GROVE. TMS500E



features

- 40 ton (40 mt) Capacity
- 29 ft.-95 ft. (8.8-29 m) 4 section, full power sequenced synchronized boom
- 26 ft.-45 ft. (7.9-13.7 m) offsettable telescopic swingaway extension
- Optional 26 ft. (7.9 m) lattice swingaway extension
- Optional 8,460 lb. (3837 kg) heavy counterweight package
- Rear air suspension with shock absorbers
- 330 bhp (246 kw) Cummins diesel engine

contents

Features

Specifications

Dimensions

Counterweight Configurations

Working Range

Main Boom Charts

Telescopic Swingaway
Charts

Standard Counterweight Charts

Light Counterweight

Charts

Load Handling

2

2

5

6

7

14

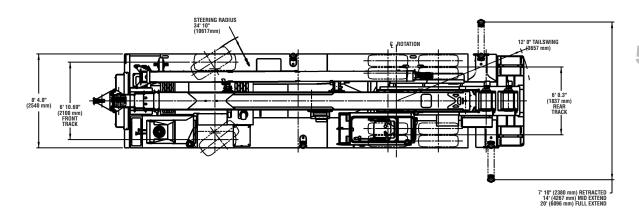
15

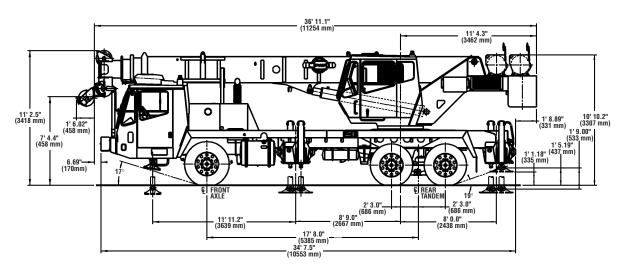
10



Truck Mounted Crane

dimensions





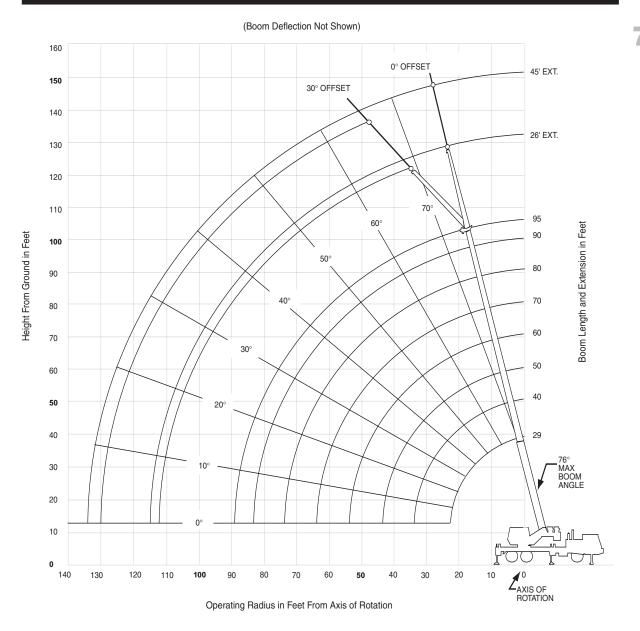
Weights

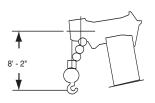
	Gr	oss	Front Axle		Rear	Axles
Axle Allowable	62,000	(28 123)	21,000	(9 525)	41,000	(18 598)
Unit Configuration lb. (kg.)						
Basic machine including 95 ft. main boom, main hoist with						
cable, Cummins/Eaton drivetrain, driver and light	47,472	(21 533)	17,651	(8 006)	29,821	(13 527)
counterweight package.						
Additions:						
Standard counterweight package (includes IPO)	1,812	(822)	-883	(-401)	2,695	(1222)
Heavy counterweight package (includes IPO)	7,972	(3 616)	-1,035	(-470)	9,007	(4 086)
25 ton (22 mt) hookblock (front stowage)	550	(250)	755	(342)	-205	(-93)
7.5 ton (6.8 mt)headache ball (front stowage)	300	(136)	413	(187)	-113	(-51)
7.5 ton (6.8)headache ball (rear stowage, includes mount)	325	(147)	-144	(-65)	469	(213)
Swingaway carrier brackets	85	(39)	40	(18)	45	(20)
26 ft. (7.9 m) swingaway	1,300	(590)	1,006	(456)	294	(133)
26 - 45 ft. (7.9 - 13.7 m) telescoping swingaway	1,790	(812)	1,351	(613)	439	(199)
Auxiliary boom nose	114	(52)	165	(75)	-51	(-23)
Auxiliary hoist with rope	339	(154)	-163	(-74)	502	(228)
Air conditioning superstructure cab	205	(93)	-47	(-21)	252	(114)
Air conditioning chassis cab	81	(37)	94	(43)	-13	(-6)

