

EXP 5020ZE





Comfortable drive : Extra large seat with 10 regulation modalities, adjustable arms, headrest, and seat heating. In addition, a safety device on the left arm rest when it is in the down position. 2 taps for lower the cabin in case of emergency, one inside the cab and the other one at the ground level.

Operators cabin with large windows for a better visibility. The front window, with double wiper, opens, completely disappearing under the top of the cab. The rotating orange light is standard. Working light standard fitted on the top of the cab guarantee a good visibility also during the darker hours of the day. It is possible, as option, to fit extra working halogen/xenon lights.



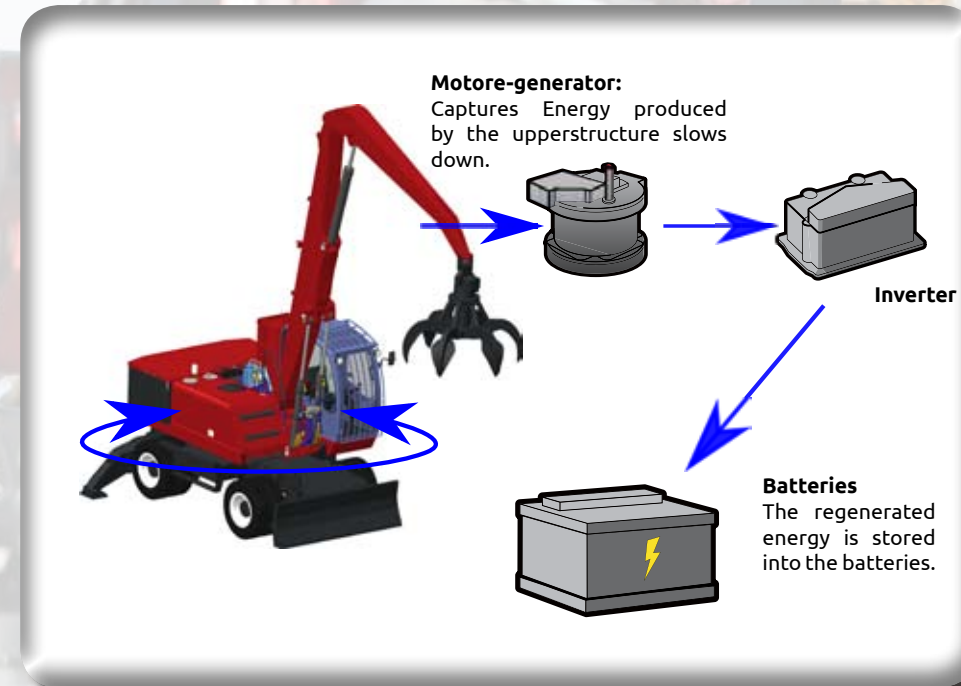
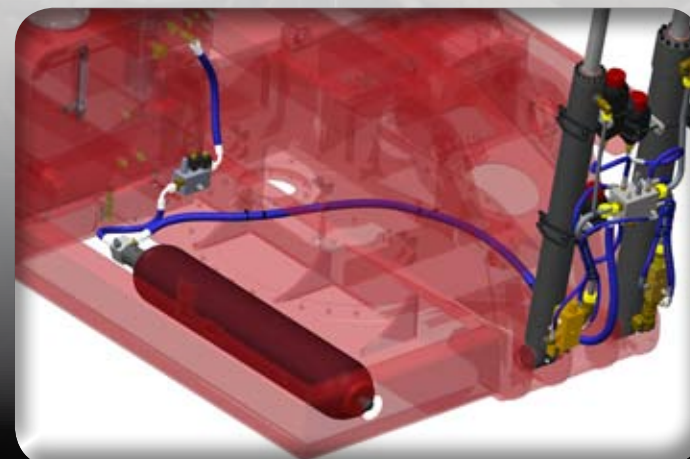
The new EXP 5020ZE has been designed and built specifically for industrial handling and with a special focus to the environment protection. **ZE = Zero EMISSION.**

The new EXP 5020ZE is available from 8 to 10 meters reach and all the possible attachments for the material handling sectors: grabs for scrap, orange peel grabs, magnet plates, grab for logs, clamshell grabs etc.

