30/ STB30 "v2"	PAIR REAR TROLLEYS STB-30
Code	801STB2030	801CT2030
Load Capacity	15.000 Kg	15.000 Kg/pair
Pulling Capacity	30.000 Kg	-
Number of Castors	16	8
Type of Castors	4xPU* & 12xPA**	PA**
Traction Wheels	4xPU*	
Polyurethane Wheels Size	150 x 63 mm	150 x 60 mm
Polyamide Wheels Size	148 x 63 mm	
Height (H)	180 mm	180 mm
Dimensions (LxW)	1.213 x 1.190 mm	320 x 183 mm
Connecting bar	-	2 unid Diam. 32 x 1190 mm
Support surface	Diam.Turnplate 210 mm	Rectangular plate 310 x 100 mm
Weight	380 Kg	15 kg
Turning radius	751 mm	-
Radio remote control	1x - Danfoss Mod. TM IK2.MP08V	-
Cable Control	4 m	-
A/C Powered	230 V 50/60 Hz	-
D/C Powered	48 VDC	-
Adjustable Speed	2 speeds and variator	-
Max speed	6,5 m/min	-
Op. Battery time	5 h	-
Charging time	3,5 h	-
Battery type	Lithium 48 VDC 72 AH	-
Touch Screen	LCD	-
Screen dimensions	7 Inches	-
Screen connectivity	Wi-Fi	-

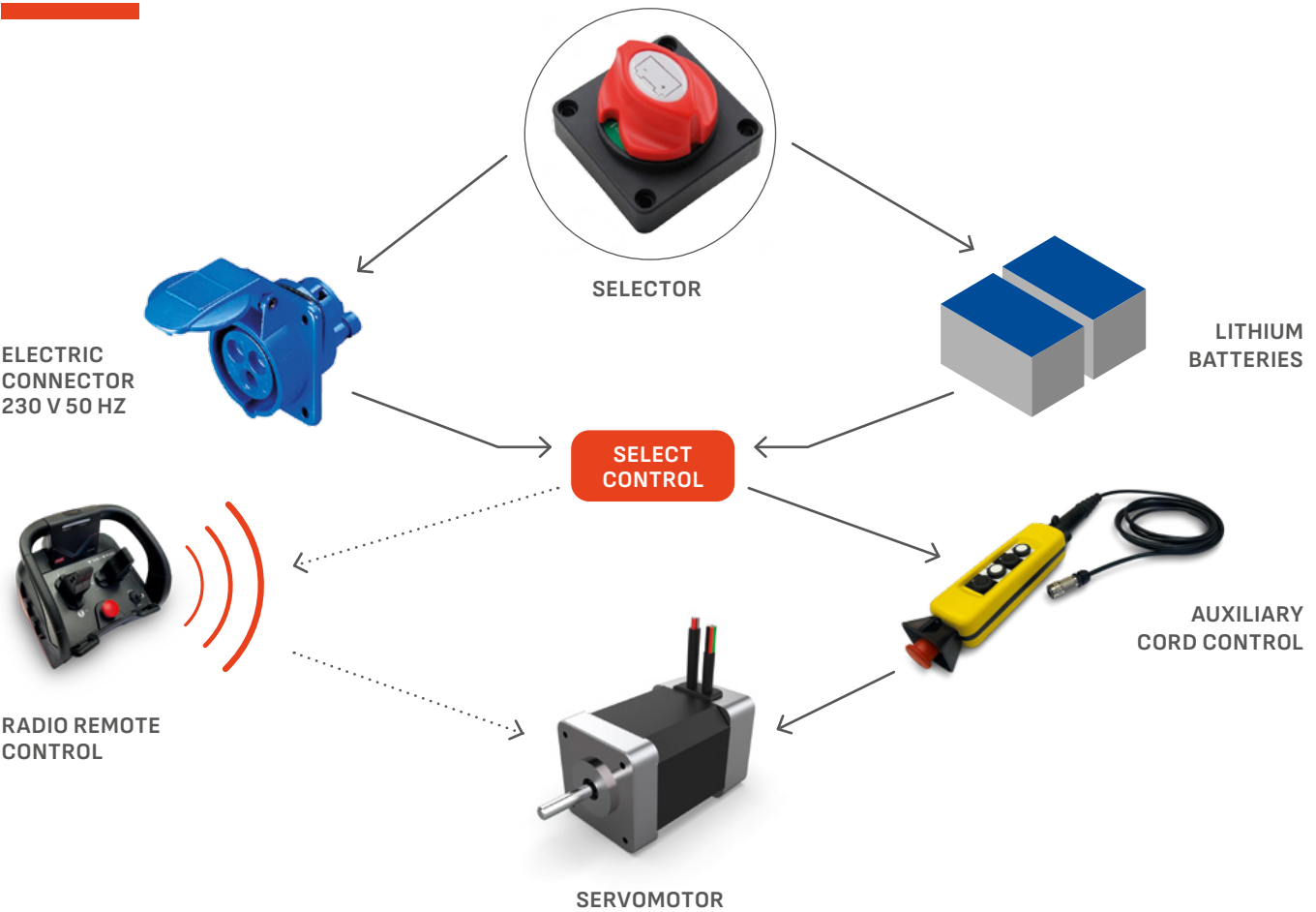
Power supply: 230 V Single phase 50/60 Hz.
48V 72Ah lithium batteries.

