

TECHNICAL
DATASHEET

FRANNA
A TEREX BRAND

**CAPITAL
CRANES**

AT40

**PICK AND CARRY
CRANE**



MAXIMUM CAPACITY
40t



MAXIMUM BOOM LENGTH
19.8m



MAXIMUM HOOK HEIGHT
19m

terex.com/franna



OVERVIEW

The AT 40 is the largest pick and carry crane in the Franna product range and has been specifically designed for higher capacity lifting applications, boasting 44% more load moment capacity than the Franna MAC 25. The 3-axle design eliminates the need for a removable counterweight and the third axle control system raises axle 3 when operating on a work site to provide a smooth turning circle.

KEY FEATURES AND BENEFITS:

- ▶ 40 tonne at 1.1m radius on lug
- ▶ 35 tonne at 2.0m radius on 8 part hook block
- ▶ 20 tonne on machinery (Rhino) hook
- ▶ 19m maximum hook height
- ▶ Single line pull 4.3 tonne
- ▶ Dynamic LMI (patent protected)
- ▶ Designed to AS1418.5 (2013)
- ▶ Full width isolated cabin ensures excellent visibility
- ▶ Automatic 4WD engages when a loss of traction is detected
- ▶ High strength boom with easy maintenance
- ▶ Hydro-pneumatic suspension enhances roadability
- ▶ Turret counterweight for greater articulated lifting capacity



TECHNICAL DESCRIPTION

01. Boom

Maximum boom length	19.8m
Maximum hook height	19.0m
Boom elevation angle range	-5°/60°
Articulation	35° R / 35° L
Fixed lug	40 tonne
Machinery hook (rhino)	20 tonne

02. Winch

Maximum line pull	4.3 tonne
Two speed winch	38 m/min / 76 m/min
7 Part Hook block	30 tonne maximum rated capacity
Optional 8 Part Hook block	35 tonne maximum rated capacity

03. Engine & Transmission

Standard engine	Mercedes OM 906
Engine power	205kW
Engine torque	1100 Nm
Fuel Type	Diesel
Fuel Capacity	500 litre
Transmission	Allison 6 speed
Transfer case	ZF 2:1 Ratio

04. Hydraulic System

Axial piston pump	135cc/rev
Maximum pump flow rate	300 litre/min
Maximum working pressure	350 bar
Hydraulic tank capacity	500 litre

05. Chassis

Front Axle (Tare / GVM)	11,100kg / 12,000kg
Axle 2 (Tare / GVM)	9,200kg / 10,000kg
Axle 3 (Tare / GVM)	9,200kg / 10,000kg
Axle Total (Tare / GVM)	29,500kg / 32,000kg
Turning circle (Highway)	10.2m
Turning circle (crane mode)	9.0m

06. Brakes & Suspension

Brake System	Air operated disc brakes with ABS
Suspension	Hydro pneumatic suspension