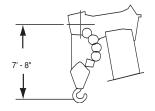
5

working range

29-95' main boom + 26-45' lattice extension







Dimensions are for largest Grove furnished hook block and headache ball, with anti-two block activated.

load charts

	29 - 95	ft.	8,460	lbs		00% 0' 0"		Q 360°			29 - 95	ft.	8,460	lbs		00% 0' 0"		Over Rear	
)						Pounds										Pounds			
	\Box				Main Boo	m Length	n in Feet				Ō				Main Bo	om Lengt	th in Feet		
	Feet	29	40	50	60	70	80	90	95	l	Feet	29	40	50	60	70	80	90	95
	9	80,000 (63)									9	80,000 (63)							
	10	60,850 (61)	50,100 (69.5)	46,950 (74.5)							10	60,850 (61)	50,100 (69.5)	46,950 (74.5)					
	12	55,050 (56)	50,100 (66.5)	44,950 (72)	38,850 (75.5)						12	55,050 (56)	50,100 (66.5)	44,950 (72)	38,850 (75.5)				
	15	46,300 (48)	45,050 (61.5)	41,050 (68)	36,000 (72.5)	29,450 (75)	*22,450 (76)				15	46,300 (48)	45,050 (61.5)	41,050 (68)	36,000 (72.5)	29,450 (75)	*22,450 (76)		
	20	32,750 (30)	31,900 (52.5)	34,100 (61.5)	29,500 (67)	27,400 (71)	22,450 (73.5)	*18,550 (76)	*15,500 (76)		20	32,750 (30)	31,900 (52.5)	34,100 (61.5)	29,500 (67)	27,400 (71)	22,450 (73.5)	*18,550 (76)	*15,500 (76)
	25	(33)	24,000 (42.5)	25,800 (54.5)	24,800 (61.5)	23,100 (66.5)	19,250 (70)	16,500 (72.5)	15,300 (74)		25		24,000 (42.5)	25,800 (54.5)	24,800 (61.5)	23,100 (66.5)	19,250 (70)	16,500 (72.5)	15,300 (74)
	30		18,800 (29)	20,300 (47)	20,600 (56)	19,600 (61.5)	16,850 (66)	14,400 (69)	13,200 (70.5)		30		18,800 (29)	20,300 (47)	20,600 (56)	19,600 (61.5)	16,850 (66)	14,400 (69)	13,200 (70.5)
	35		(==)	15,550 (38)	15,850 (49.5)	16,000 (57)	14,850 (62)	12,700 (65.5)	11,500 (67.5)		35	_		15,550 (38)	15,850 (49.5)	16,000 (57)	14,850 (62)	12,700 (65.5)	11,500 (67.5)
	40			12,800 (26)	13,050 (42.5)	13,200 (51.5)	13,250 (57.5)	11,000	10,000 (64)		40			12,800 (26)	13,050 (42.5)	13,200 (51.5)	13,250 (57.5)	11,000 (62)	10,000 (64)
	45			,,,,,	10,900 (34.5)	10,900 (46)	10,900 (53)	9,630 (58)	9,060 (60.5)		45				10,900 (34.5)	11,100 (46)	11,200 (53)	9,630 (58)	9,060 (60.5)
	50				8,990 (23.5)	9,020 (39.5)	9,030 (48)	8,740 (54.5)	7,990 (57)		50				9,240 (23.5)	9,410 (39.5)	9,530 (48)	8,740 (54.5)	7,990 (57)
	55					7,550 (32)	7,560 (43)	7,670 (50)	7,100 (53)		55					8,030 (32)	8,150 (43)	7,760 (50)	7,100 (53)
	60					6,350 (22)	6,380 (37)	6,470 (45.5)	6,320 (49)		60					6,870 (22)	7,000 (37)	6,920 (45.5)	6,320 (49)
	65						5,410 (30)	5,490 (40.5)	5,530 (44.5)		65						6,020 (30)	6,110 (40.5)	5,650 (44.5)
	70						4,580 (20.5)	4,670 (35)	4,700 (40)		70						5,190 (20.5)	5,280 (35)	5,080 (40)
	75							3,970 (28.5)	4,000 (34.5)		75							4,560 (28.5)	4,570 (34.5)
	80							3,360 (19.5)	3,400 (28)		80							3,930 (19.5)	3,960 (28)
	85								2,860 (19.5)		85								3,410 (19.5)
	Maximum	boom and boom ler	ngth (ft.) a	t 0º boom	angle (no				0 95	N	Maximum.	boom lenç	gth (ft.) at	0º boom a	ngth (no la ngle (no la				0 95
) Boom an acity is ba										Boom and acity is bas		degrees. ximum bo	om angle.				
	Lifting Capacities at Zero Degree Boom Angle										Lifting C		at Zero De	-	-				
	Boom Angle	29	40	Mair 50	n Boom Le 60	ngth in Fe	et 80	90	95		Boom Angle	29	40	Maii 50	n Boom L 60	ength in F 70	eet 80	90	95
	0°	26,150 (22.8)	15,850 (33.8)	11,000 (43.8)	7,790 (53.8)	5,570 (63.8)	4,030 (73.8)	2,940 (83.8)	2,480 (89)		0°	26,150 (22.8)	15,850 (33.8)	11,100 (43.8)	8,140 (53.8)	6,100 (63.8)	4,620 (73.8)	3,490 (83.8)	3,000 (89)
	NOTE: () Reference	e radii in	feet.	, ,	. , ,		A6-8	329-102810	N	IOTE: ()	Reference	radii in fe	et.				A6-8	329-10281