High torque and very low consumption servo-motors.

Sealed maintenance-free reducer and gear transmission.

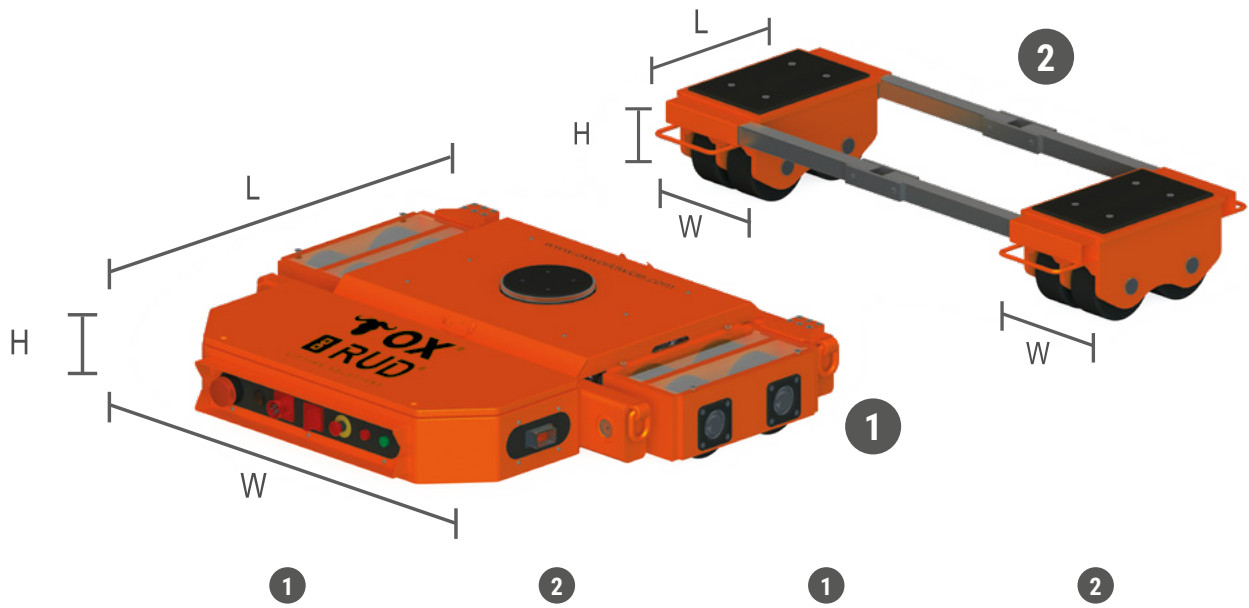
Mixed wheel system with PA6 Polyamide load wheels and Polyurethane traction wheels, providing an ideal balance between load capacity and traction.

MINI**FORCE30**
BLOCK DIAGRAM



The ST models are the basic model as they have only power supply without the possibility of battery, direct to mains, specifically three-phase 400V and also has no lifting. Although it has the limitation of use exclusively connected to the mains and requires additional means

for lifting the load, it is a more economical solution but no less capable of supporting and dragging the nominal load without ever running out, so it is an interesting solution to complement the maneuvering of movements of specific equipment.