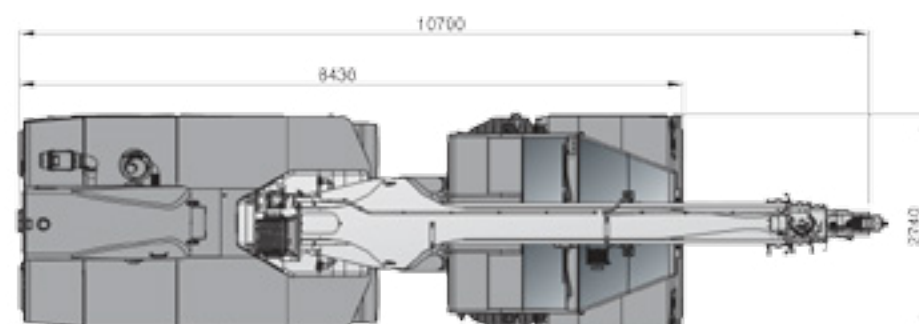
07. Vehicle Performance

Maximum rated travel speed	80km/h
Gradeability	39%

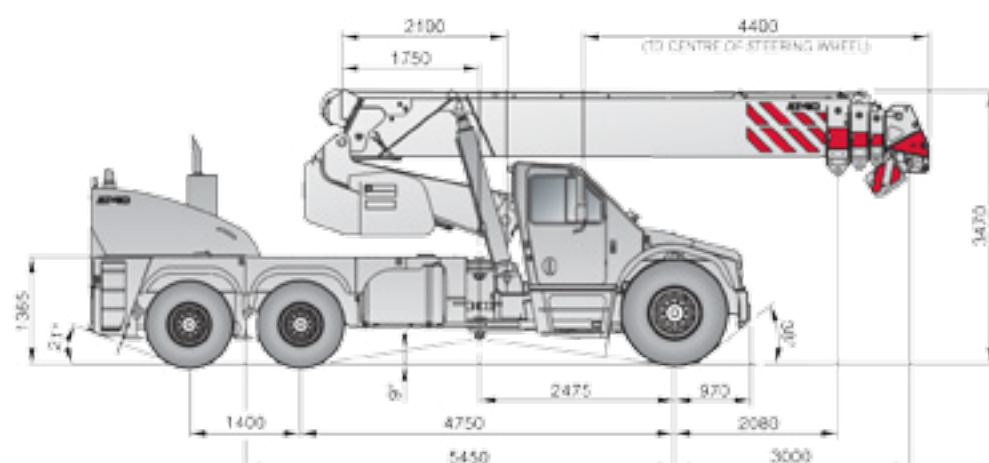


DIMENSIONS / AREA OF OPERATION

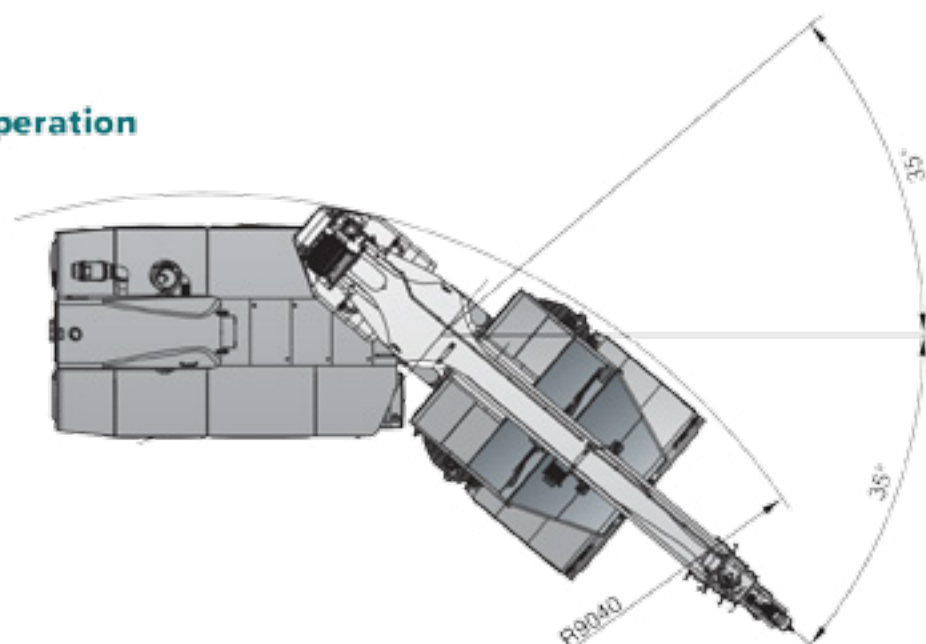
