

# 3-wheel electric tow tractor

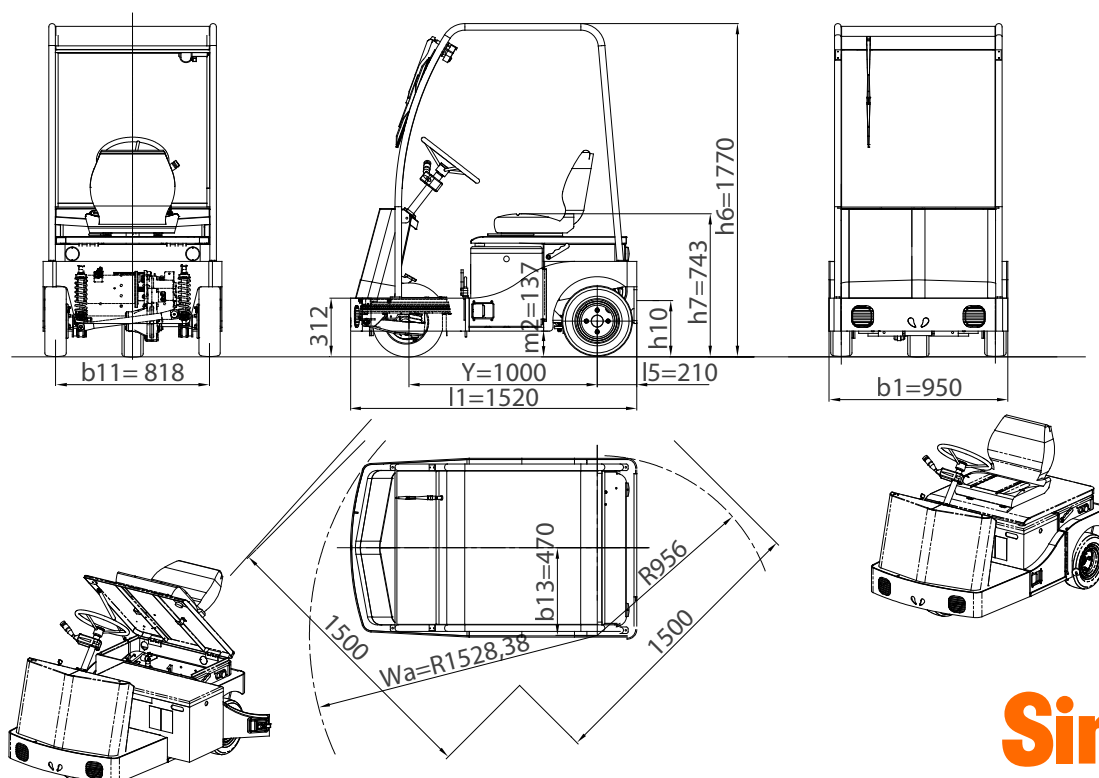
## TTE40

Towing Capacity 4000 kg



3-wheel tow tractor, man on board, with rear-wheel drive. Extremely compact and easy to drive, ideal for all industrial duties - even outdoors. Height with roof is limited for towing duties in tunnels and height-restricted areas.