load charts



29 - 95 ft. 2	26 - 45 ft.	8,460 lbs	100% 20' 0"	360°				
		Pounds						
	26 ft. LEN	NGTH	45 ft. LEN	LENGTH				
Feet	0° OFFSET	30° OFFSET	0° OFFSET	30° OFFSET				
30	*8,200 (76)							
35	8,200 (73.5)		*5,250 (76)					
40	8,200 (71)	*5,780 (76)	5,250 (75)					
45	8,120 (68.5)	5,780 (73.5)	4,940 (73)					
50	7,350 (66)	5,360 (71)	4,540 (71)					
55	6,370 (63.5)	4,750 (68)	4,150 (68.5)	*2,730 (76)				
60	5,670 (60.5)	4,290 (65)	3,890 (66.5)	2,730 (74.5)				
65	4,820 (57.5)	3,870 (62)	3,740 (64)	2,730 (72)				
70	4,200 (54.5)	3,530 (59)	3,600 (61.5)	2,580 (69.5)				
75	3,680 (51.5)	3,230 (56)	3,470 (59)	2,520 (67)				
80	3,080 (48.5)	3,000 (52.5)	3,240 (56.5)	2,460 (64)				
85	2,520 (45)	2,780 (49)	3,050 (54)	2,420 (61.5)				
90	2,050 (41)	2,500 (45)	2,820 (51)	2,390 (58.5)				
95	1,670 (37)	2,070 (40.5)	2,520 (48)	2,370 (55.5)				
100	1,370 (32.5)	1,650 (35.5)	2,170 (45)	2,310 (52)				
105	1,020 (27)	(00.0)	1,860 (42)	2,000 (48.5)				
110	1511		1,550 (38.5)	1,580 (45)				
115			1,230 (34.5)	1,260 (40.5)				
120			104.07	1,000 (35.5)				
Min. boom angle for indicated length	20°	30°	31º	30°				
(no load) Max. boom length at 0° boom angle (no load)	90	ft.	80	ft.				

