

Powerful, safe and easy to use electric tractor with three wheels and operator seat.



The TR70 ac electric tractor with 3 wheels is ideal for towing trailers of up to 7,000 kg. Extremely compact and highly manoeuvrable, this tractor can make a 360° turn in less than 2,000 mm with small turning radius. Therefore, it is efficient even in tight spaces, thanks to its extremely light steering. The readily accessible tow hook has three positions and is visible from any location. On request, it can be equipped with automatic hook up and release systems so that the operator does not have to leave the operator's compartment. It can tow several trailers at the same time, speeding up therefore the operations and optimising the processing times. On request, it can also be fitted with special hooks for trailers of particular sizes. Another optional feature available for this tractor is a system of buttons for moving it forward and backward ("backing" function), facilitating the right connection to the vehicle to be towed.

Frame

The rugged "shock resistant" frame made of thick steel sheets offers stability and allows the operator to make the best out of the high torque performance provided by the asynchronous motor. All casings are made of polyethylene and are extremely resistant to collisions, scratching and corrosion. The back of the tractor is made of a single block housing the motor, installed parallel to the axle of the rear wheels and fixed to the frame using elastic supports (silent-blocks). The low center of gravity makes the

machine more compact, allowing a more secure grip. The traction battery is installed at the lowest point between the axles so as to increase the stability of the tractor. The guide wheel has the same size as the drive wheels, is installed on large diameter ball bearings and fitted with buffer for high driving comfort. The pneumatic or superelastic (optional) tyres render it suitable for work both on smooth surfaces and on irregular floors.

Operator's compartment

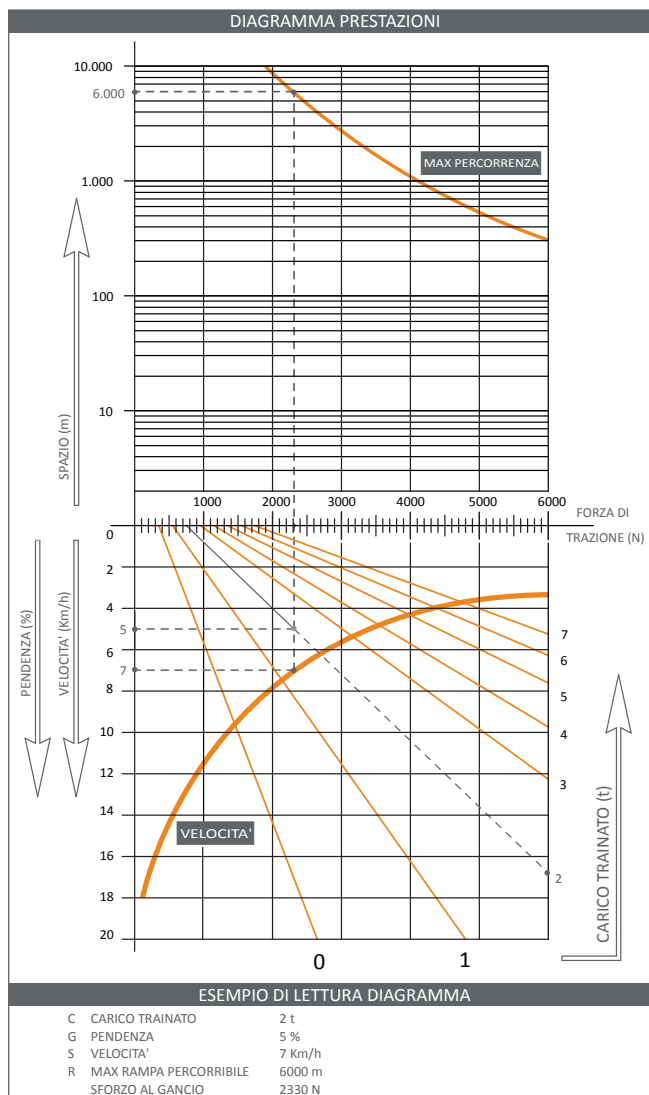
Special attention was paid to the ergonomics of the operator's compartment:

