



**DANIEL SMITH INDUSTRIES LTD**  
 315 Flaxton Road, Rangiora, 7400  
 Canterbury, New Zealand.  
 Phone: 0064 (0) 3 313 9902  
 Fax: 0064 (0) 3 313 9904  
 Mobile 0064 (0) 21 33 66 23  
 Email: [daniel@danielsmith.co.nz](mailto:daniel@danielsmith.co.nz)

# GROVE

## RT880E

**80 Ton / 2 axle / 4 x 4 Rough Terrain Crane**  
 (2009) Serial No. #230161 and #229118

Unit: metric ton

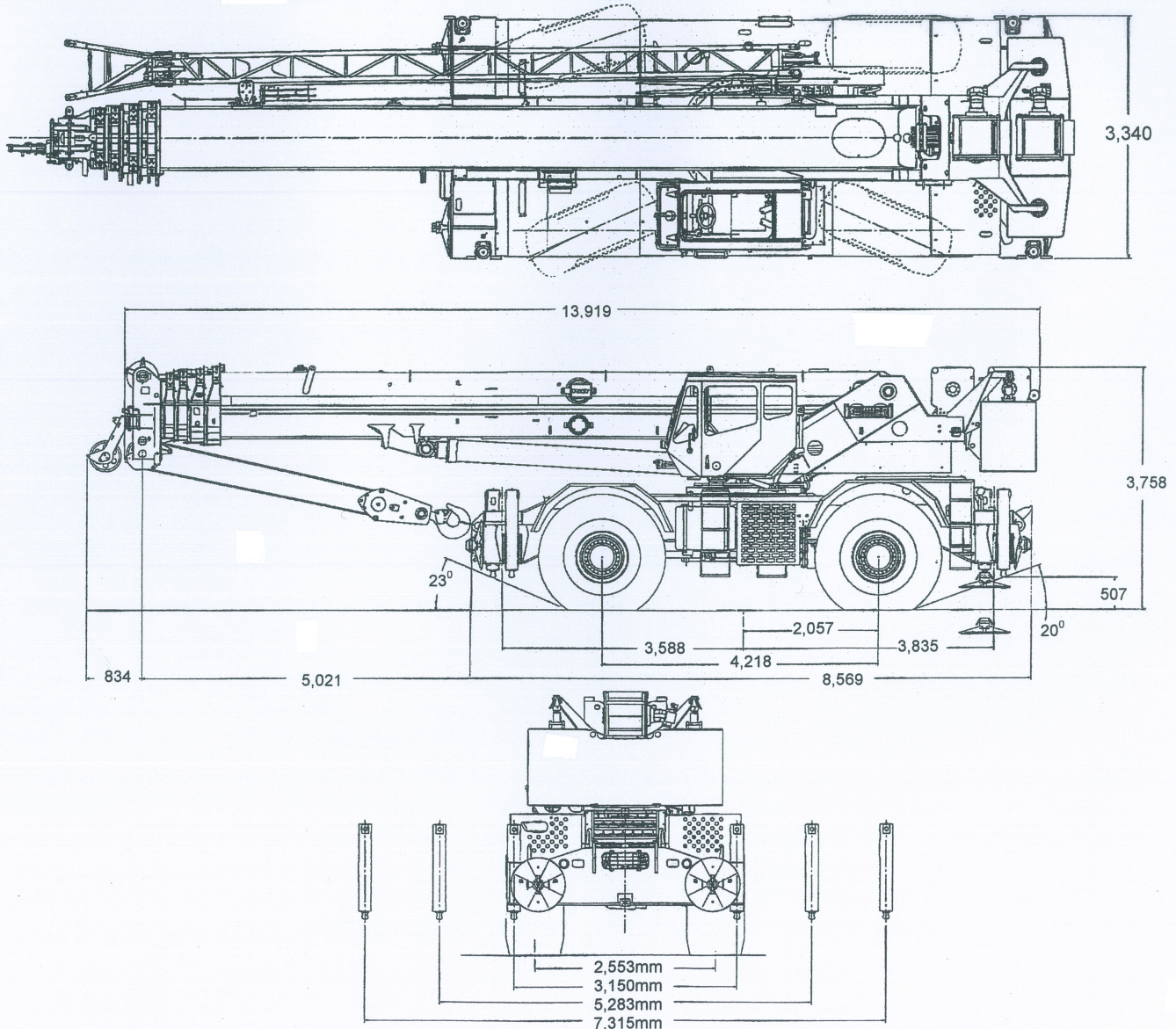
Page 1 of 12

## SPECIFICATIONS AND LIFT CHARTS

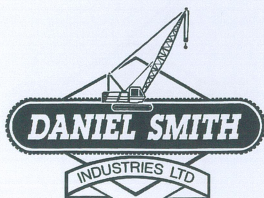
39 metre main boom + Fly Jib 10, 17, 23, 29 metre options  
 Main + Auxiliary Winch  
 Crane Weight: (with 8,156kg counterweight) = 49 ton



### Dimensions







**DANIEL SMITH INDUSTRIES LTD**  
 315 Flaxton Road, Rangiora, 7400  
 Canterbury, New Zealand.  
 Phone: 0064 (0) 3 313 9902  
 Fax: 0064 (0) 3 313 9904  
 Mobile 0064 (0) 21 33 66 23  
 Email: [daniel@danielsmith.co.nz](mailto:daniel@danielsmith.co.nz)