MODEL	OX-ST-060 V1	PAIR REAR TROLLEYS OX-CT-060	OX-ST-100 V3	PAIR REAR TROLLEYS OX-CT-100
Code	801ST1060	801CT1060	801ST3100	801CT1100
Load Capacity	30.000 Kg	30.000 Kg/pair	50.000 Kg	50.000 Kg/pair
Pulling Capacity	60.000 Kg	-	100.000 Kg	-
Number of castors	12	12	18	16
Type of castors	12xPA*	12xPA*	18xPA*	16xPA*
Traction wheels	12xPA*	-	18xPA*	-
Polyurethane wheels size	-	-	-	-
Polyamide wheels size	200 x 100 mm	200 x 100 mm	200 x 100 mm	200 x 100 mm
Height (H)	302 mm	302 mm	315 mm	315 mm
Dimensions (LxW)	1.509 x 1.520 mm	371 x 302 mm	1.582 x 1.919 mm	497 x 315 mm
Connecting bar	-	50X50 Square 1.200 mm x2	-	50X50 Square 1.200 mm x2
Support surface	Diam.Turnplate 283 mm	-	Diam.Turnplate 283 mm	-
Weight	790 Kg	130 Kg/pair	1.070 Kg	180 Kg/pair
Turning radius	1.086 mm	-	1.086 mm	-
Radio remote control	1x - Teleradio PNS-R15141	-	1x - Teleradio PNS-R15141	-
Cable Control	1x	-	1x	-
A/C Powered	400 V 50/60Hz	-	400 V 50/60Hz	-
D/C Powered	-	-	-	-
Adjustable Speed	1 speed with acceleration & deceleration ramp	-	1 speed with acceleration & deceleration ramp	-
Max speed	5 m/min	-	5 m/min	-

Polyamide

Power supply: 400 V III 50/60 Hz.

Compact planetary geared motor with chain and gear transmission between shafts.

Drive by variable speed drives with acceleration and braking ramp.

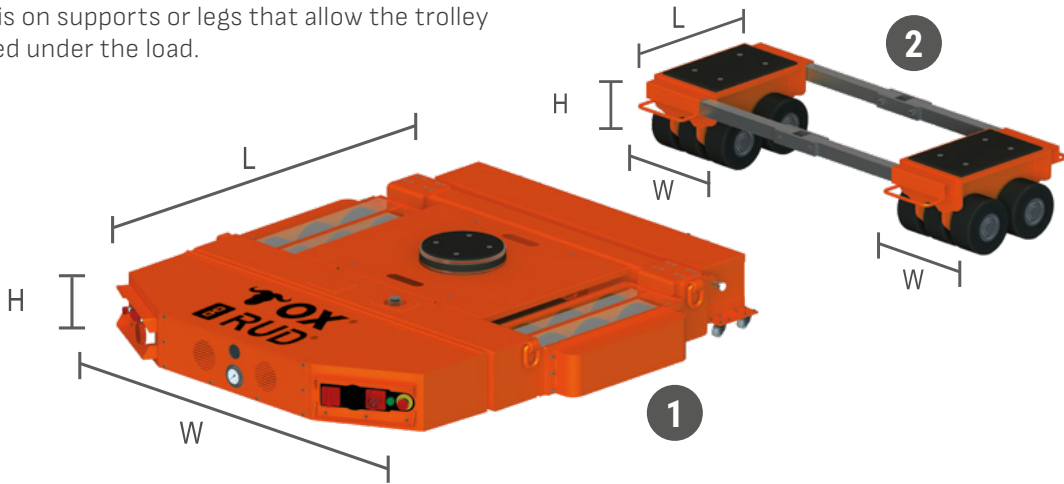
Polyamide PA6 black wheels.

Speed: Acceleration and deceleration ramp, from 0 to 5 m/min in 3 seconds.