Plan view



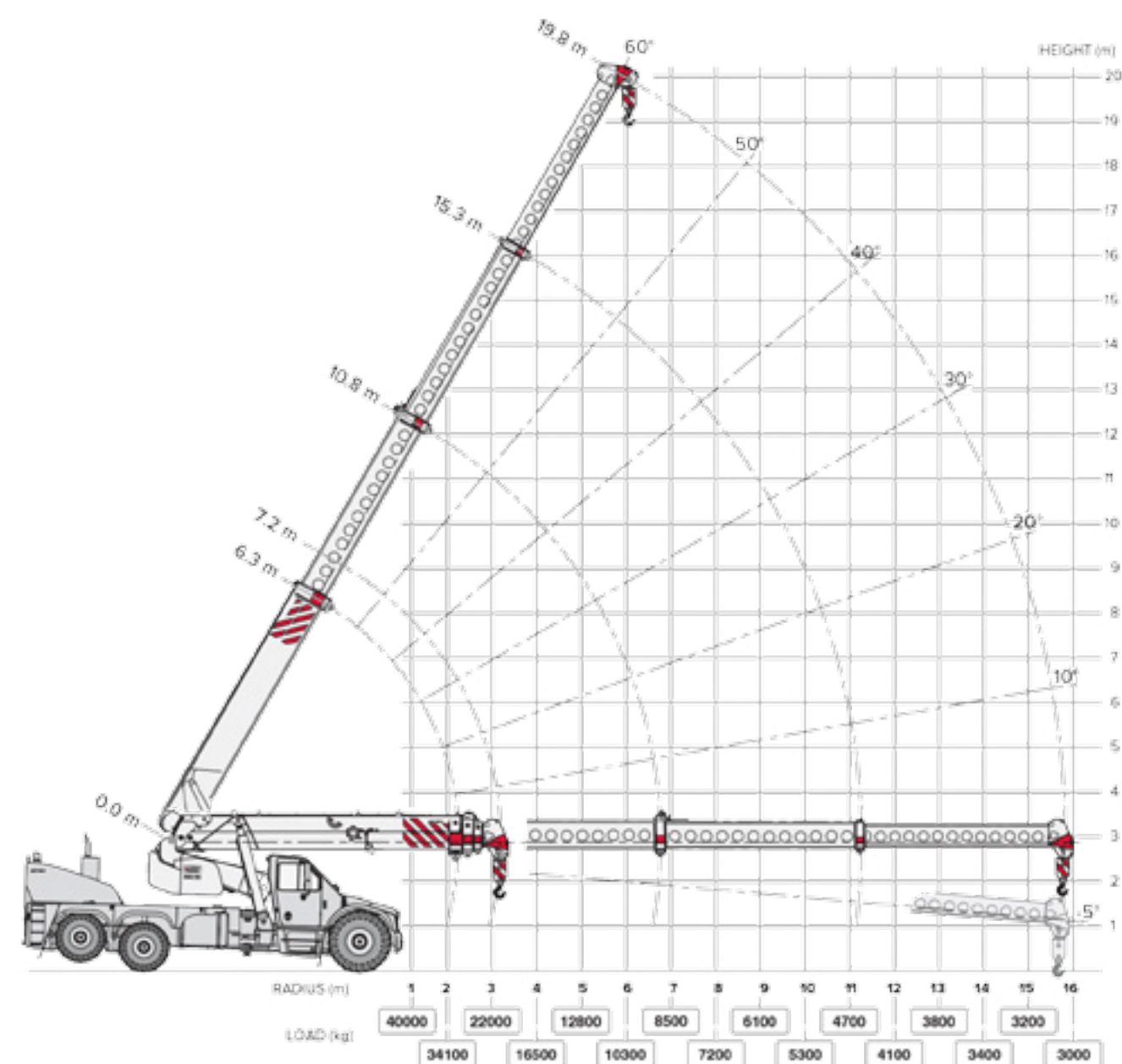
Right hand view



Area of operation



RADIUS LOAD CHART



NOTE: Rated Capacity values shown are for the Pick and Carry Chart.
The Static Chart will give higher rated capacities.