The clear visual **instrumentation panel with a coloured 5" display** allows monitoring of all machines functions: battery charge level, diagnostic codes, hydraulic oil level and temperature, hydraulic oil filter clogging. There are also controls dedicated to auxiliary functions and for light warnings that advise the operator when the machine reaches stability level, highness of the grab from the ground or distance of it from the centre of the machine, total or partial hour counter, hours from the next service, list of controls for auxiliary functions.

Load Energy Saving System (LESS)

It's an hydro-pneumatic system of the machine passive weights support, it is constituted by a conventional hydraulic ram, connected directly to a series of hydro-pneumatic accumulator which guarantee a direct hydraulic force to the hydraulic ram. A multi-function solenoid valve unit, electronically managed, controls the correct functionality and the pre-charge pressure of the system. Through this system, the hydraulic power used for the handling of the load is real.



ENERGY SAVING (Kinetic Energy Recovery System)

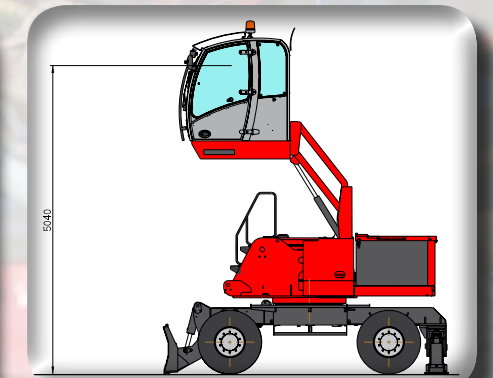
The electric swing motor/generator captures and regenerates energy produced at each time by the upper structure slows down and converts it into electric energy. The regenerated energy is stored into the batteries.

The new EXP 5020ZE is the most equipped machine in its sector, the standard configuration is almost complete: working lights over the cabin, handrails and safety steps, front window screen protection, overload warning device, break valves on all the cylinders.

The other optional available, are also useful for a comfortable and safe use of the machine: radio cd player, anti-theft, automatic greasing system, total cabin protection, rear camera on counterweight with 7" coloured display into the cabin, protection for the transmission on undercarriage.

The new EXP 5020ZE is more secure; Non-slip steps and hand-rails facilitate the ascent and descent of the operator from the machine.

The new EXP 5020ZE (in accordance with EU directive 2006/42/EC) comes standard with the "OWD" (Overload Warning Device) system that alerts the operator with a visual and acoustic signal on the dashboard when the machine has exceeded the maximum load for that position and effectively blocking the movement of the arms and agreeing only those who will bring the load in a safe position.



Operators cabin with **hydraulic parallelogram elevation** has a 5,2 m high reach (operator's eye). It is possible, on request, to arrive to 6,0 m high reach.



Centralized automatic greasing system (as standard), to make easier service operations. Oil tank pressurized with air filter

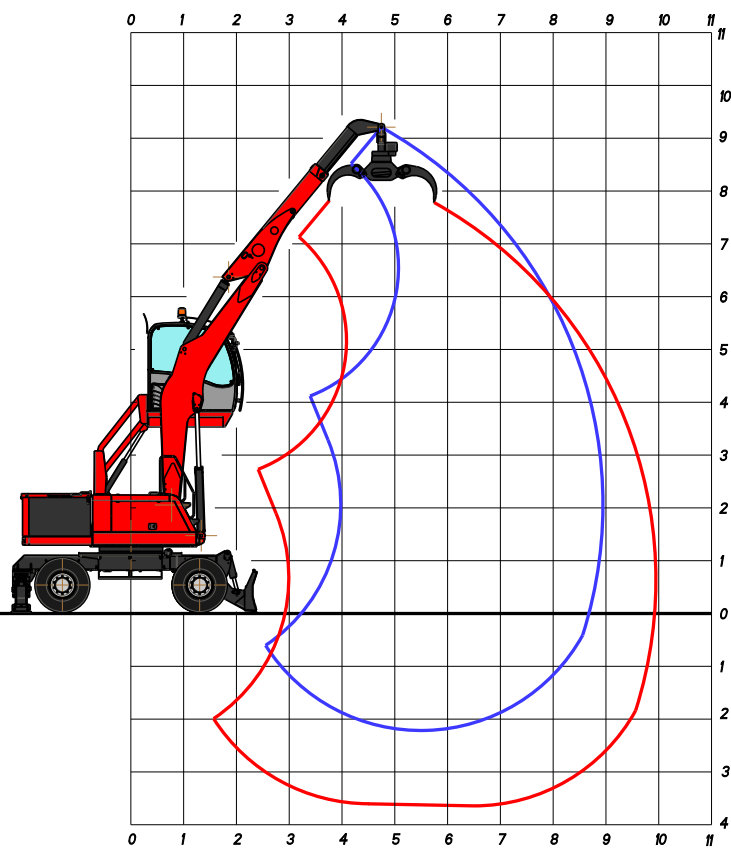
Centralized greasing system for the undercarriage (as option available) for an easier maintenance of the machine



