

# 4-wheel electric tow tractor

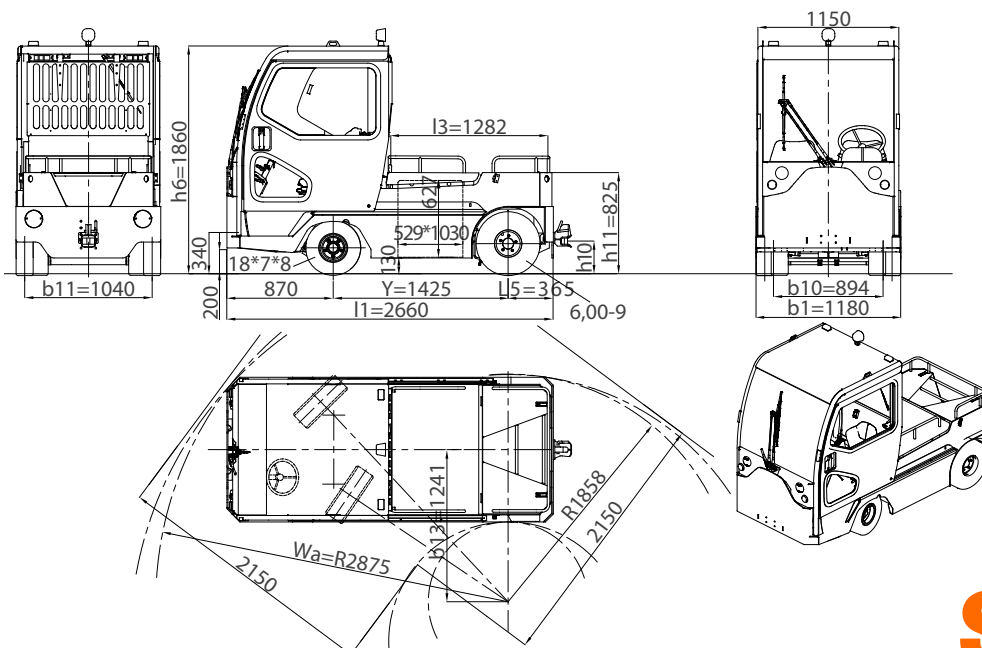
## TE152

Towing Capacity 15000 kg



4-wheel tow tractor, man on board, with rear-wheel drive. Ideal for all intense duties - both indoors and outdoors. Loading capacity of wide rear platform 200 kg.