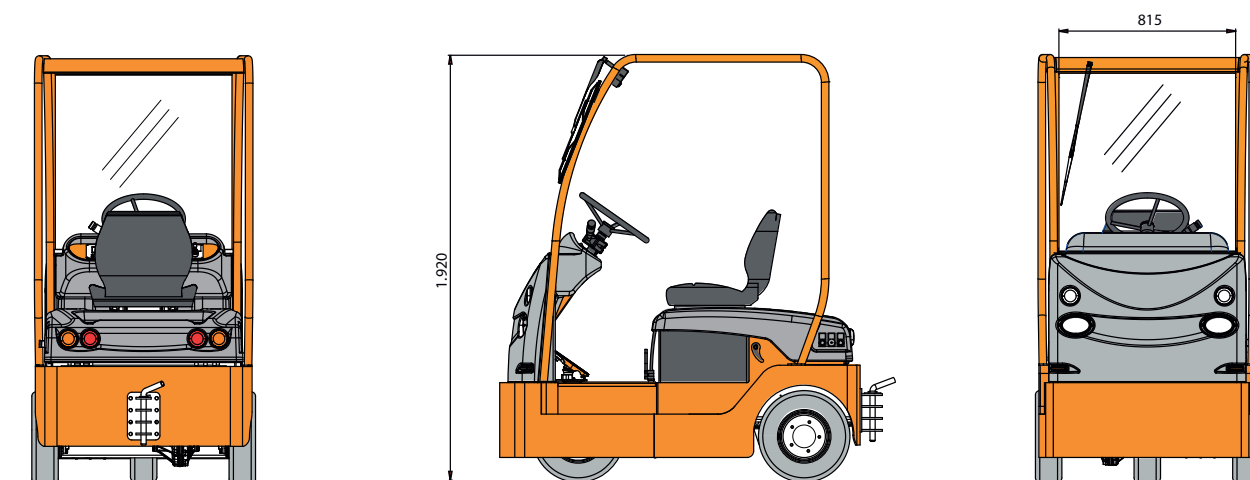
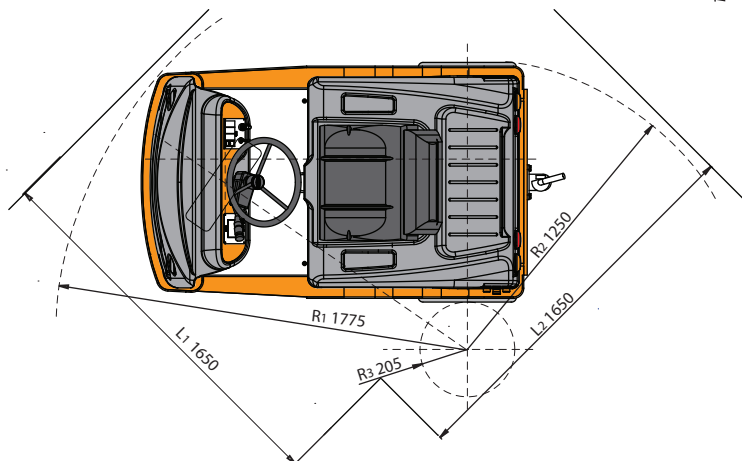
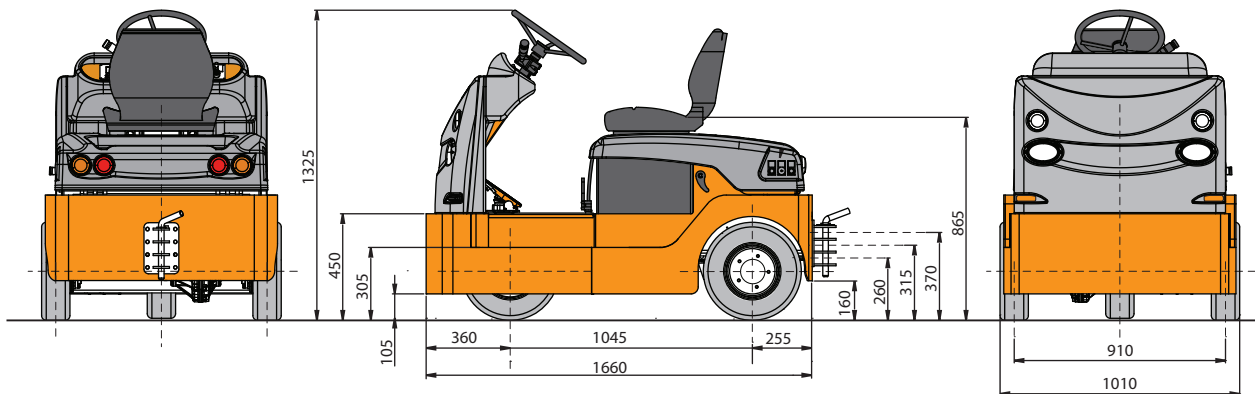
- large stairs on both sides for easy access,
- central position of the seat (equipped with "dead man" safety device) for spacious legroom,
- controls within reach,
- front compartment for objects installed on the side of the steering wheel and spacious rear compartment,
- large brake and acceleration pedals,
- "check control" display for battery state of charge, operating hours, travel speed and error codes monitoring,
- possibility to program the operating parameters.