Six white **working lights** on counterweight as standard. On request available also road lights red and orange

As option, **rear camera** on counterweight with 7" coloured display into the cabin. It's also possible to fit a camera on the secondary stick.





AF8:
Gooseneck boom
4,80 m

Industrial stick
3,30 m

AT8:
Telescopic stick
2,60 - 3,50 m

OPERATING WEIGHT:

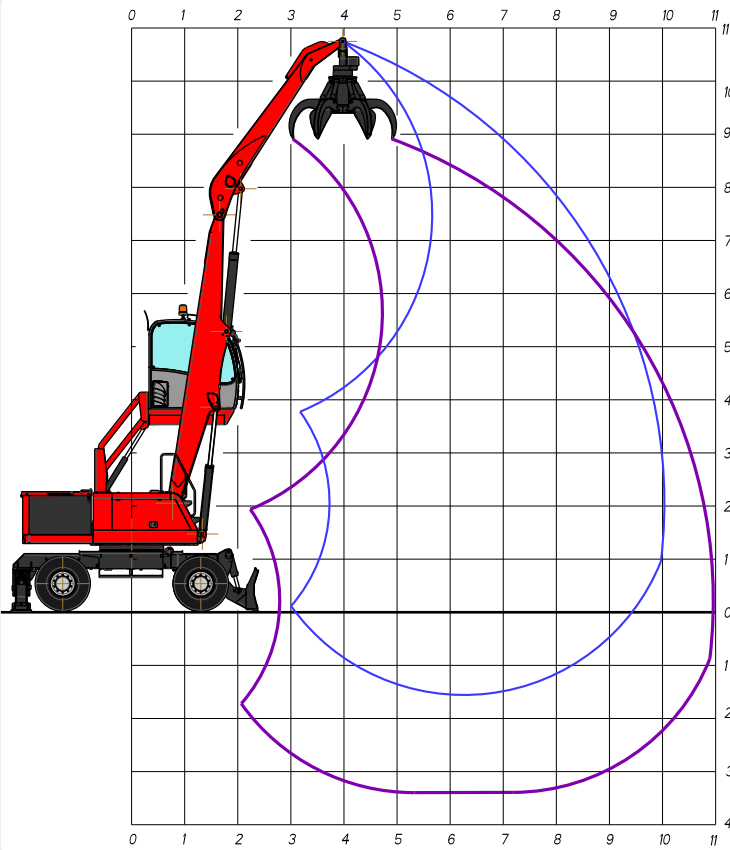
24.300 kg

OPERATING WEIGHT WITH, FRONT BLADE
REAR OUTRIGGERS, FULL RUBBER TYRES,
GOOSENECK BOOM 4,80 m,
TELESCOPIC STICK,
R50/604 LOGS GRAB WITH ROTATOR.