# GROVE

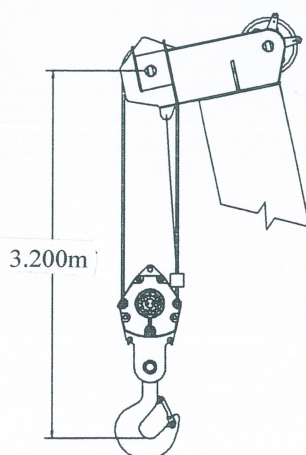
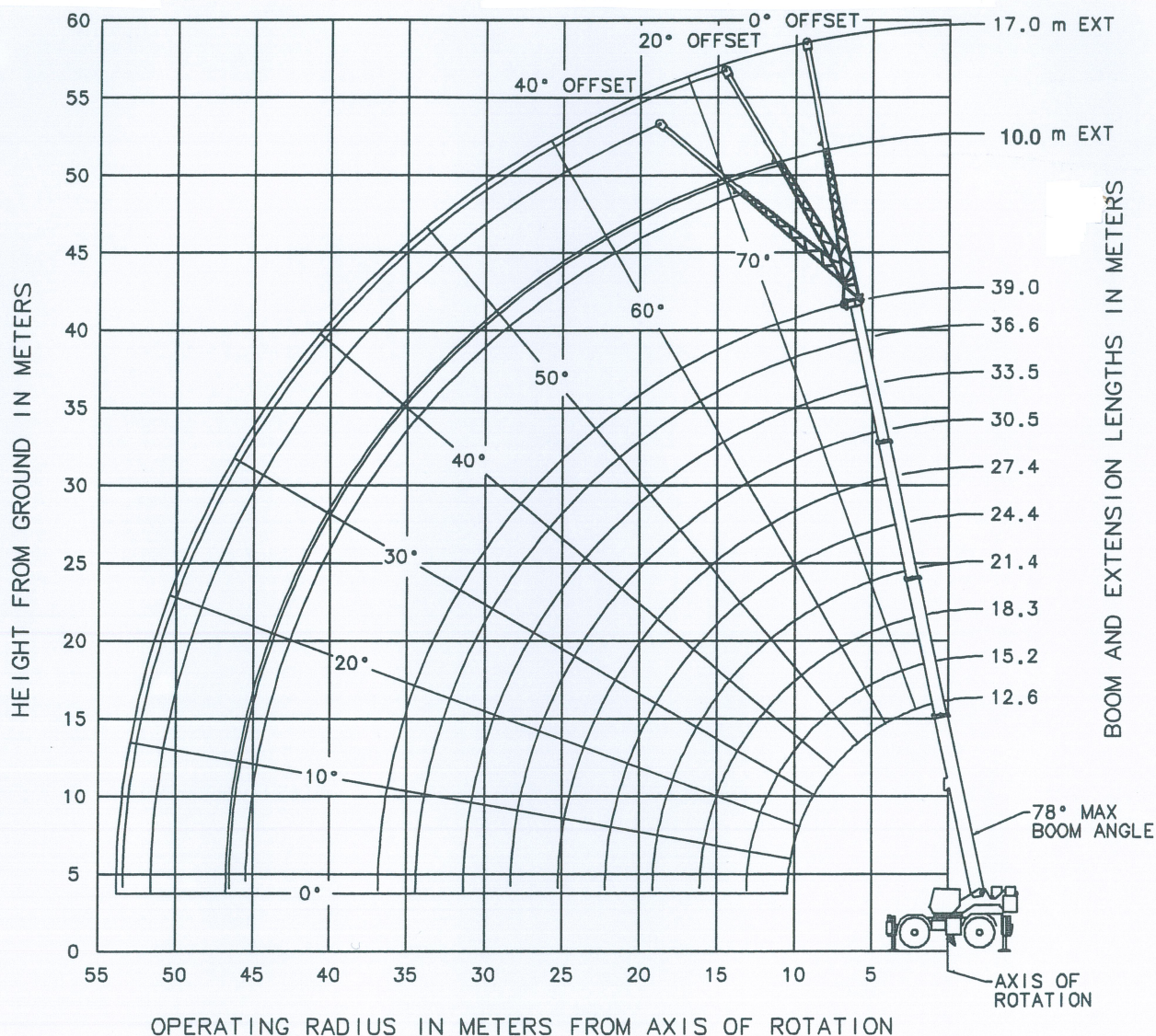
## RT880E

**80 Ton / 2 axle / 4 x 4 Rough Terrain Crane**  
 (2009) Serial No. #230161 and #229118

Unit: metric ton

Page 2 of 12

### WORKING RANGES WITH BI-FOLD EXTENSION



DIMENSIONS ARE FOR  
 LARGEST GROVE FURNISHED  
 HOOKBLOCK AND OVERHAUL  
 BALL, WITH ANTI-TWO  
 BLOCK ACTIVATED.





**DANIEL SMITH INDUSTRIES LTD**  
 315 Flaxton Road, Rangiora, 7400  
 Canterbury, New Zealand.  
 Phone: 0064 (0) 3 313 9902  
 Fax: 0064 (0) 3 313 9904  
 Mobile 0064 (0) 21 33 66 23  
 Email: [daniel@danielsmith.co.nz](mailto:daniel@danielsmith.co.nz)

# GROVE

## RT880E

**80 Ton / 2 axle / 4 x 4 Rough Terrain Crane**  
 (2009) Serial No. #230161 and #229118

Unit: metric ton

Page 3 of 12

### WORKING RANGES WITH 6.1M AND 12.2M FLY INSERTS

#### Range Diagram

**880E**



12,6 - 39,0 m



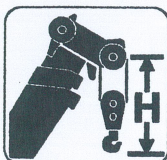
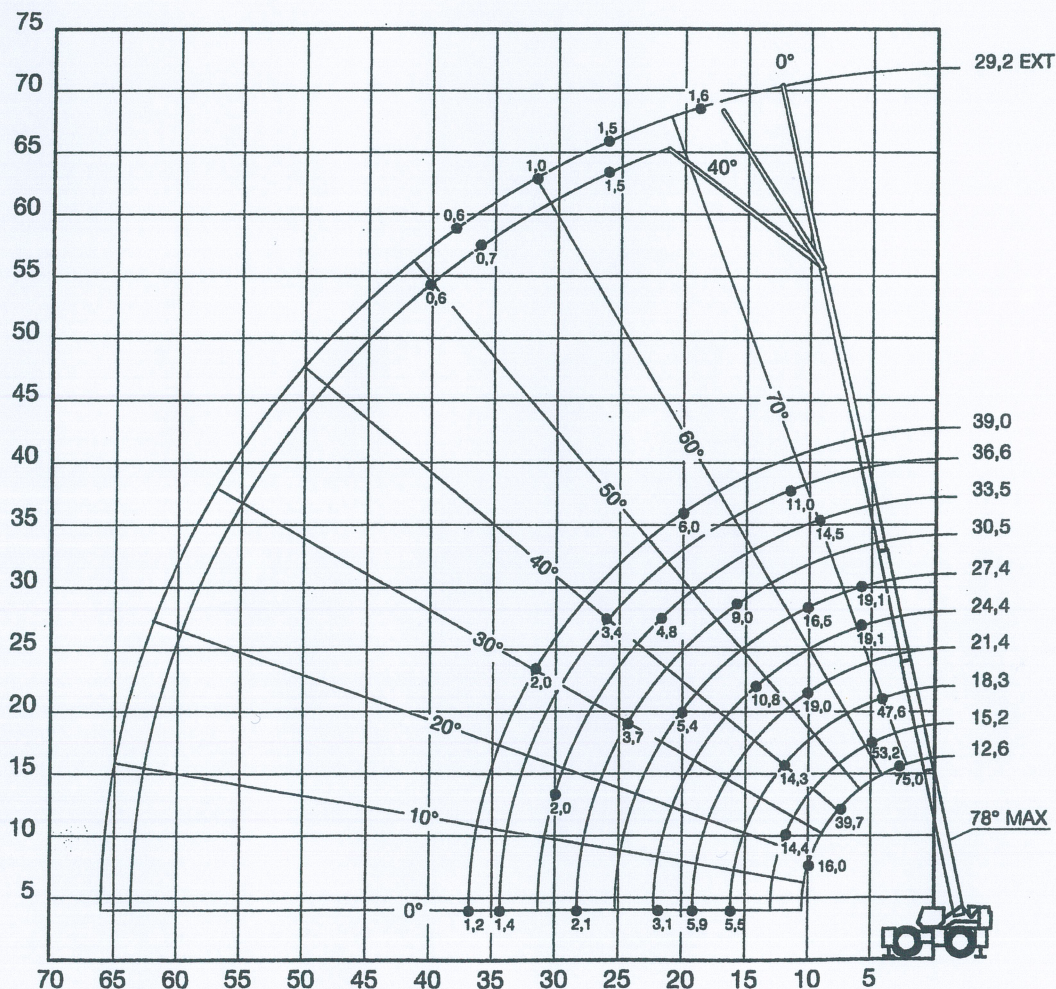
100%



360°



8,2 t



H  
(mm)  
(l)