NOTE: () Boom angles are in degrees.
*This capacity based on maximum boom angle.

A6-829-101542

NOTES:

- All capacities above the bold line are based on structural strength of boom extension.
- 2. 26 ft. and 45 ft. boom extension lengths may be used for single line lifting service.
- 3. Radii listed are for a fully extended boom with the boom extension erected. For main boom lengths less than fully extended, the rated loads are determined by boom angle. Use only the column which corresponds to the boom extension length and offset for which the machine is configured. For boom angles not shown, use the rating of the next lower boom angle.
- WARNING: Operation of this machine with heavier loads than the capacities listed is strictly prohibited. Machine tipping with boom extension occurs rapidly and without advance warning.
- Boom angle is the angle above or below horizontal of the longitudinal axis of the boom base section after lifting rated load.
- 6. Capacities listed are with outriggers properly extended and vertical jacks set only.



load charts

10

29 - 95 IL.	20 - 43 II.	0,400 IDS	20' 0"	Rear		
			Pounds			
	26 ft. L	ENGTH	45 ft. LE	LENGTH		
Feet	0° OFFSET	30° OFFSET	0° OFFSET	30° OFFSET		
30	*8,200 (76)					
35	8,200 (73.5)		*5,250 (76)			
40	8,200 (71)	*5,780 (76)	5,250 (75)			
45	8,120 (68.5)	5,780 (73.5)	4,940 (73)			
50	7,350 (66)	5,360 (71)	4,540 (71)			
55	6,370 (63.5)	4,750 (68)	4,150 (68.5)	*2,730 (76)		
60	5,670 (60.5)	4,290 (65)	3,890 (66.5)	2,730 (74.5)		
65	4,820 (57.5)	3,870 (62)	3,740 (64)	2,730 (72)		
70	4,200 (54.5)	3,530 (59)	3,600 (61.5)	2,580 (69.5)		
75	3,680 (51.5)	3,230 (56)	3,470 (59)	2,520 (67)		
80	3,080 (48.5)	3,000 (52.5)	3,240 (56.5)	2,460 (64)		
85	2,520 (45)	2,780 (49)	3,050 (54)	2,420 (61.5)		
90	2,050 (41)	2,500 (45)	2,820 (51)	2,390 (58.5)		
95	1,670 (37)	2,100 (40.5)	2,520 (48)	2,370 (55.5)		
100	1,370 (32.5)	1,650 (35.5)	2,170 (45)	2,310 (52)		
105	1,020 (27)		1,860 (42)	2,000 (48.5)		
110			1,550 (38.5)	1,580 (45)		
115			1,230 (34.5)	1,260 (40.5)		
120				1,000 (35.5)		
Min. boom angle for indicated lengt (no load)	h 20°	30°	31º	30°		
Max. boom lengt at 0° boom angle (no load)	h	90 ft.	8	0 ft.		
NOTE: () Boom an	gles are in degrees	s. A6-	-829-101564			

NOTE: () Boom angles are in degrees. *This capacity based on maximum boom angle.

NOTES:

- 1. All capacities above the bold line are based on structural strength of boom extension.
- 2. 26 ft. and 45 ft. boom extension lengths may be used for single line lifting service.
- 3. Radii listed are for a fully extended boom with the boom extension erected. For main boom lengths less than fully extended, the rated loads are determined by boom angle. Use only the column which corresponds to the boom extension length and offset for which the machine is configured. For boom angles not shown, use the rating of the next lower boom angle.
- 4. WARNING: Operation of this machine with heavier loads than the capacities listed is strictly prohibited. Machine tipping with boom extension occurs rapidly and without advance warning.
- 5. Boom angle is the angle above or below horizontal of the longitudinal axis of the boom base section after lifting rated load.
- 6. Capacities listed are with outriggers properly extended and vertical jacks set only.