LIFTING CAPACITIES TONS
LIFTING RANGE (m)

HEIGHT METERS	CONF.	4,0			5,5			7,0			8,5			9,0		
		↗	○	⊙	↗	○	⊙	↗	○	⊙	↗	○	⊙	↗	○	⊙
8,0	○○				4,65*	4,65*	3,7*									
	┌┐				4,65*	4,65*	3,7*									
	└└				4,65*	4,65*	3,7*									
6,0	○○				4,46*	4,46*	3,55*	4,16*	4,16*	3,21						
	┌┐				4,46*	4,46*	3,55*	4,16*	4,16*	3,30*						
	└└				4,46*	4,46*	3,55*	4,16*	4,16*	3,30*						
4,0	○○	5,03*	5,03*	3,79*	5,14*	5,14*	4,09*	4,40*	4,40*	3,12	3,97*	3,31*	2,32			
	┌┐	5,03*	5,03*	3,79*	5,14*	5,14*	4,09*	4,40*	4,40*	3,49*	3,97*	3,97*	3,14*			
	└└	5,03*	5,03*	3,79*	5,14*	5,14*	4,09*	4,40*	4,40*	3,49*	3,97*	3,97*	3,14*			
2,0	○○	8,78*	8,78*	6,24	6,20*	5,96*	4,17	4,88*	4,30*	3,01	4,22*	3,25*	2,28	3,86*	3,03	2,12
	┌┐	8,78*	8,78*	6,98*	6,20*	6,20*	4,93*	4,88*	4,88*	3,87*	4,22*	4,22*	3,35*	3,86*	3,86*	3,03*
	└└	8,78*	8,78*	6,98*	6,20*	6,20*	4,93*	4,88*	4,88*	3,87*	4,22*	4,22*	3,35*	3,86*	3,86*	3,03*
0,0	○○	10,27*	8,41*	5,88	6,98*	5,67*	3,97	5,24*	4,17*	2,92	4,06*	3,20	2,24			
	┌┐	10,27*	10,27*	8,16*	6,98*	6,98*	5,54*	5,24*	5,24*	4,16*	4,06*	4,06*	3,22*			
	└└	10,27*	10,27*	8,16*	6,98*	6,98*	5,54*	5,24*	5,24*	4,16*	4,06*	4,06*	3,22*			
-2,0	○○				6,47*	5,44*	3,81									
	┌┐				6,47*	6,47*	5,13*									
	└└				6,47*	6,47*	5,13*									

↗ LIFTING CAPACITIES ON LONGITUDINAL AXIS ○ LIFTING CAPACITIES ON 360° WITHOUT SAFETY FACTOR ⊙ LIFTING CAPACITIES ON 360° ACCORDING WITH ISO 10567
*= HYDRAULIC LIMIT
LIFTING CAPACITIES ARE ON HOOK WITHOUT GRABS, MACHINE STATIC, LEVEL SOLID GROUND, WITH AXLE LOCKED.



DF10:
Straight boom
5,50 m

Industrial stick
4,00 m

OPERATING WEIGHT:

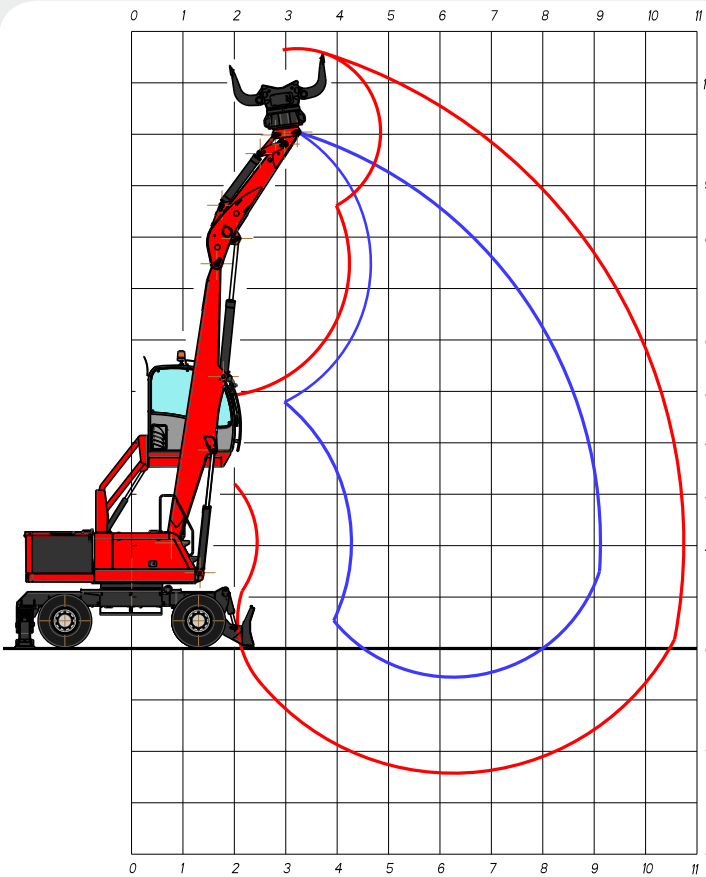
24.400 kg

OPERATING WEIGHT WITH FRONT BLADE,
REAR OUTRIGGERS, FULL RUBBER TYRES,
STRAIGHT BOOM 5.50 m,
INDUSTRIAL STICK 4.00 m,
RV 400 ORANGE PEEL GRAB WITH ROTATOR.

LIFTING CAPACITIES TONS
LIFTING RANGE (m)

HEIGHT METERS	CONF.	4,0			5,5			7,0			8,5			10,0		
		↗	○	⊙	↗	○	⊙	↗	○	⊙	↗	○	⊙	↗	○	⊙
8,0	○○				4,93*	4,93*	4,41*	4,20*	4,20*	3,16						
	┌┐				4,93*	4,93*	4,41*	4,20*	4,20*	3,73*						
	└└				4,93*	4,93*	4,41*	4,20*	4,20*	3,73*						
6,0	○○				5,05*	5,05*	4,51*	4,20*	4,20*	3,16	3,58*	3,35	2,34			
	┌┐				5,05*	5,05*	4,51*	4,20*	4,20*	3,73*	3,58*	3,58*	3,17*			
	└└				5,05*	5,05*	4,51*	4,20*	4,20*	3,73*	3,58*	3,58*	3,17*			
4,0	○○	7,47*	7,47*	6,61*	5,51*	5,51*	4,27	4,39*	4,35	3,04	3,63*	3,31	2,32			
	┌┐	7,47*	7,47*	6,61*	5,51*	5,51*	4,90*	4,39*	4,39*	3,89*	3,63*	3,63*	3,21*			
	└└	7,47*	7,47*	6,61*	5,51*	5,51*	4,90*	4,39*	4,39*	3,89*	3,63*	3,63*	3,21*			
2,0	○○	9,01*	8,67	6,07	6,03*	5,67	3,97	4,56*	4,14	2,91	3,61*	3,22	2,25	2,57*	2,56	1,79
	┌┐	9,01*	9,01*	8,00*	6,03*	6,03*	5,35*	4,56*	4,56*	4,03*	3,61*	3,61*	3,19*	2,57*	2,57*	2,25
	└└	9,01*	9,01*	8,00*	6,03*	6,03*	5,35*	4,56*	4,56*	4,03*	3,61*	3,61*	3,19*	2,57*	2,57*	2,25
0,0	○○	4,72*	4,72*	4,02*	5,79*	5,38	3,77	4,31*	3,99	2,79	3,21*	3,13	2,19			
	┌┐	4,72*	4,72*	4,02*	5,79*	5,79*	5,11*	4,31*	4,31*	3,81*	3,21*	3,21*	2,82*			
	└└	4,72*	4,72*	4,02*	5,79*	5,79*	5,11*	4,31*	4,31*	3,81*	3,21*	3,21*	2,82*			

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*= HYDRAULIC LIMIT
LIFTING CAPACITIES ARE ON HOOK WITHOUT GRABS, MACHINE STATIC, LEVEL SOLID GROUND, WITH AXLE LOCKED.



