

3-wheel electric tow tractor

TTE71

Towing capacity 7000 kg



3-wheel tow tractor, with on-board operator and rear-wheel drive. Extremely compact and easy to drive, ideal for all industrial duties - both indoors and outdoors.

- “Shock resistant” **supporting perimeter chassis** ensures maximum exploitation of AC motor torque.
- **Suspensions:** rubberised steel coil spring in the front, steel springs with hydraulic shock absorbers in the rear.
- **Drum service brake** acting on 3 wheels with twofold braking system. Electromagnetic parking brake. Preset electrical braking, operating automatically when accelerator pedal is released, with first stroke of brake pedal and when reversing direction.
- Fifth wheel mechanical **steering**. Available also with fifth wheel electric steering, “AGV ready”.
- **1 operator on board**. Optimised driving position for maximum comfort and efficiency, low step-on platform for comfortable access as well as user-friendly and ergonomic dashboard.
- “**Man on board**” device with seat occupancy sensor.
- **Lighting system:** 2 front lights (position/dipped-beam/main-beam), 2 front turn indicators, 2 rear turn indicators, 2 rear lights (position/brake lights). Horn. Flashing light, reversing light and blue lights available upon request.
- **Digital dashboard** with battery charge indicator, fault detection, speedometer and hour meter.
- **24 V DC/DC converter** for auxiliary services.
- **AC motor** equipped with encoder, thermal probes and negative electromagnetic parking brake with manual brake disengagement lever.
- **Electronic AC control** with energy recovery and braking during deceleration.
- Several towing hitches available. Rear inching control to ease coupling operations.
- DIN 43531A 48 V **battery** – available capacity 315Ah, 345Ah and 375Ah

Available options:

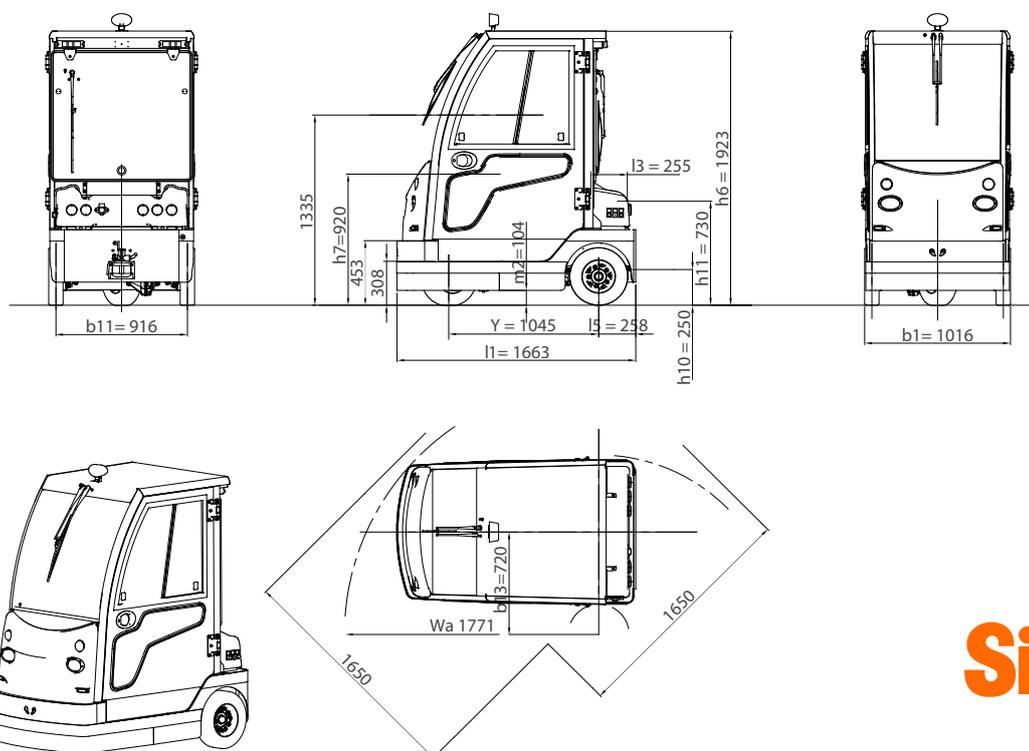
Pneumatic, superelastic or non-marking **tyres**. **Standard version without roof and cab**, available with **weather protection roof** with front windscreen, electric wiper, front and rear lights (position/brake/reversing lights/turn indicators), 2 small exterior rearview mirrors - full-LED lights; available also with canvas doors or with **full cab with hinged side doors**.

Electric **heating**.

Flashing light and blue safety light.

Standard paint finish: chassis dark grey RAL 7021/body light grey RAL 7035. Other colours available upon request.

All parts are easy to access for fast and effective maintenance. Lower costs due to AC technology and modular design.