OX-ST
BLOCK DIAGRAM



The TBC models are the top equipment model as they have both battery and direct power supply, specifically three-phase 400V and also have oil hydraulic elevation (lifting hydraulic cylinder) under the turntable. It can work indistinctly with battery or connected to the mains. It does not require additional means for lifting the load if it is on supports or legs that allow the trolley @to be placed under the load.



MODEL	OX-TBC-060 V1	PAIR REAR TROLLEYS OX-CT-060	OX-TBC-100 V1	PAIR REAR TROLLEYS OX-CT-100
Code	801TBC1060	801CT1060	801TBC1100	801CT1100
Load Capacity	30.000 Kg	30.000 Kg/pair	50.000 Kg	50.000 Kg/pair
Pulling Capacity	60.000 Kg	-	100.000 Kg	-
Number of castors	12	12	18	16
Type of castors	12xPA*	12xPA*	18xPA*	16xPA*
Traction wheels	12xPA*	-	18xPA*	-
Polyurethane wheels size	-	-	-	-
Polyamide wheels size	200 x 100 mm	200 x 100 mm	200 x 100 mm	200 x 100 mm
Height (H)	302 mm	302 mm	315 mm	315 mm
Dimensions (LxW)	1.882 x 1.678 mm	371 x 302 mm	1.880 x 1.934 mm	497 x 315 mm
Connecting bar	-	50X50 Square 1.200 mm x2	-	50X50 Square 1.200 mm x2
Support surface	Diam.Turnplate 283 mm	-	Diam.Turnplate 283 mm	-
Weight	968 Kg	130 Kg/pair	1.095 Kg	180 Kg/pair
Turning radius	1.220 mm	-	1.221 mm	-
Radio remote control	1x - Teleradio PNS-R15141	-	1x - Teleradio PNS-R15141	-
Cable Control	1x	-	1x	-
A/C Powered	400 V 50/60Hz	-	400 V 50/60Hz	-
D/C Powered	24 VDC	-	24 VDC	-
Adjustable Speed	1 speed	-	1 speed	-
Max speed	4 m/min	-	3 m/min	-
Op. Battery time	1 - 1,5 h	-	1 - 1,5 h	-
Charging time	8 hrs	-	8 hrs	-
Battery type	Pure lead batteries	-	Pure lead batteries	-
Hydraulic cylinder	1 x 30.000 Kg WLL	-	1 x 50.000 Kg WLL	-
Cylinder stroke	70 mm	-	70 mm	-