Drive

Powerful and reliable 48V ac brushless traction motor for high performance and minimum operating costs. Equipped with encoder, temperature probes and negative electromagnetic parking brake. Powerful and gradual acceleration up to maximum speed. Electric braking not subject to wear, can be operated automatically by releasing the accelerator pedal, with the first stroke of the brake and by reversing the running direction. When the accelerator pedal is released, the system recovers power into the battery. Automotive style service brake with pedal and pump. Electronically controlled automatic electromagnetic parking and emergency brake.





Standard multilevel hooking device

Optional: automatic hooking device type 244

Optional: automatic hooking device type 245

(optional hook unlocking system from operator's compartment)



Characteristics	1.1	Manufacturer		Simai S.p.A.		
	1.2	Model		TR 70 ac		
		Execution				
	1.3	Operation		Electrical		
	1.4	Operator position		seated		
	1.5	Towing capacity	Q	t	7.0 / 6.0	
	1.7	Hook stress per hour		daN	155	
	1.9	Wheel centre distance		mm	1,045	
	Weights	2.1	Truck weight incl. battery (see line 6.5)		kg	1,065
2.3		load on axles without front / rear load		kg	465 / 600	
Wheels Frame	3.1	Wheels and tyres		Type	Pneumatic / Superelastic	
	3.2	Front wheel size		mm	4.00 - 8	
	3.3	Rear wheels size		mm	4.00 - 8	
	3.5	Number of front / rear wheels (x = drive)		no.	1 / 2x	
	3.7	Front / rear track		mm	- / 910	
Base dimensions	4.7	Upper edge overhead guard height		mm	1,920	
	4.8	Seat height / platform height		mm	865 / 450	
	4.12	Tow hook height		mm	260 / 315 / 370	
		Floor height		mm	730	
	4.16	Floor width / length		mm	650 / 255	
	4.19	Overall length		mm	1,660	
	4.21	Overall width		mm	1,010	
	4.32	Clearance at mid stroke		mm	105	
	4.35	Front turning radius		R1	mm	1,775
		Rear turning radius		R2	mm	1,250
		Internal turning radius		R3	mm	205
	Front aisle 90°		L1	mm	1,650	
	Rear aisle 90°		L2	mm	1,650	
Performance	5.1	Speed with / without load		km/h	8.5 / 18	
	5.6	Max hook stress		daN	600	
	5.7	Max feasible gradient without load		%	22	
	5.8	Max feasible gradient with load		%	4	
	5.10	Service brake		type	hydraulic	
		Parking brake		type	electromagnetic	
	Front / rear axle suspensions		type	springs		
Electric motors	6.1	Traction motor, 60 min performance with S2		kW	5	
	6.3	Battery as per DIN 43531 / 35 / 36 A, B, C, no			yes	
	6.4	K5 battery voltage, nominal capacity		V/Ah	48 / 345 (*375)	
	6.5	Battery weight		kg	550	
	6.6	Power consumption 50% empty 50% with load		km	55	
	Miscellaneous	8.1	Type of electronic system			AC Inverter
8.4		Noise threshold as per EN 12 053		dB(A)		
* optional						

Technical data sheet referring to pallet truck in standard version; data determined in compliance with VDI 2198. These values may differ if your product is fitted with other types of wheels and tires, supports and accessories. All data and images herein are indicative, OMG S.r.l. Single member company reserves the right to modify the documentation without prior notice.

Accessories and special features		
pneumatic tyres	automatic battery filling system	
superelastic tyres	electronic speed control	
no-marking superelastic tyres	electronic braking system	
overhead guard protected against adverse weather, front windshield, wipers	electromagnetic parking brake	
rigid cabin, front windshield, wipers, doors, rear-view mirrors	manual tow hook (multilevel)	
cabin with PVC doors	automatic tow hook (type 244)	
seat belt (mandatory with overhead guard)	automatic tow hook (type 245)	
heater (available with cabin)	hook unlocking system from operator's compartment	
revolving light	rear control for slow slow approach "backing"	
reverse buzzer	48V 375Ah traction battery	
multifunction display	automotive-type lights and warning devices	
	standard	optional