3020





**DANIEL SMITH INDUSTRIES LTD**  
 315 Flaxton Road, Rangiora, 7400  
 Canterbury, New Zealand.  
 Phone: 0064 (0) 3 313 9902  
 Fax: 0064 (0) 3 313 9904  
 Mobile 0064 (0) 21 33 66 23  
 Email: [daniel@danielsmith.co.nz](mailto:daniel@danielsmith.co.nz)

# GROVE

## RT880E

**80 Ton / 2 axle / 4 x 4 Rough Terrain Crane**  
 (2009) Serial No. #230161 and #229118

Unit: metric ton

Page 4 of 12

### RATED LIFTING CAPACITIES IN KILOGRAMS WITH 8,165 kg CWT 12.6 m - 39.0 m BOOM

ON OUTRIGGERS FULLY EXTENDED - 360°

Radius in Meters	#0001									
	Main Boom Length in Meters									
	12.6	15.2	18.3	**21.4	24.4	27.4	30.5	33.5	36.6	39.0
3	++75,000 (71)	56,225 (75)	47,850 (78)							
3.5	+68,025 (68.5)	56,225 (73)	47,850 (76)							
4	64,625 (66)	56,225 (71)	47,675 (74.5)	26,975 (77)						
4.5	59,675 (63.5)	56,225 (69)	47,225 (73)	26,975 (76)	19,075 (78)					
5	55,125 (60.5)	53,150 (66.5)	44,850 (71)	26,975 (74.5)	19,075 (76.5)	*19,050 (78)				
6	46,075 (55)	45,975 (62.5)	39,475 (67.5)	26,975 (71.5)	19,075 (74.5)	19,050 (76.5)	*17,975 (78)			
7	39,750 (48.5)	38,600 (58)	35,350 (64)	26,325 (68.5)	19,075 (72)	19,050 (74)	17,975 (76)	*14,475 (78)		
8	32,775 (41.5)	30,925 (53)	28,800 (60.5)	25,000 (65.5)	19,075 (69)	18,700 (72)	17,575 (74)	14,475 (76)	11,675 (78)	*9,975 (78)
9	25,650 (33)	25,200 (47.5)	23,850 (56.5)	22,450 (62.5)	19,075 (66.5)	17,825 (69.5)	16,525 (72)	14,475 (74.5)	11,675 (76)	9,975 (77.5)
10	15,975 (20.5)	20,475 (42)	20,200 (52.5)	19,000 (59.5)	18,075 (64)	16,450 (67.5)	15,150 (70)	13,800 (72.5)	11,675 (74.5)	9,975 (76)
12		14,375 (26.5)	14,275 (43.5)	14,050 (52.5)	14,225 (58.5)	13,825 (62.5)	12,650 (66)	11,800 (69)	10,925 (71)	9,975 (72.5)
14			10,500 (32)	10,300 (45)	10,825 (52.5)	11,150 (57.5)	10,825 (61.5)	10,075 (65)	9,530 (67.5)	9,170 (69.5)
16			5,500 (10.5)	7,725 (36)	8,335 (45.5)	8,675 (52)	9,020 (57)	8,720 (61)	8,210 (64)	7,880 (66)
18	See Note 16			5,855 (23.5)	6,480 (38)	6,835 (46.5)	7,145 (52)	7,340 (57)	7,145 (60.5)	6,830 (63)
20					5,080 (28.5)	5,415 (40)	5,730 (47)	5,930 (52.5)	6,125 (56.5)	5,985 (59.5)
22					3,125 (11.5)	4,300 (32)	4,610 (41)	4,825 (47.5)	5,020 (52.5)	5,160 (55.5)
24						3,405 (21)	3,695 (34.5)	3,925 (42.5)	4,135 (48.5)	4,275 (52)
26							2,950 (26)	3,180 (36.5)	3,400 (43.5)	3,550 (47.5)
28							2,120 (11.5)	2,555 (29.5)	2,775 (38.5)	2,930 (43.5)
30								2,025 (20)	2,245 (32.5)	2,405 (38.5)
32									1,790 (25)	1,950 (33)
34									1,395 (12.5)	1,555 (26)
36										1,210 (15.5)
Minimum boom angle (deg.) for indicated length (no load)										9
Maximum boom length (m) at 0 deg. boom angle (no load)										36.6

#LMI operating code. Refer to LMI manual for instructions.

\*This capacity is based upon maximum obtainable boom angle.

Note: ( ) Boom angles are in degrees.

+9 parts line required to lift this capacity (using aux. boom nose). Refer to Operator's & Safety Handbook for reeving diagram.

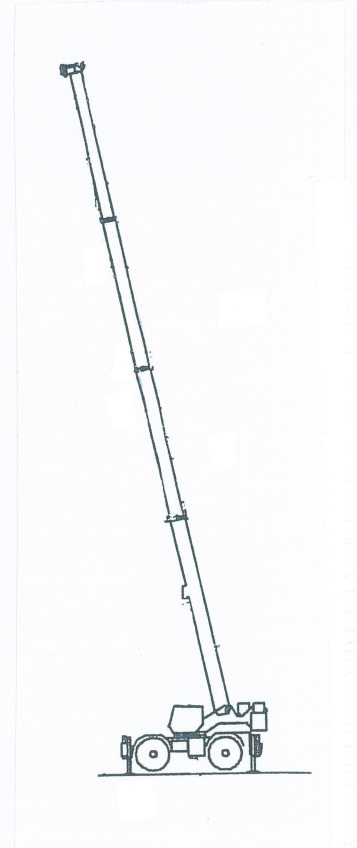
+10 parts line required to lift this capacity (using aux. boom nose). Refer to Operator's & Safety Handbook for reeving diagram.

Lifting Capacities at Zero Degree Boom Angle										
Boom Angle	Main Boom Length in Meters									
	12.6	15.2	18.3	**21.4	24.4	27.4	30.5	33.5	36.6	
0°	9,410 (10.4)	6,870 (13)	4,760 (16.1)	3,035 (19.2)	2,310 (22.2)	1,765 (25.2)	1,315 (28.3)	905 (31.3)	590 (34.4)	

Note: ( ) Reference radii in meters.

\*\*This boom length is with inner-mid fully extended and outer-mid & fly fully retracted.