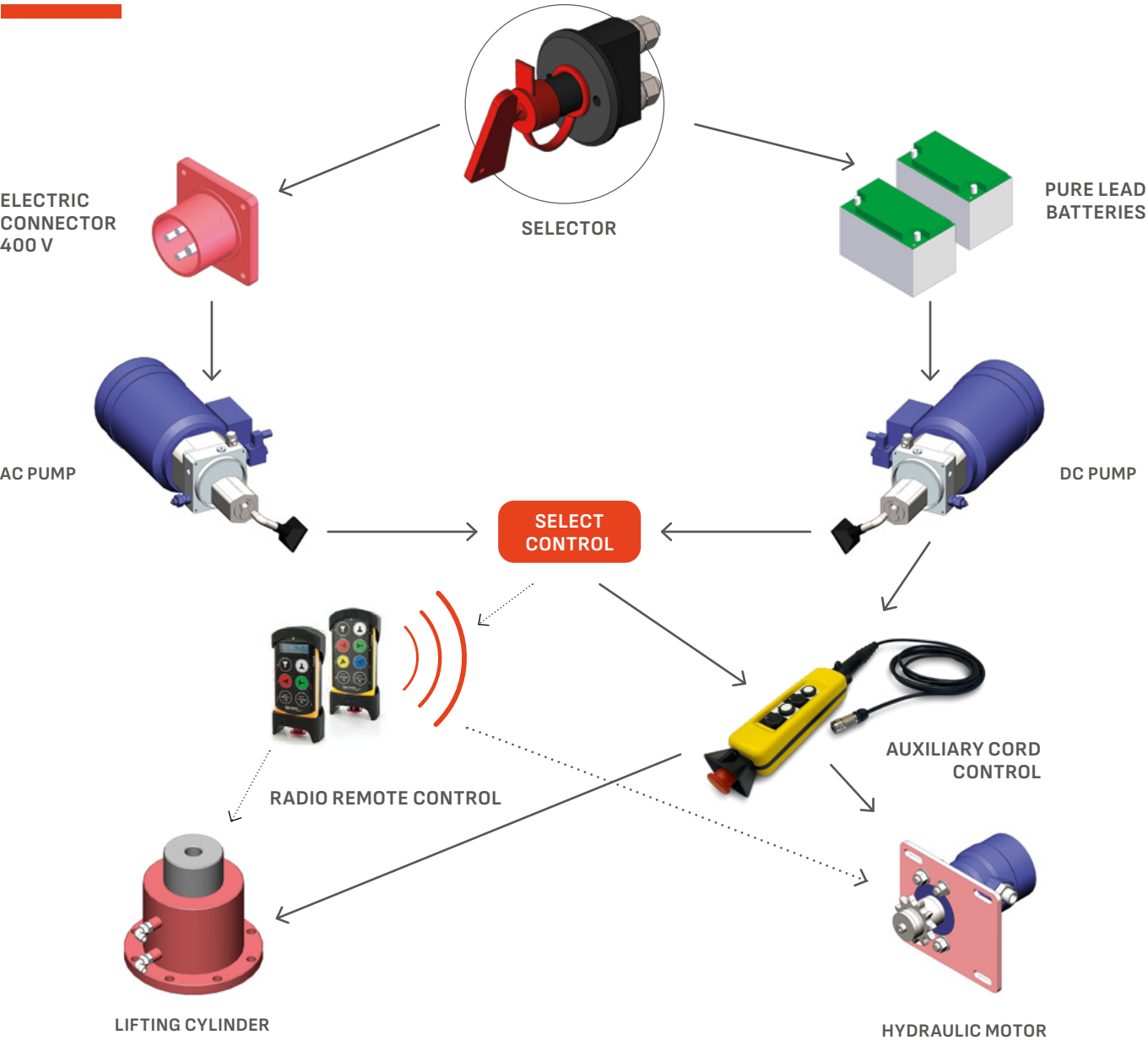
Polyamide

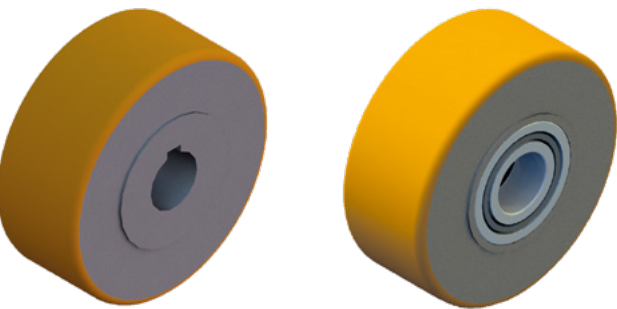
It is also a wise decision as it saves on additional equipment such as hydraulic jacks. Likewise, although the battery has limited autonomy, it can be supplied with a double battery or, if necessary, the maneuver can be finished connected to the mains.

Power supply: 400 V III 50/60 Hz
Battery: 24V 180Ah.
Autonomy: 60 minutes.
Double hydraulic power pack, powered

respectively at 24V DC and 400V III AC.
Chain and gear transmission between axles.
Driven by hydraulic motors with overcenters.
Polyamide PA6 black wheels.

OX-TBC
BLOCK DIAGRAM





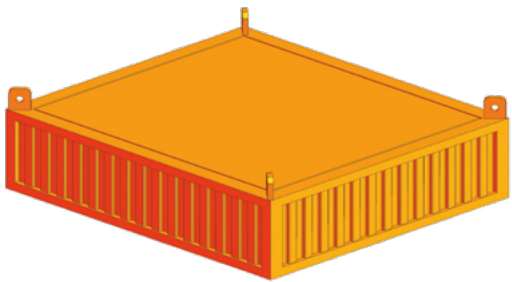
CH
Trolley traction wheel.

RD
Rear-trolley wheel with bearing.