DS9:
Straight boom
5,50 m

Selector arm
3,00 m

OPERATING WEIGHT:
24.600 kg

OPERATING WEIGHT WITH, FRONT BLADE,
REAR OUTRIGGERS, FULL RUBBER TYRES,
STRAIGHT BOOM 5,50 m,
SELECTOR ARM,
RS 500 SELECTOR GRAB WITH ROTATOR

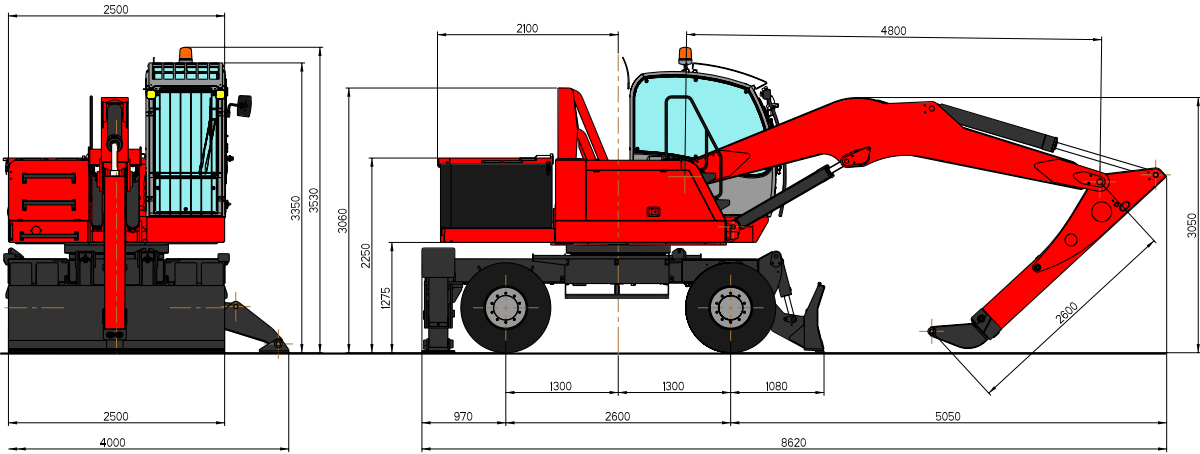
LIFTING CAPACITIES TONS
LIFTING RANGE (m)

HEIGHT CONF. METERS		4,5			6			7,5			9,1		
		↗	○	⊙	↗	○	⊙	↗	○	⊙	↗	○	⊙
8,0	○○				4,72*	4,72*	3,65						
	└┐				4,72*	4,72*	4,18*						
	└└				4,72*	4,72*	4,18*						
6,0	○○	6,11*	6,11*	5,45*	4,67*	4,67*	3,61	3,81*	3,67	2,57			
	└┐	6,11*	6,11*	5,45*	4,67*	4,67*	4,14*	3,81*	3,81*	3,36*			
	└└	6,11*	6,11*	5,45*	4,67*	4,67*	4,14*	3,81*	3,81*	3,36*			
4,0	○○	6,79*	6,79*	5,13	4,95*	4,95*	3,47	3,84*	3,57	2,50			
	└┐	6,79*	6,79*	6,03*	4,95*	4,95*	4,37*	3,84*	3,84*	3,38*			
	└└	6,79*	6,79*	6,03*	4,95*	4,95*	4,37*	3,84*	3,84*	3,38*			
2,0	○○	7,31*	6,93*	4,85	5,10*	4,73	3,31	3,75*	3,45	2,42	2,45*	2,45*	1,85
	└┐	7,31*	7,31*	6,33*	5,10*	5,10*	4,50*	3,75*	3,75*	3,29*	2,45*	2,45*	2,12*
	└└	7,31*	7,31*	6,33*	5,10*	5,10*	4,50*	3,75*	3,75*	3,29*	2,45*	2,45*	2,12*