80005124







**DANIEL SMITH INDUSTRIES LTD**  
 315 Flaxton Road, Rangiora, 7400  
 Canterbury, New Zealand.  
 Phone: 0064 (0) 3 313 9902  
 Fax: 0064 (0) 3 313 9904  
 Mobile 0064 (0) 21 33 66 23  
 Email: [daniel@danielsmith.co.nz](mailto:daniel@danielsmith.co.nz)

# GROVE

## RT880E

**80 Ton / 2 axle / 4 x 4 Rough Terrain Crane**  
 (2009) Serial No. #230161 and #229118

Unit: metric ton

Page 5 of 12

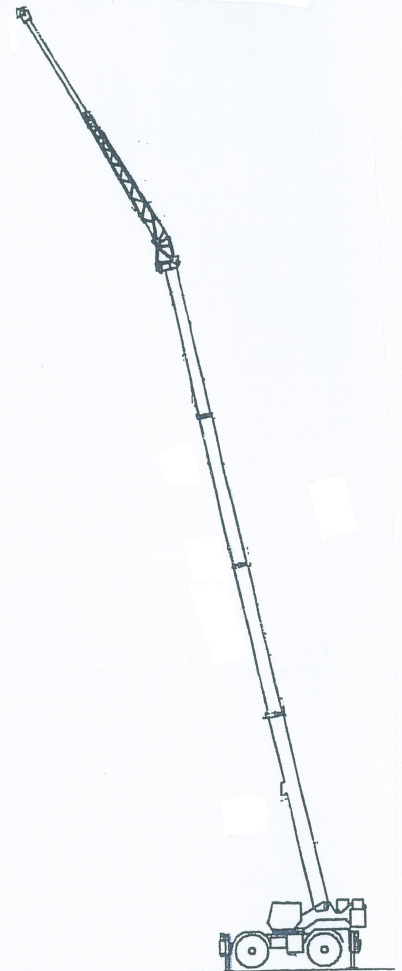
### 10.0 - 17.0 m FOLDING BOOM EXTENSION WITH 8,165 kg COUNTERWEIGHT ON OUTRIGGERS FULLY EXTENDED - 360°

Radius in Meters	10.0 m LENGTH			17.0 m LENGTH		
	0° OFFSET	20° OFFSET	40° OFFSET	0° OFFSET	20° OFFSET	40° OFFSET
	#0021	#0022	#0023	#0041	#0042	#0043
10	*5,395 (78)					
12	5,395 (77.5)			*2,745 (78)		
14	5,395 (75)	5,285 (78)		2,745 (77.5)		
16	5,395 (72.5)	4,620 (75.5)	*4,080 (78)	2,745 (75)		
18	5,065 (70)	4,155 (73)	3,640 (75.5)	2,745 (73)	*2,450 (78)	
20	4,490 (67.5)	3,760 (70.5)	3,345 (73)	2,745 (71)	2,400 (76.5)	
22	4,020 (64.5)	3,420 (67.5)	3,085 (70)	2,710 (68.5)	2,340 (74)	*2,070 (78)
24	3,620 (62)	3,130 (65)	2,855 (67.5)	2,650 (66.5)	2,280 (72)	2,010 (76)
26	3,275 (59)	2,875 (62)	2,650 (64.5)	2,515 (64)	2,100 (69.5)	1,860 (73.5)
28	2,980 (56.5)	2,655 (59)	2,475 (61.5)	2,270 (61.5)	1,930 (67)	1,725 (71)
30	2,725 (53)	2,455 (56)	2,310 (58)	2,060 (59)	1,775 (64.5)	1,605 (68)
32	2,290 (50)	2,280 (53)	2,160 (55)	1,870 (56.5)	1,635 (62)	1,495 (65.5)
34	1,900 (46.5)	2,095 (49.5)	2,030 (51.5)	1,710 (54)	1,510 (59.5)	1,395 (62.5)
36	1,555 (43)	1,720 (46)	1,810 (47.5)	1,560 (51)	1,400 (56.5)	1,305 (60)
38	1,250 (39)	1,385 (42)		1,430 (48.5)	1,290 (53.5)	1,220 (56.5)
40	975 (35)	1,085 (37.5)		1,185 (45.5)	1,200 (50.5)	1,135 (53.5)
42	725 (30)	820 (32.5)		945 (42)	1,115 (47.5)	1,065 (50)
44	505 (24)			725 (38.5)	920 (44)	
46				525 (35)	695 (40)	
Minimum boom angle (°) for indicated length (no load)	15	28	44	23	31	46
Maximum boom length (m) at 0° boom angle (no load)	33.5			33.5		

NOTE: ( ) Boom angles are in degrees.

#LMI operating code. Refer to LMI manual for operating instructions.

\*This capacity is based upon maximum boom angle.



1. All capacities above the bold line are based on structural strength of boom extension
2. The 10.0 m and 17.0 m extension lengths may be used for single line lifting service only.
3. For main boom lengths less than 39.0 m with the boom extension erected, 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 set up. For boom angles not shown, use 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.
7. When lifting over the main boom nose with 10.0 m or 17.0 m extension erected, the outriggers must be fully extended or 50% extended (5.3 m spread).





**DANIEL SMITH INDUSTRIES LTD**  
 315 Flaxton Road, Rangiora, 7400  
 Canterbury, New Zealand.  
 Phone: 0064 (0) 3 313 9902  
 Fax: 0064 (0) 3 313 9904  
 Mobile 0064 (0) 21 33 66 23  
 Email: [daniel@danielsmith.co.nz](mailto:daniel@danielsmith.co.nz)

# GROVE

## RT880E

**80 Ton / 2 axle / 4 x 4 Rough Terrain Crane**  
 (2009) Serial No. #230161 and #229118

Unit: metric ton

Page 6 of 12

### 10.0 m - 17.0 m FOLDING BOOM EXTENSION WITH INSERTS WITH 8,165 kg COUNTERWEIGHT

#### ON OUTRIGGERS FULLY EXTENDED - 360°

Radius in Meters	23.1 m (17.0 m LENGTH + 1 INSERT)			29.2 m (17.0 m LENGTH + 2 INSERTS)		
	0° OFFSET	20° OFFSET	40° OFFSET	0° OFFSET	20° OFFSET	40° OFFSET
	#0084	#0085	#0086	#0084	#0085	#0086
16	2,200 (78)					
18	2,200 (76.5)			1,595 (78)		
20	2,200 (74.5)	*2,220 (78)		1,595 (76)		
22	2,200 (72.5)	2,125 (77)		1,595 (74.5)	*1,695 (78)	
24	2,155 (70.5)	1,905 (74.5)	*1,835 (78)	1,595 (72.5)	1,585 (77)	
26	1,945 (68.5)	1,710 (72.5)	1,580 (76.5)	1,485 (71)	1,395 (75)	*1,460 (78)
28	1,730 (66.5)	1,540 (70.5)	1,440 (74)	1,295 (69)	1,235 (73)	1,195 (76)
30	1,540 (64.5)	1,395 (68.5)	1,310 (72)	1,120 (67)	1,085 (71)	1,060 (74.5)
32	1,375 (62)	1,255 (66)	1,190 (69.5)	970 (65)	950 (69.5)	935 (72.5)
34	1,230 (60)	1,135 (64)	1,085 (67)	840 (63)	835 (67.5)	830 (70)
36	1,100 (57.5)	1,025 (61.5)	985 (65)	720 (61)	725 (65.5)	730 (68)
38	985 (55)	925 (59)	895 (62.5)	615 (59)	630 (63)	635 (66)
40	880 (52.5)	835 (56.5)	815 (59.5)	520 (57)	540 (61)	550 (63.5)
42	785 (50)	745 (54)	735 (57)			
44	700 (47.5)	670 (51.5)	665 (54)			
46	545 (44.5)	595 (48.5)	595 (51)			
48		530 (45.5)	535 (47.5)			
Min. boom angle (°) for indicated length (no load)	36	40	44	54	58	60
Max. boom length (m) at 0° boom angle (no load)	21.4			18.3		