POLYURETHANE WHEELS

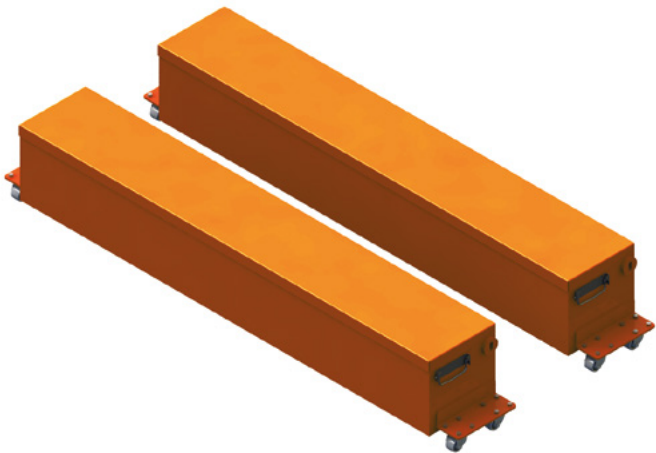
In case the floor is very slippery it is recommended to use polyurethane wheels (in combination with polyamide wheels) for better traction.

CODE	DESCRIPTION (WHEEL / PIN)
801PU200CH	200 x 100 / 45
801PU200RD	200 x 100 / 45
801PU250CH	200 x 100 / 60
801PU250RD	200 x 100 / 60



TRANSPORT BOXES

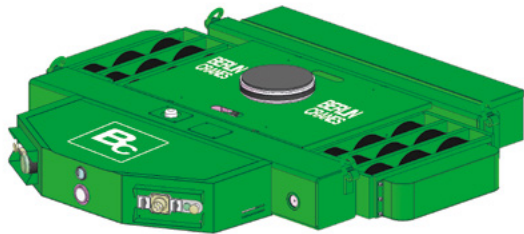
We supply all our trolleys with treated wooden box (not included in the price of the trolley) with cover, for better transport and handling. But we can design any type of box, metallic for example, for better storage.



AUXILIARY BATTERY BOX

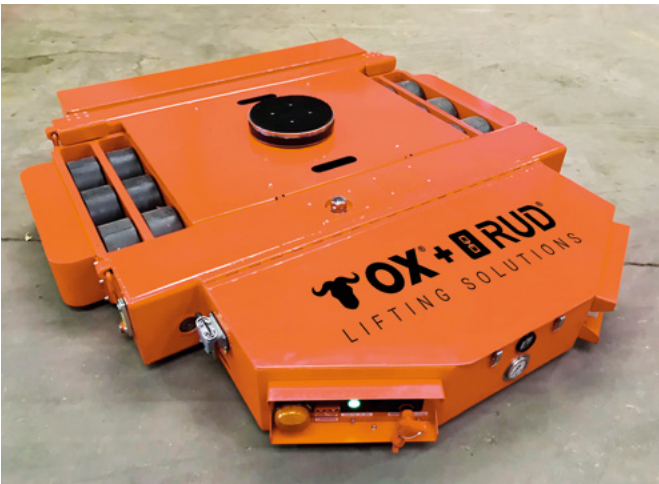
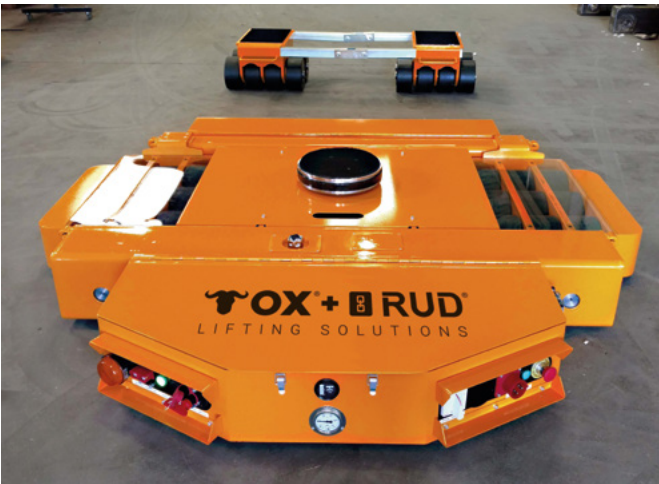
All TBC trolleys are supplied with a battery box for continuous use of approximately 45-60 min approx. This time may vary depending on the conditions of use, load, type of floor, etc. The auxiliary battery box is a box with wheels for quick change of the supplied with the original trolley, so that we double the working time. The change can be made in one minute.