- “Shock resistant” **supporting perimeter chassis** ensures maximum exploitation of induction motor torque.
  - **Suspensions:** rubberised steel coil springs in the front, SUMOR springs in the rear.
  - **Drum service brake** acting on 4 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 on reversing direction.
  - Standard electrohydraulic **steering**.
  - **2 operators 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 the basic version, with weather protection roof with front windscreen and electric wiper. PVC canvas doors or cab with hinged or sliding side doors available.
  - **Lighting system:** 2 front beams (dipped-beam/main-beam), 2 front turn indicators, 2 rear turn indicators, 2 rear beams (tail/brake lights). Full LED technology. Horn. Flashing light, reversing light and blue lights as well as cab lights available upon request.
  - **Digital dashboard** with battery charge indicator, fault detection, speedometer and hour meter. 24 V DC/DC converter for auxiliary services.
  - **2 induction motors** equipped with encoder, thermal probes and negative electromagnetic parking brake.
  - **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** DIN 43531B 48 V - available capacity 525Ah, 575Ah and 625Ah. Battery fitted behind driving position for fast replacement from 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			TE152
	1.3	Drive			electric
	1.4	Operator Type			sitting driver
	1.5	Load Capacity	Q	t	0,2
	1.5.1	Towing Capacity (S2=60' / S2=30')	Q	t	15
	1.7	Rated Drawbar pull	F	N	3000
	1.9	Wheelbase	Y	mm	1425
	WEIGHT	2.1	Service weight (w/battery)		kg
2.2		Axle loading laden front/rear (with operator 80 kg. each)		kg	1450 / 1170
2.3		Axle loading unladen front/rear		kg	1290 / 970
TIRES, CHASSIS	3.1	Tyres:Cushion(Cu),Superelastic(SE), Pneus(Pn) Poliurethane (PE)			SE/Pn
	3.2	Tyre size front			18x7x8
	3.3	Tyre size rear			6.00-9
	3.5	Wheels nr. Front/Rear (X=motive)			2 / 2X
	3.6	Tread front	b <sub>10</sub>	mm	894
	3.7	Tread rear	b <sub>11</sub>	mm	1040
	DIMENSIONS	4.7	Height of roof/cabin	h <sub>6</sub>	mm
4.8		Seat height	h <sub>7</sub>	mm	850
4.8.1		Step on platform height		mm	340
4.12		Coupling height	h <sub>10</sub>	mm	240 - 295 - 350 - 405
4.13		Loading height (min / MAX)	h <sub>11</sub>	mm	825
4.16		Platform length	l <sub>3</sub>	mm	1282
4.17		Rear overhang	l <sub>5</sub>	mm	365
4.18		Platform width	b <sub>9</sub>	mm	880
4.19		Overall length	l <sub>1</sub>	mm	2660
4.21		Overall width	b <sub>1</sub>	mm	1180
4.32		Ground clearance - centre of wheelbase	m <sub>2</sub>	mm	130
4.35		Turning radius front	Wa	mm	2875
4.35.1		Turning radius rear		mm	1858
4.36		Turning radius inner	b <sub>13</sub>	mm	1241
4.36.1		Aisle width when turning 90°		mm	2150
PERFORMANCES		5.1	Travel speed laden/unladen		km/h
	5.5	Drawbar pull laden		N	-
	5.5.1	Drawbar pull unladen		N	3000
	5.6	Max. Drawbar pull laden/unladen		N	- / 10500
	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 / mult. disks	
MOTOR	6.1	Drive motor rating S2 60 min		kW	2 x 6,6
	6.1.1	Hydrauling steering motor rating S2 60 min		kW	0,6 (Ac)
	6.3	Battery according to DIN 43531 / 35 / 36 A, B, C, no			43531 B
	6.4	Battery voltage	U	V	48
	6.4.1	Battery rated capacity	K <sub>5</sub>	Ah	525 - 575 - <b>625</b>
	6.5	Battery weight		kg	812 - 857 - <b>898</b>
6.6	Energy consumption (EN 16796)		kWh/h	4,83	
OTHER DATA	8.1	Drive Control			2 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

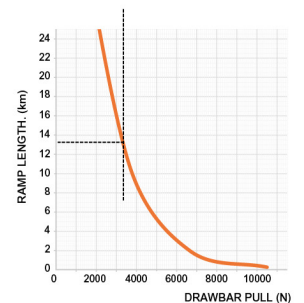
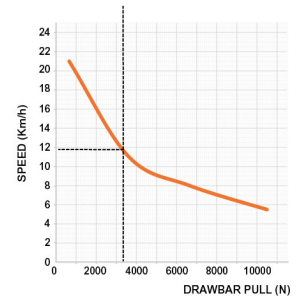
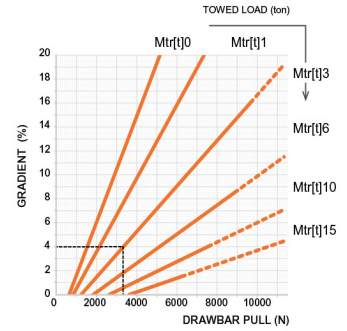
GRAPH 2:  
V0 [km/h] = SPEED  
F [N] = TRACTION FORCE

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) = 3 t  
- GRADIENT (i) = 4 %  
- TRACTION FORCE (F) = 3350 N  
- SPEED (V0) = 12 km/h  
- MAX. RAMP LENGTH THAT CAN BE COVERED PER HOUR (s) = 13,5 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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