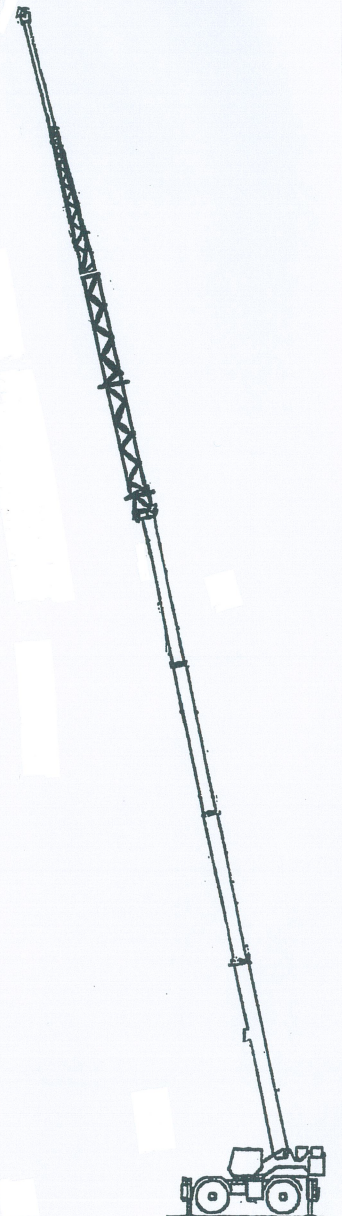
NOTE: ( ) Boom angles are in degrees.

A6-829-103699C

#LMI operating code. Refer to LMI manual for operating instructions.

\*This capacity is based upon maximum boom angle.

1. All capacities above the bold line are based on structural strength of boom extension
2. The 17.0 m extension length may be used for single line lifting service only.
3. For main boom lengths less than 39.0 m with the boom extension erected, 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 set up. For boom angles not shown, use 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. When lifting over the main boom nose with 17.0 m extension erected and inserts, the outriggers must be fully extended and vertical jacks set.







**DANIEL SMITH INDUSTRIES LTD**  
 315 Flaxton Road, Rangiora, 7400  
 Canterbury, New Zealand.  
 Phone: 0064 (0) 3 313 9902  
 Fax: 0064 (0) 3 313 9904  
 Mobile 0064 (0) 21 33 66 23  
 Email: [daniel@danielsmith.co.nz](mailto:daniel@danielsmith.co.nz)

# GROVE

## RT880E

**80 Ton / 2 axle / 4 x 4 Rough Terrain Crane**  
 (2009) Serial No. #230161 and #229118

Unit: metric ton

Page 7 of 12

### RATED LIFTING CAPACITIES IN KILOGRAMS WITH 8,165 kg CWT 12.6 m - 39.0 m BOOM

ON OUTRIGGERS 50% EXTENDED (5.3 m spread) - 360°

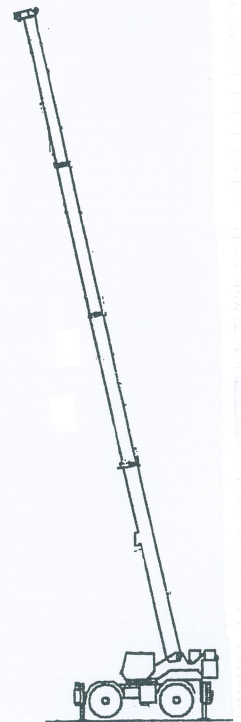
Radius in Meters	#4001									
	Main Boom Length in Meters									
	12.6	15.2	18.3	**21.4	24.4	27.4	30.5	33.5	36.6	39.0
3	+67,350 (71)	56,225 (75)	47,850 (78)							
3.5	59,950 (68.5)	56,225 (73)	47,850 (76)							
4	53,375 (66)	52,675 (71)	47,325 (74.5)	26,975 (77)						
4.5	47,450 (63.5)	44,850 (69)	40,850 (73)	26,975 (76)	19,075 (78)					
5	41,425 (60.5)	38,075 (66.5)	34,925 (71)	26,975 (74.5)	19,075 (76.5)	*19,050 (78)				
6	31,000 (55)	28,850 (62.5)	26,700 (67.5)	24,850 (71.5)	19,075 (74.5)	19,050 (76.5)	*17,975 (78)			
7	24,400 (48.5)	22,825 (58)	21,275 (64)	19,900 (68.5)	19,075 (72)	19,050 (74)	17,975 (76)	*14,475 (78)		
8	19,475 (41.5)	18,600 (53)	17,425 (60.5)	16,325 (65.5)	16,175 (69)	15,950 (72)	15,675 (74)	14,475 (76)	11,675 (78)	*9,975 (78)
9	15,525 (33)	15,225 (47.5)	14,500 (56.5)	13,650 (62.5)	13,625 (66.5)	13,525 (69.5)	13,375 (72)	13,175 (74.5)	11,675 (76)	9,975 (77.5)
10	12,625 (20.5)	12,475 (42)	12,225 (52.5)	11,525 (59.5)	11,625 (64)	11,600 (67.5)	11,525 (70)	11,400 (72.5)	11,250 (74.5)	9,975 (76)
12		8,710 (26.5)	8,625 (43.5)	8,410 (52.5)	8,645 (58.5)	8,760 (62.5)	8,785 (66)	8,770 (69)	8,715 (71)	8,665 (72.5)
14			6,155 (32)	6,005 (45)	6,530 (52.5)	6,720 (57.5)	6,840 (61.5)	6,880 (65)	6,880 (67.5)	6,875 (69.5)
16			4,420 (10.5)	4,250 (36)	4,820 (45.5)	5,190 (52)	5,355 (57)	5,460 (61)	5,500 (64)	5,525 (66)
18				2,950 (23.5)	3,545 (38)	3,885 (46.5)	4,200 (52)	4,335 (57)	4,415 (60.5)	4,470 (63)
20					2,560 (28.5)	2,880 (40)	3,190 (47)	3,405 (52.5)	3,530 (56.5)	3,605 (59.5)
22					1,780 (11.5)	2,085 (32)	2,375 (41)	2,595 (47.5)	2,800 (52.5)	2,885 (55.5)
24						1,435 (21)	1,715 (34.5)	1,935 (42.5)	2,145 (48.5)	2,290 (52)
26							1,170 (26)	1,390 (36.5)	1,600 (43.5)	1,750 (47.5)
28							710 (11.5)	930 (29.5)	1,145 (38.5)	1,295 (43.5)
30								540 (20)	750 (32.5)	905 (38.5)
32										570 (33)
Minimum boom angle (deg.) for indicated length (no load)								0	0	22
Maximum boom length (m) at 0 deg. boom angle (no load)								36.6		

#LMI operating code. Refer to LMI manual for instructions.

\*This capacity is based upon maximum obtainable boom angle.

Note: ( ) Boom angles are in degrees.

+9 parts line required to lift this capacity (using aux. boom nose). Refer to Operator's & Safety Handbook for reeving diagram.