CODE	DESCRIPTION
801TBC1CBAUX	Auxiliary Battery Box



PAINTING. FINISH. SERIGRAPHY.

We offer you the possibility to customize your product by choosing the RAL paint you prefer, adding your company logo through serigraphy, and more.



TECHNICAL FEATURES

- Rotating trolley (rotates 360°)
 - Mobile platform with free wheels
 - Loads from 4 to 6 t
 - It can be combined with manual trolleys
 - Polyamide wheels
 - It is recommended the transported load to be two thirds of the capacity of the set of rotating trolleys chosen by the customer
- The transported load must cover at least 70% of the support rubber surface (dimension D) and the weight must be centered
 - The rotating trolleys have a Ø 20 mm central hole that allows the customer to fix the load to the device. As well as a lateral hole of Ø 22 mm to place a shackle of 3.25 t for handling the trolley with no load on it

OPTIONS

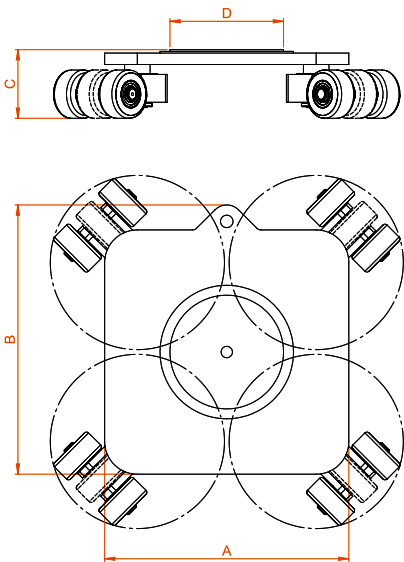
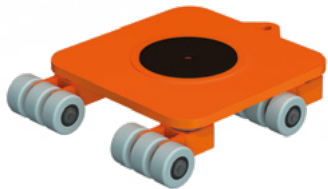
- Polyurethane wheels (changes slightly the dimensions but not the capacity)
- Galvanized finish.
 - Other dimensions can be manufactured under request

CODE	DESCRIPTION	WLL (t)	PLATFORM DIMENSIONS (mm)				NUMBER AND MATERIAL OF WHEELS	WHEEL DIMENSIONS O x E (mm)	WEIGHT (kg)
			A	B	C	D			
801CG240	OX-CG 4 Rotating Trolley	4	380	425	115	Ø 200	8 polyamide	ø 85 x 40	31
801CG260	OX-CG 6 Rotating Trolley	6	430	475	120	Ø 200	12 polyamide	ø 85 x 40	48

4t OX-CG 4 Rotating Trolley

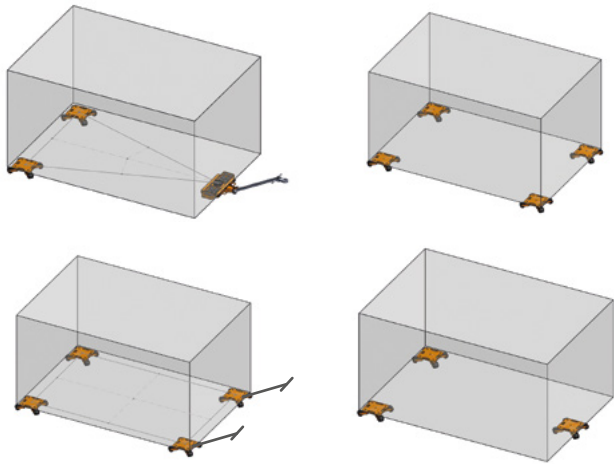


6t OX-CG 6 Rotating Trolley



POSSIBLE USES

It is mandatory to use, at least, three points of support and the center of gravity has to be known and centered. You can combine the manual trolleys and the rotating trolleys.