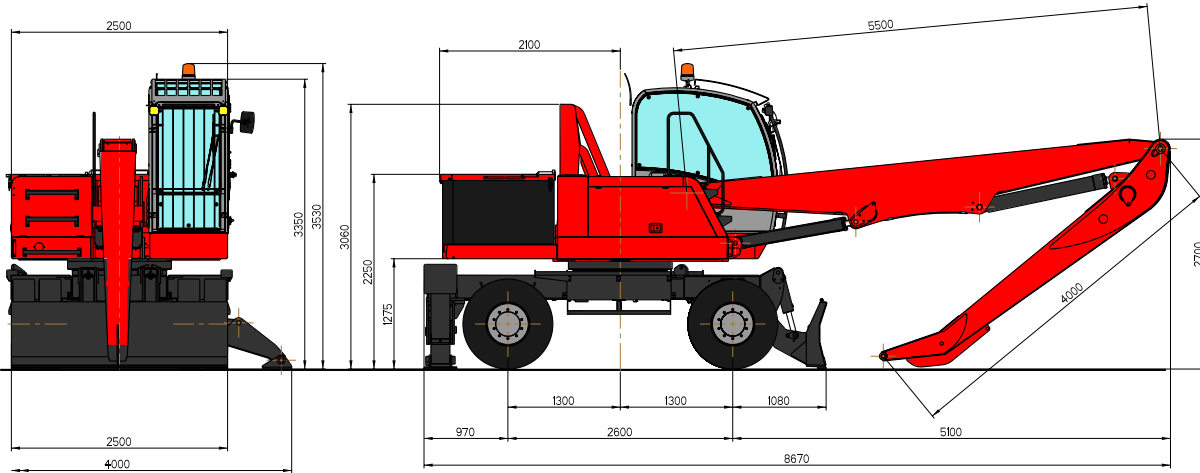
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DIMENSIONS

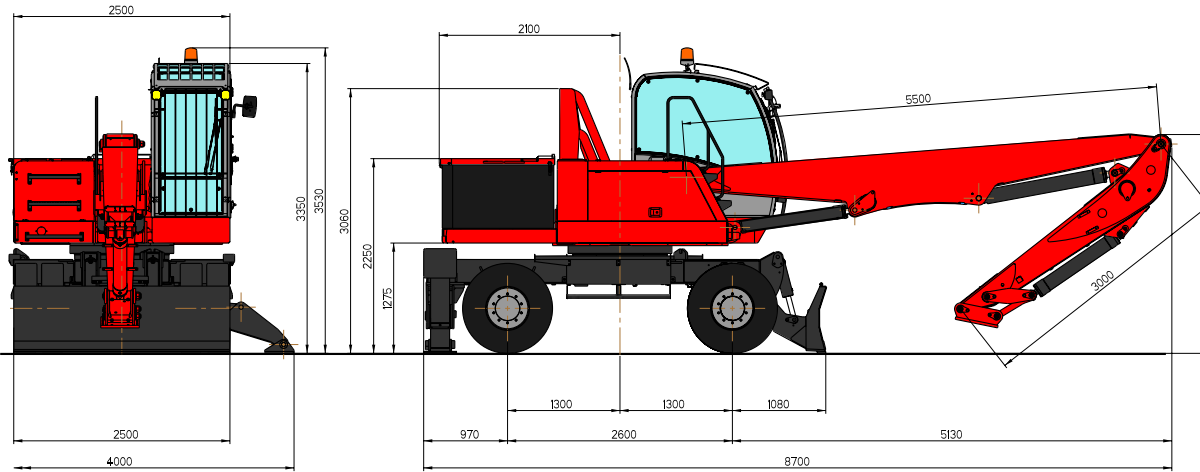
AT8



DF10



DS9



TECHNICAL DATA EXP 5020ZE

ELECTRIC MOTOR

Three-phase electric motor with electronic control by inverter.
2 work speed are available, variable speed in function of the working mode choised.

4 working mode are suitable: POWER, NORMAL, ECO, FINE.

Maxi power:	40 kW
Rotating speed	2300 rpm.
Maxi torque:	300 Nm

ELECTRICAL CIRCUIT

Powered by 2 parallel batteries from 930A to 120V.
Voltage transformer from 120V to 24V for auxiliary circuits.
Two inverters controlled by CAN-BUS for the management and control of the hydraulic pump and swing system.
"High Frequency" electronic battery chargers and high efficiency charging.

HYDRAULIC SYSTEM

Open "LOAD SENSING" circuit constituted by a variable displacement axial pump, with automatic flow setting, 4 power levels setting, feeding a distributor block composed by 6 elements, with high pressure control valves and anti-choc valves on each element.

Max. flow:	185 l/min
Max. hydraulic pressure:	310 bar
Hydraulic tank capacity:	160 l
Hydraulic circuit capacity:	240 l

Additional pumps for brakes, direction and distributor piloting.
Hydraulic oil cooling by aluminium heat exchanger. Thermostatic 24 volt fan.
Micrometric filter for the hydraulic oil on the return line, integrated on the tank and on the pilot line.