**DANIEL SMITH INDUSTRIES LTD**  
 315 Flaxton Road, Rangiora, 7400  
 Canterbury, New Zealand.  
 Phone: 0064 (0) 3 313 9902  
 Fax: 0064 (0) 3 313 9904  
 Mobile 0064 (0) 21 33 66 23  
 Email: [daniel@danielsmith.co.nz](mailto:daniel@danielsmith.co.nz)

# GROVE

## RT880E

**80 Ton / 2 axle / 4 x 4 Rough Terrain Crane**  
 (2009) Serial No. #230161 and #229118

Unit: metric ton

Page 8 of 12

### 10.0 m - 17.0 m FOLDING BOOM EXTENSION WITH 8,165 kg CWT

#### ON OUTRIGGERS 50% EXTENDED (5.3 m spread) - 360°

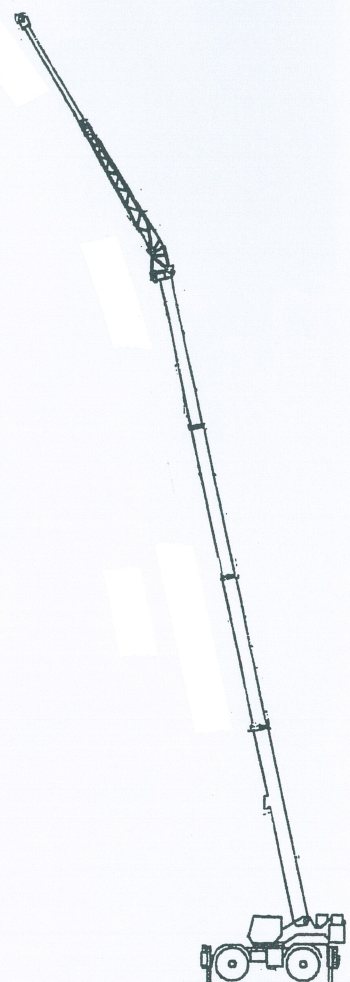
Radius in Meters	10.0 m LENGTH			17.0 m LENGTH		
	0° OFFSET	20° OFFSET	40° OFFSET	0° OFFSET	20° OFFSET	40° OFFSET
	#4021	#4022	#4023	#4041	#4042	#4043
10	*5,395 (78)					
12	5,395 (77.5)			*2,745 (78)		
14	5,395 (75)	5,285 (78)		2,745 (77.5)		
16	5,300 (72.5)	4,620 (75.5)	*4,080 (78)	2,745 (75)		
18	4,325 (70)	4,155 (73)	3,640 (75.5)	2,745 (73)	*2,450 (78)	
20	3,530 (67.5)	3,760 (70.5)	3,345 (73)	2,745 (71)	2,400 (76.5)	
22	2,880 (64.5)	3,305 (67.5)	3,085 (70)	2,710 (68.5)	2,340 (74)	*2,070 (78)
24	2,330 (62)	2,710 (65)	2,855 (67.5)	2,430 (66.5)	2,280 (72)	2,010 (76)
26	1,865 (59)	2,200 (62)	2,460 (64.5)	1,975 (64)	2,100 (69.5)	1,860 (73.5)
28	1,465 (56.5)	1,760 (59)	1,985 (61.5)	1,585 (61.5)	1,930 (67)	1,725 (71)
30	1,115 (53)	1,380 (56)	1,570 (58)	1,245 (59)	1,720 (64.5)	1,605 (68)
32	810 (50)	1,045 (53)	1,200 (55)	945 (56.5)	1,375 (62)	1,495 (65.5)
34	540 (46.5)	745 (49.5)	875 (51.5)	675 (54)	1,065 (59.5)	1,375 (62.5)
36			580 (47.5)		790 (56.5)	1,055 (60)
38					540 (53.5)	770 (56.5)
40						505 (53.5)
Minimum boom angle (°) for indicated length (no load)	42	45	43	48	51	51.5
Maximum boom length (m) at 0° boom angle (no load)	24.4			21.4		

NOTE: ( ) Boom angles are in degrees.

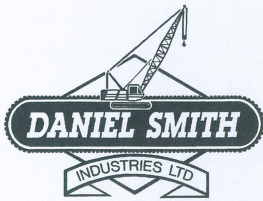
#LMI operating code. Refer to LMI manual for operating instructions.

\*This capacity is based upon maximum boom angle.

1. All capacities above the bold line are based on structural strength of boom extension
2. The 10.0 m and 17.0 m extension lengths may be used for single line lifting service only.
3. For main boom lengths less than 39.0 m with the boom extension erected, 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 set up. For boom angles not shown, use 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.
7. When lifting over the main boom nose with 10.0 m or 17.0 m extension erected, the outriggers must be fully extended or 50% extended (5.3 m spread).







**DANIEL SMITH INDUSTRIES LTD**  
 315 Flaxton Road, Rangiora, 7400  
 Canterbury, New Zealand.  
 Phone: 0064 (0) 3 313 9902  
 Fax: 0064 (0) 3 313 9904  
 Mobile 0064 (0) 21 33 66 23  
 Email: [daniel@danielsmith.co.nz](mailto:daniel@danielsmith.co.nz)

# GROVE

## RT880E

**80 Ton / 2 axle / 4 x 4 Rough Terrain Crane**  
 (2009) Serial No. #230161 and #229118

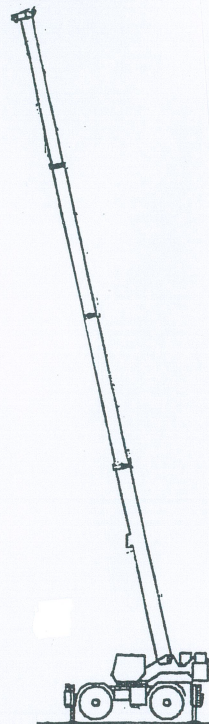
Unit: metric ton

Page 9 of 12

### RATED LIFTING CAPACITIES IN KILOGRAMS WITH 8,165 kg CWT 12.6 m - 39.0 m BOOM

ON OUTRIGGERS 0% EXTENDED (3.15 m spread) - 360°

Radius in Meters	#8001									
	Main Boom Length in Meters									
	12.6	15.2	18.3	**21.4	24.4	27.4	30.5	33.5	36.6	39.0
3	39,875 (71)	36,000 (75)	32,400 (78)							
3.5	32,500 (68.5)	29,675 (73)	26,950 (76)							
4	27,175 (66)	25,050 (71)	22,875 (74.5)	21,025 (77)						
4.5	23,150 (63.5)	21,450 (69)	19,725 (73)	18,175 (76)	17,675 (78)					
5	20,000 (60.5)	18,600 (66.5)	17,200 (71)	15,900 (74.5)	15,550 (76.5)	*15,150 (78)				
6	15,425 (55)	14,375 (62.5)	13,350 (67.5)	12,425 (71.5)	12,300 (74.5)	12,125 (76.5)	*11,875 (78)			
7	12,275 (48.5)	11,400 (58)	10,600 (64)	9,900 (68.5)	9,955 (72)	9,885 (74)	9,775 (76)	*9,630 (78)		
8	9,955 (41.5)	9,220 (53)	8,545 (60.5)	7,955 (65.5)	8,130 (69)	8,170 (72)	8,140 (74)	8,065 (76)	7,960 (78)	*7,870 (78)
9	7,870 (33)	7,525 (47.5)	6,940 (56.5)	6,440 (62.5)	6,670 (66.5)	6,795 (69.5)	6,835 (72)	6,815 (74.5)	6,760 (76)	6,710 (77.5)
10	6,235 (20.5)	6,110 (42)	5,660 (52.5)	5,220 (59.5)	5,495 (64)	5,660 (67.5)	5,765 (70)	5,795 (72.5)	5,770 (74.5)	5,750 (76)
12		3,940 (26.5)	3,750 (43.5)	3,385 (52.5)	3,710 (58.5)	3,930 (62.5)	4,090 (66)	4,190 (69)	4,245 (71)	4,265 (72.5)
14			2,365 (32)	2,070 (45)	2,425 (52.5)	2,675 (57.5)	2,865 (61.5)	3,000 (65)	3,085 (67.5)	3,145 (69.5)
16			1,275 (10.5)	1,090 (36)	1,455 (45.5)	1,725 (52)	1,935 (57)	2,090 (61)	2,195 (64)	2,270 (66)
18					705 (38)	980 (46.5)	1,200 (52)	1,370 (57)	1,490 (60.5)	1,575 (63)
20							615 (47)	790 (52.5)	920 (56.5)	1,010 (59.5)
22										545 (55.5)
Minimum boom angle (deg.) for indicated length (no load)				21	30	35	39	46	48	48
Maximum boom length (m) at 0 deg. boom angle (no load)				18.3						



#LMI operating code. Refer to LMI manual for instructions.