FEATURES	1.1	Manufacturer			SIMAI S.p.A.
	1.2	Model			TTE71
	1.3	Drive			electric
	1.4	Operator Type			sitting driver
	1.5	Load Capacity	Q	t	0,1
	1.5.1	Towing Capacity (S2=60' / S2=30')	Q	t	7
	1.7	Rated Drawbar pull	F	N	1550
	1.9	Wheelbase	Y	mm	1045
	WEIGHT	2.1	Service weight (w/battery)		kg
2.2		Axle loading laden front/rear (with operator 80 kg. each)		kg	495 / 750
2.3		Axle loading unladen front/rear		kg	465 / 600
TIRES, CHASSIS	3.1	Tyres:Cushion(Cu),Superelastic(SE), Pneus(Pn) Poliurethane (PE)			SE/Pn
	3.2	Tyre size front			4.00 - 8
	3.3	Tyre size rear			4.00 - 8
	3.5	Wheels nr. Front/Rear (X=motive)			1 / 2X
	3.6	Tread front	b ₁₀	mm	-
	3.7	Tread rear	b ₁₁	mm	916
	DIMENSIONS	4.7	Height of roof/cabin	h ₆	mm
4.8		Seat height	h ₇	mm	920
4.8.1		Step on platform height		mm	453
4.12		Coupling height	h ₁₀	mm	250 - 305 - 360
4.13		Loading height (min / MAX)	h ₁₁	mm	730
4.16		Platform length	l ₃	mm	255
4.17		Rear overhang	l ₅	mm	258
4.18		Platform width	b ₉	mm	500
4.19		Overall length	l ₁	mm	1663
4.21		Overall width	b ₁	mm	1016
4.32		Ground clearance - centre of wheelbase	m ₂	mm	104
4.35		Turning radius front	Wa	mm	1771
4.35.1		Turning radius rear		mm	1250
4.36		Turning radius inner	b ₁₃	mm	720
4.36.1		Aisle width when turning 90°		mm	1650
PERFORMANCES		5.1	Travel speed laden/unladen		km/h
	5.5	Drawbar pull laden		N	-
	5.5.1	Drawbar pull unladen		N	1550
	5.6	Max. Drawbar pull laden/unladen		N	6000
	5.7	Gradeability laden/unladen		%	see chart
	5.8	Max. Gradeability laden/unladen		%	see chart
	5.10	Service / Parking brake (I=Hydraulic E=Electromagn. M=Mechanical)			I / E
5.10.1	Type of service brake front/rear			drum / drum	
MOTOR	6.1	Drive motor rating S2=60 min		kW	5
	6.1.1	Hydrauling steering motor rating S2=60 min		kW	-
	6.3	Battery according to DIN 43531 / 35 / 36 A, B, C, no			43531 A
	6.4	Battery voltage	U	V	48
	6.4.1	Battery rated capacity	K _s	Ah	315 - 345 - 375
	6.5	Battery weighth		kg	536 - 550 - 580
OTHER DATA	6.6	Energy consumption (EN 16796)		kWh/h	2,28
	8.1	Drive Control			inverter AC
	8.4	Sound level at driver's ear according to DIN 12053		dB(A)	69
	8.5	Towing coupling, type DIN			-

GRAPH 1:
i [%] = GRADIENT
Mtr [ton] = TOWED LOAD
F [N] = TRACTION FORCE
SOLID CURVES: START & STOP ALLOWED

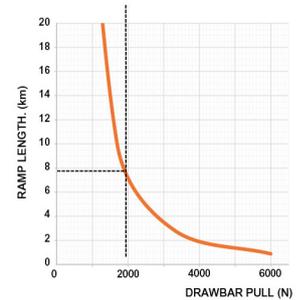
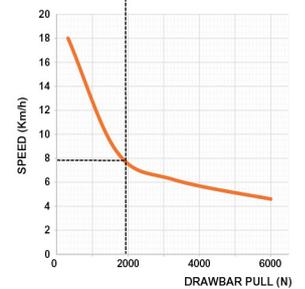
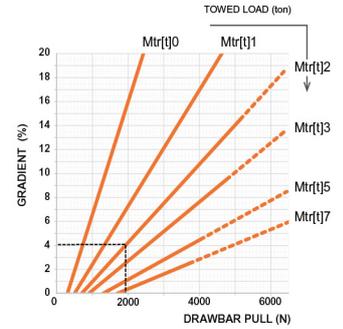
GRAPH 2:
V0 [km/h] = SPEED
F [N] = TRACTION FORCE

TRAILERS WITH BRAKES ARE RECOMMENDED FOR LOADED DESCENTS. IF THIS IS NOT POSSIBLE, SPEED SHOULD BE LIMITED IN ACCORDANCE WITH OPERATING MANUAL.

GRAPH 3:
s [km] = RAMP LENGTH THAT CAN BE COVERED PER HOUR
F [N] = TRACTION FORCE

EXAMPLE OF GRAPH READING:

- TOWED LOAD (Mtr) = 2 t
- GRADIENT (i) = 4 %
- TRACTION FORCE (F) = 1900 N
- SPEED (V0) = 8 km/h
- MAX. RAMP LENGTH THAT CAN BE COVERED PER HOUR (s) = 7,5 km



As per VDI guidelines 2198, this datasheet applies to standard electric tractor / platform truck only. Dimensions are not binding and can be changed in any moment. The performances must be intended for brand new machines, after having completed the running-in tested in San Donato Milanese Factory in normal climatic conditions. Performances and weight are to be intended with standard motors and battery (reported in bold) and with pneumatic tires. Some data can vary according to different equipments.



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