TRAVEL

Hydrostatic with 4 wheel drive by means of a variable displacement hydraulic axial piston motor mounted on a two speed gearbox hydraulically operated from the cab coupled to the rear axle
Travel controlled by two separate pedals (one for each travelling direction).

Travel speed (in both directions)

Working speed:	from 0 to 6 km/h
Travel speed:	from 0 to 17 km/h

Differential axles 2,50 m wide with planetary reduction gears on the hubs.

Braking valve integrated on the hydraulic motor.

STEERING

Hydraulic steering system powered by an independent pump.
The front floating steering axle can be hydraulically locked from the cabin in any position.

BRAKES

SERVICE BRAKES: multiple discs oil immersed on the hubs, hydraulically operated by the pedal.

PARKING AND EMERGENCY BRAKES: hydraulically released disk-type brake mounted on driveshaft.

TYRES

n° 8 front and rear twinned solid rubber tyres SUPERELASTIC.
- 10.00x20 with spacer rings

SWING SYSTEM

Unlimited rotation in both directions thanks to a three-phase electric motor electronically controlled by inverter. Braking of the rotation controlled by the inverter with recovery of energy to recharge of the main batteries. The electric motor is mounted dual stage oil bath planetary gearbox with negative oil bath brake discs and automatically released. LHigh diameter double row ball bearing ring with internal teeth. Automatic greasing system

Max rotation speed:	8 rpm
Overall dimensions of rotating turret:	2,35 m

OPERATOR'S CAB

Hydraulically operated raising driver's cab mounted on a parallelogram linkage installed on silent block with large windows of tinted heat resistant safety glass; front sliding window, and lateral opening window, upper glass with safety grill. Winter heating aventilation installed as standard. Radio preset. Windscreen wiper with washer.

"GRAN COMFORT" operator's seat with shock absorbing suspension, headrest, lumbar support, belt winder, electric seat heating device and armrests adjustable height and angle. Many possibilities of adjustment according to operator's weight and size with electronic joysticks controlled by CAN-BUS incorporated in the armrests. AUTO-IDLE electronic accelerator with two automatic preselected rpm.

The instrumentation, consisting of a color display on the dashboard, indicates includes:

Motor speed indicator, state of the batteries charge level, hour counter, hydraulic oil temperature, Volt, two converters diagnostics, and maintenance program. Warning lights showing: hydraulic oil filter clogging, park brake, brakes failure, lights, hydraulic oil low level, state stability of the machine stability, position and mass of the load ...

CONTROLS

N° 2 electronic controlled joysticks to carry out four operations each with electric pushbuttons incorporated.

Electronics proportional rollers for front blade a/o outriggers and telescopic/selector arm. Electric button for grab rotator. Electro hydraulic devices for controlling hydraulic raising of the cab, parking brakes, front axle oscillation lock, gear box.

ARMS

With reach from 8 to 10 meters.

ENERGY SAVING

KERS (Kinetic Energy Recovery System): Swing system with brake energy recovery. The energy is stored in the main batteries.

LESS (Load Energy Saving System):

System to support the passive loads of the machine. It consists of a hydraulic cylinder directly connected to a hydropneumatic accumulator which guarantees a hydraulic force capable to support the weight of the arms. Hydraulic components, high efficiency pump and main distributor

SOUND LEVELS

SOUND LEVELS (EEC Directive 2000/14/CE - 2005/88/CE)
Inside cab LpA 76 dB (A)

ELECTROMAGNETIC COMPATIBILITY

In accordance with CE Directive (Dir. 2014/30/CE)

OVERLOAD WARNING DEVICE

In accordance with CE directive (Dir 2006/42/CE) this device provides to check the crane stability while loading in accordance with loads and distances (as standard). When the stability limits are reached, acoustical and optical warning advise danger conditions before the automatic lock of movements.



Viale delle industrie, 9
45100 ROVIGO - ITALY
phone +39 0425 474833
fax +39 0425 475548
www.solmec.it
solmec@solmec.it