\*This capacity is based upon maximum obtainable boom angle.

Note: ( ) Boom angles are in degrees.

\*\*This boom length is with inner-mid fully extended and outer-mid & fly fully retracted.





**DANIEL SMITH INDUSTRIES LTD**  
 315 Flaxton Road, Rangiora, 7400  
 Canterbury, New Zealand.  
 Phone: 0064 (0) 3 313 9902  
 Fax: 0064 (0) 3 313 9904  
 Mobile 0064 (0) 21 33 66 23  
 Email: [daniel@danielsmith.co.nz](mailto:daniel@danielsmith.co.nz)

# GROVE

## RT880E

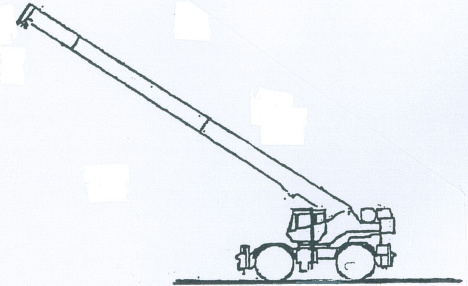
**80 Ton / 2 axle / 4 x 4 Rough Terrain Crane**  
 (2009) Serial No. #230161 and #229118

Unit: metric ton

Page 10 of 12

### ON RUBBER CAPACITIES WITH 8,165 kg COUNTERWEIGHT

#### STATIONARY CAPACITIES - 360°



Radius in Meters	#9005					
	Main Boom Length in Meters					
	12.6	15.2	18.3	*21.4	24.4	27.4
3.5	22,300 (68.5)	18,475 (73)				
4	20,650 (66)	17,625 (71)				
4.5	17,725 (63.5)	16,300 (69)				
5	15,000 (60.5)	14,200 (66.5)				
6	10,950 (55)	10,975 (62.5)	10,075 (67.5)	9,295 (71.5)		
7	8,280 (48.5)	8,270 (58)	7,860 (64)	7,305 (68.5)		
8	6,370 (41.5)	6,340 (53)	6,100 (60.5)	5,775 (65.5)	5,965 (69)	
9	4,940 (33)	4,915 (47.5)	4,750 (56.5)	4,560 (62.5)	4,800 (66.5)	4,940 (69.5)
10	3,825 (20.5)	3,815 (42)	3,690 (52.5)	3,500 (59.5)	3,850 (64)	4,025 (67.5)
12		2,240 (26.5)	2,125 (43.5)	1,920 (52.5)	2,395 (58.5)	2,615 (62.5)
14			1,025 (32)	870 (45)	1,330 (52.5)	1,535 (57.5)
16					505 (45.5)	740 (52)
Minimum boom angle (deg.) for indicated length (no load)			21	38.5	42	49
Maximum boom length (m) at 0 deg. boom angle (no load)			15.2			

#LMI operating code. Refer to LMI manual for instructions.

Note: ( ) Boom angles are in degrees.

\*This boom length is with inner-mid fully extended and outer-mid & fly fully retracted.

Lifting Capacities at Zero Degree Boom Angle						
Boom Angle	Main Boom Length in Meters					
	12.6	15.2				
0°	3,440 (10.4)	1,625 (13)				

Note: ( ) Reference radii in meters.

#### NOTES TO ALL RUBBER CAPACITY CHARTS:

1. Capacities are in kilograms. The crane's stability was determined in compliance with ISO 4305-1991 and EN 13000-2004, and also complies with DIN 15019.2 and British Standard 1757:1986 Clause 9. Capacities also meet the requirements of 75% stability when stationary and 66 2/3% stability for pick and carry lifts on rubber.
2. Capacities are applicable to machines equipped with 29.5x25 (34 ply) General tires at 5.2 bar cold inflation pressure.
3. Capacities appearing above the bold line are based on structural strength and tipping should not be relied upon as a capacity limitation.
4. Capacities are applicable only with machine on firm level surface.
5. On rubber lifting with boom extensions not permitted.
6. For pick and carry operation, boom must be centered over front of machine, mechanical swing lock engaged and load restrained from swinging. When handling loads in the structural range with capacities close to maximum ratings, travel should be reduced to creep speeds.
7. Axle lockouts must be functioning when lifting on rubber.
8. All lifting depends on proper tire inflation, capacity and condition. Capacities must be reduced for lower tire inflation pressures. See lifting capacity chart for tire used. Damaged tires are hazardous to safe operation of crane.
9. Creep - not over 61 m of movement in any 30 minute period and not exceeding 1.6 km/h.





**DANIEL SMITH INDUSTRIES LTD**  
 315 Flaxton Road, Rangiora, 7400  
 Canterbury, New Zealand.  
 Phone: 0064 (0) 3 313 9902  
 Fax: 0064 (0) 3 313 9904  
 Mobile 0064 (0) 21 33 66 23  
 Email: [daniel@danielsmith.co.nz](mailto:daniel@danielsmith.co.nz)

# GROVE

## RT880E

**80 Ton / 2 axle / 4 x 4 Rough Terrain Crane**  
 (2009) Serial No. #230161 and #229118

Unit: metric ton

Page 11 of 12

### ON RUBBER CAPACITIES WITH 8,165 kg COUNTERWEIGHT (cont'd.)

PICK & CARRY CAPACITIES (UP TO 4.0 km/h) -  
 BOOM CENTERED OVER FRONT (See note 6)

Radius in Meters	#9006					
	Main Boom Length in Meters					
	12.6	15.2	18.3	*21.4	24.4	27.4
3.5	26,950 (68.5)	22,400 (73)				
4	25,300 (66)	22,400 (71)				
4.5	22,875 (63.5)	22,400 (69)				
5	21,050 (60.5)	20,900 (66.5)				
6	17,550 (55)	17,425 (62.5)	16,725 (67.5)	13,475 (71.5)		
7	15,050 (48.5)	14,925 (58)	14,550 (64)	13,475 (68.5)		
8	12,375 (41.5)	12,200 (53)	11,950 (60.5)	11,975 (65.5)		
9	9,945 (33)	9,745 (47.5)	9,600 (56.5)	9,750 (62.5)	10,050 (66.5)	
10	8,125 (20.5)	7,915 (42)	7,830 (52.5)	7,940 (59.5)	8,280 (64)	
12		5,370 (26.5)	5,365 (43.5)	5,370 (52.5)	5,780 (58.5)	6,130 (62.5)
14			3,735 (32)	3,665 (45)	4,090 (52.5)	4,425 (57.5)
16			2,575 (10.5)	2,455 (36)	2,885 (45.5)	3,190 (52)
18				1,550 (23.5)	1,985 (38)	2,265 (46.5)
20					1,290 (28.5)	1,550 (40)
22					730 (11.5)	980 (32)
24						510 (21)
Minimum boom angle (deg.) for indicated length (no load)						0
Maximum boom length (m) at 0 deg. boom angle (no load)						27.4