- “Shock resistant” **supporting chassis** ensures maximum exploitation of induction motor torque.
  - **Suspensions:** front rubberised steel coil spring and shock absorber, rear steel coil springs with shock absorbers.
  - **Drum service brake** acting on 3 wheels. Electromagnetic parking brake. Preset electrical **braking**, operating automatically when accelerator pedal is released, with first stroke of brake pedal and on reversing direction.
  - Fifth wheel mechanical **steering**.
  - **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. Available in basic version, with weather protection roof with front windscreen and electric wipers. PVC canvas doors available.
  - **Lighting system:** 2 front lights, 2 rear lights (position/brake lights). Horn.
  - **Multifunction digital dashboard** with battery charge indicator, fault detection, speedometer and hour meter.
  - **Induction motor** equipped with encoder, thermal probes and negative electromagnetic parking brake with manual brake disengage lever.
  - **Electronic speed control of AC motor** with energy recovery during deceleration and braking. Several towing hitches available. Rear inching control to ease coupling operations.
  - **Battery** 24 V - available capacity 240Ah, 300Ah and 360Ah. Fast replacement from the side or above. 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			TTE40	
	1.3	Drive			electric	
	1.4	Operator Type			sitting driver	
	1.5	Load Capacity	Q	t	-	
	1.5.1	Towing Capacity (S2=60' / S2=30')	Q	t	4	
	1.7	Rated Drawbar pull	F	N	1000	
	1.9	Wheelbase	Y	mm	1000	
	WEIGHT	2.1	Service weight (w/battery)		kg	710
2.2		Axle loading laden front/rear (with operator 80 kg. each)		kg	320 / 470	
2.3		Axle loading unladen front/rear		kg	290 / 420	
TIRES, CHASSIS	3.1	Tyres:Cushion(Cu),Superelastic(SE), Pneus(Pn) Poliurethane (PE)			SE/Pn	
	3.2	Tyre size front			15x4,5-8	
	3.3	Tyre size rear			15x4,5-8	
	3.5	Wheels nr. Front/Rear (X=motive)			1 / 2X	
	3.6	Tread front	b <sub>10</sub>	mm	-	
	3.7	Tread rear	b <sub>11</sub>	mm	818	
	DIMENSIONS	4.7	Height of roof/cabin	h <sub>6</sub>	mm	1770
4.8		Seat height	h <sub>7</sub>	mm	743	
4.8.1		Step on platform height		mm	312	
4.12		Coupling height	h <sub>10</sub>	mm	290 - 345 - 400	
4.13		Loading height (min / MAX)	h <sub>11</sub>	mm	-	
4.16		Platform length	l <sub>3</sub>	mm	-	
4.17		Rear overhang	l <sub>5</sub>	mm	210	
4.18		Platform width	b <sub>9</sub>	mm	-	
4.19		Overall length	l <sub>1</sub>	mm	1520	
4.21		Overall width	b <sub>1</sub>	mm	950	
4.32		Ground clearance - centre of wheelbase	m <sub>2</sub>	mm	137	
4.35		Turning radius front	Wa	mm	1528	
4.35.1		Turning radius rear		mm	956	
4.36		Turning radius inner	b <sub>13</sub>	mm	470	
4.36.1		Aisle width when turning 90°		mm	1500	
PERFORMANCES		5.1	Travel speed laden/unladen		km/h	7 / 15
		5.5	Drawbar pull laden		N	-
	5.5.1	Drawbar pull unladen		N	1000	
	5.6	Max. Drawbar pull laden/unladen		N	- / 3200	
	5.7	Gradeability laden/unladen		%	see chart	
	5.8	Max. Gradeability laden/unladen		%	see chart	
MOTOR	5.10	Service / Parking brake (I=Hydraulic E=Electromagn. M=Mechanical)			I / E	
	5.10.1	Type of service brake front/rear			- / drum	
	6.1	Drive motor rating S2=60 min		kW	2	
	6.1.1	Hydrauling steering motor rating S2=60 min		kW	-	
	6.3	Battery according to DIN 43531 / 35 / 36 A, B, C, no			no	
	6.4	Battery voltage	U	V	24	
	6.4.1	Battery rated capacity	K <sub>5</sub>	Ah	240 - <b>300</b> - 360	
	6.5	Battery weight		kg	300 - <b>320</b> - 340	
6.6	Energy consumption (EN 16796)		kWh/h	1,44		
OTHER DATA	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			-	

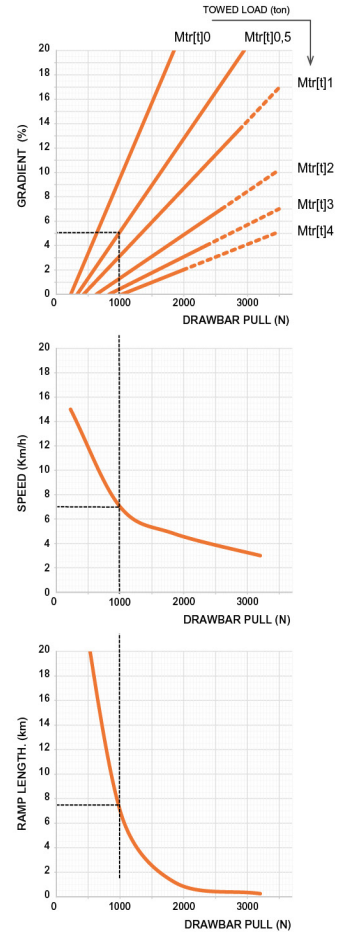
**GRAPH 1:**  
i [%] = GRADIENT  
Mtr [ton] = TOWED LOAD  
F [N] = TRACTION FORCE  
SOLID CURVES: START & STOP ALLOWED

**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) = 0,5 t  
- GRADIENT (i) = 5 %  
- TRACTION FORCE (F) = 950 N  
- SPEED (V0) = 7 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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