INCLUDED ACCESSORIES

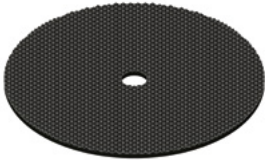


CFCG200300
Smooth rubber

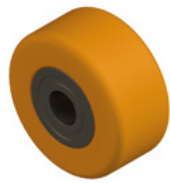


CFCG200400
Polyamide wheel

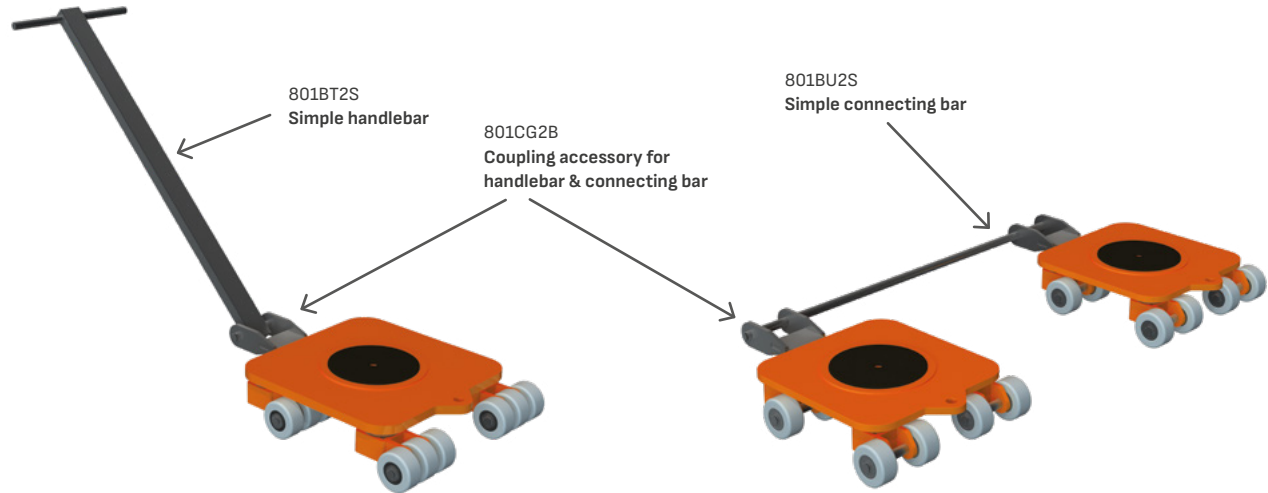
OPTIONAL ACCESSORIES



CFCG200301
Studded rubber



CFCG200401
Polyurethan wheel



OX & RUD LIFTING SOLUTIONS, S.L.

OX, as a brand of the CFB Group, was created in 2011, and in 2024 we joined a huge company, RUD Ketten Rieger & Dietz GmbH u. Co. KG., with the mission of offering and bringing to all countries the best solutions for the transport and lifting of loads in a controlled and safe way in any industrial, naval, railway, wind, oil & gas, offshore, automotive, aeronautical and small industries. Now, more than ever, closer to the customer, with distributors and branches on all five continents.

At OX & RUD, engineering, experience and advice are the basis of our quality.

OX & RUD, now bigger, stronger, better.

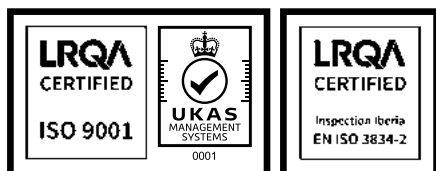
ISO & DNV CERTIFICATE

We have managed to manufacture and distribute machinery that meets the highest standards.

For this, it is an essential requirement to pass all quality controls, which is why we have the following certifications:

- **ISO 9001:2015**
- **EN ISO 3834-2:2006 (Welding)**
- **DNV GL-ST-0378 (Standard Spreaders up to 1350t)**
- **DNV GL-ST-0377 (Standard Spreaders up to 1350t)**

OX & RUD is Lloyd Register Quality Assurance certified, in order to comply with all regulations, standards and norms of the European Union.



"Our priority is to provide effective, profitable and safe solutions, to ensure long-term business relationships, through customer satisfaction."

Emilio Blasco
Founder

**YOUR TRUSTED
PARTNER FOR
HEAVY LIFTING
SOLUTIONS**

OX® + RUD®
LIFTING SOLUTIONS

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