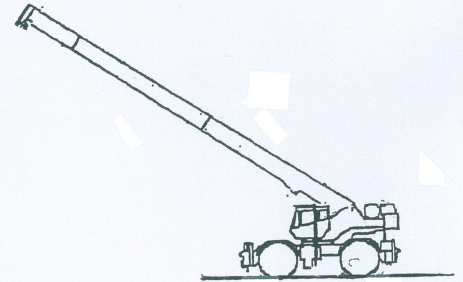
#LMI operating code. Refer to LMI manual for instructions.

Note: ( ) Boom angles are in degrees.

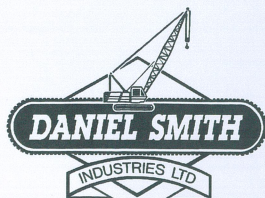
Lifting Capacities at Zero Degree Boom Angle						
Boom Angle	Main Boom Length in Meters					
	12.6	15.2	18.3	*21.4	24.4	
0°	7,510 (10.4)	4,410 (13)	2,530 (16.1)	1,105 (19.2)	685 (22.2)	

Note: ( ) Reference radii in meters.

\*This boom length is with inner-mid fully extended and  
 outer-mid & fly fully retracted.







**DANIEL SMITH INDUSTRIES LTD**  
 315 Flaxton Road, Rangiora, 7400  
 Canterbury, New Zealand.  
 Phone: 0064 (0) 3 313 9902  
 Fax: 0064 (0) 3 313 9904  
 Mobile 0064 (0) 21 33 66 23  
 Email: [daniel@danielsmith.co.nz](mailto:daniel@danielsmith.co.nz)

# GROVE

## RT880E

**80 Ton / 2 axle / 4 x 4 Rough Terrain Crane**  
**(2009) Serial No. #230161 and #229118**

Unit: metric ton

Page 12 of 12

### WEIGHT REDUCTIONS FOR LOAD HANDLING DEVICES

10.0 m - 17.0 m FOLDING BOOM EXTENSION	
*10.0 m Extension (Erected) -	1678 kg
*17.0 m Extension (Erected) -	3552 kg
*23.1 m (1 insert Erected) -	4695 kg
*29.2 m (2 inserts Erected) -	6033 kg

\*Reduction of main boom capacities

(no deduct required for stowed boom extension)

When lifting over boom extension, deduct total weight of all load handling devices reeved over main boom nose directly from boom extension capacity.

AUXILIARY BOOM NOSE	62 kg
HOOKBLOCK and OVERHAUL BALL:	
75 MT, 5 Sheave	578 kg+
36 MT, 3 Sheave	545 kg+
9.1 MT Overhaul Ball	258 kg+

+Refer to rating plate for actual weight.

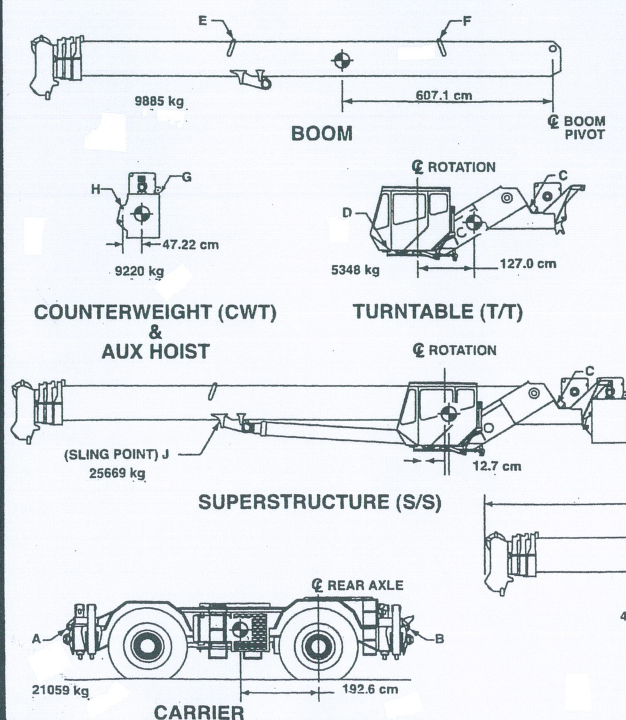
**NOTE:** All load handling devices and boom attachments are considered part of the load and suitable allowances **MUST BE MADE** for their combined weights. Weights are for Grove furnished equipment.

### LINE PULLS AND REEVING INFORMATION

HOISTS	CABLE SPECS.	PERMISSIBLE LINE PULLS	NOMINAL CABLE LENGTH
Main	19 mm (3/4") 6x37 Class EIPS, IWRC Special Flexible Min. Breaking Str. 26,670 kg	7,620 kg	183 m
Main & Aux.	19 mm (3/4") 35x7 Class Rotation Resistant (non-rotating) Min. Breaking Strength 38,920 kg	7,780 kg	185 m

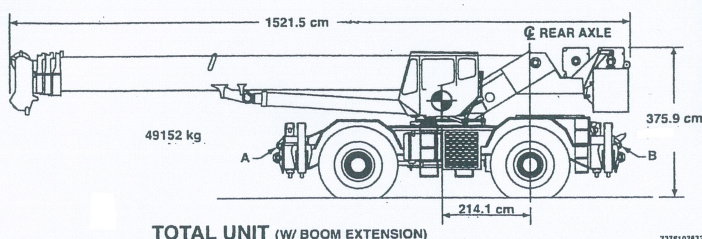
The approximate weight of 19 mm wire rope is 0.68 kg / .3048 m

### TRANSPORTATION AND LIFTING DATA RT880E



FITTINGS	NO	UNIT	TOTAL UNIT		CARRIER		S/S	T/T	BOOM	CWT	FITTING CAPACITY (TONS)				
			LIFT	TOW	LIFT	TOW					LIFT	TOW	TIE DOWN		
													FORE & AFT	SIDE	DOW
A	2	X	X	X	X	X					43	81	24	18	49
B	2	X	X	X	X	X					43	81	24	18	49
C	2						X	X			13				
D	2							X			50				
E	2								X		3.4				
F	2								X		3.4				
G	2									X	29				
H	2									X	4				
J	1						X				14				

- Lifting of entire crane or major crane assemblies must be accomplished by utilizing specific fittings indicated on above chart. Use of fittings for purposes other than those designated on chart is prohibited. Fitting capacities are maximum allowable loads per individual fitting.
- Rigging personnel shall be responsible for proper selection and placement of all slings and load handling devices.
- Dimensions and weights shown are for largest configuration available. Weights do not include boom extension and/or jib, unless noted otherwise.
- Rigging personnel shall verify dimensions as required for clearance.



7376102932