LOAD CHART

RATED CAPACITY CHART STATIC (0 km/hr) - FALL BLOCK																				
RAD		BOOM LENGTH TO HEAD SHEAVES - 3rd BOOM RETRACTED										3rd BOOM EXTENDING								RAD
		7.23	7.50	8.00	8.50	9.00	9.50	10.00	10.50	11.00	12.00	13.00	14.00	15.00	16.00	17.00	18.00	19.83		
m		kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	m	
1.0		35000	35000	35000	35000	35000	35000												1.0	
		35000	35000	33000	28700	25500	23000													
		47	49	52	55	57	59													
2.0		35000	35000	35000	35000	35000	34900	34300	33700	33100									2.0	
		34400	30800	26100	22900	20500	18500	17000	15600	14500										
		34	37	42	46	49	52	54	56	58										
2.5		30200	30300	30300	30400	30100	29600	29100	28500	28200	27400								2.5	
		29400	29500	29500	29600	29300	25500	22600	20400	18500	15700									
		27800	27900	24300	21100	18800	17000	15600	14400	13400	11700									
3.0		24700	24800	24800	24900	24900	25000	25000	24800	24500	23800	23200							3.0	
		24000	24100	24200	24200	24300	24300	22000	19700	17900	15100	13100								
		22700	22800	22900	19900	17600	15900	14500	13400	12400	10900	9700								
3.5		23800	21700	20900	21000	21000	21100	21100	21100	21100	21000	20500	20100						3.5	
		23200	21100	20400	20400	20500	20500	20500	19300	17400	14700	12700	11200							
		21900	19900	19200	19300	16800	15000	13600	12600	11700	10200	9100	8200							
4.0		(3.1)	(3.4)	19	28	34	38	42	45	48	52	56	59						4.0	
				18600	18000	18100	18100	18200	18200	18200	18200	18200	18000	17600						
				18100	17500	17600	17600	17700	17700	17100	14300	12300	10900	9700						
5.0					17100	16500	16500	14400	13000	11900	11000	9600	8600	7700	7000				5.0	
					(3.9)	19	27	33	37	41	44	49	53	56	59					
					16200	14400	14000	14000	14100	14100	14100	14100	14200	14200	14200	14200				
6.0					15800	14000	13600	13600	13700	13700	13700	11800	10300	9200	8300	7700			6.0	
					14900	13100	12800	12400	11100	10100	8700	7700	6900	6300	5800	5500				
					(4.4)	(4.9)	18	26	31	36	42	47	51	54	57	59				
7.0						12800	11500	11300	11300	11400	11400	11400	11500	11600	11800				7.0	
						12500	11200	11000	11000	11000	11100	10000	8800	7900	7300	6800				
						11700	10500	10300	9800	8200	7100	6300	5700	5300	5000	4800				
8.0						(5.4)	(5.9)	17	25	34	40	45	49	52	55	58			8.0	
								10500	9600	9400	9400	9500	9500	9500	9700	9800	10000			
								10200	9300	9100	9200	9200	8600	7700	7000	6500	5800			
9.0										9500	8700	8000	6700	5900	5300	4800	4600	4400	4000	9.0
										(6.4)	(6.9)	24	33	39	44	48	51	54	58	
										8100	8000	8000	8000	8100	8200	8300	8500			
10.0										7800	7700	7700	7800	7500	6900	6300	5600			10.0
										7300	6700	5600	5000	4500	4300	4000	3700			
										(7.9)	23	30	38	42	46	50	54			
11.0											6900	6800	6900	6900	7000	7200	7300			11.0
											6700	6600	6600	6700	6800	6200	5400			
											6200	5600	4800	4300	4000	3800	3500			
12.0											(8.9)	22	31	37	41	45	51			12.0
											6000	5900	6000	6100	6200	6400				
											5800	5700	5800	5900	6000	5300				
13.0											5400	4800	4100	3800	3600	3200			13.0	
											(9.9)	21	30	36	40	47				
											5300	5200	5400	5500	5600					
14.0											5100	5100	5200	5300	5200				14.0	
											4700	4200	3700	3400	3100					
											(10.9)	21	29	35	42					
15.0												4700	4700	4800	5000				15.0	
												4500	4600	4700	4800					
												4200	3700	3300	2900					
15.68												(11.9)	20	28	38				15.68	
													4200	4300	4500					
													4100	4200	4300					
16.0													3800	3400	2800				16.0	
													(12.9)	20	32					
													3900	4000						
17.0														3500	2800				17.0	
														(13.9)	26					
														3600						
18.0														2900					18.0	
														17						
														3300						
19.83														3000					19.83	
														0						
														13.00	14.00	15.00	16.00	17.00		18.00

WINCH RATED CAPACITY

2	FALLS	8700
4	FALLS	17500
6	FALLS	26700
7	FALLS	30600
8	FALLS	35000

UNITS:

- ANGLES IN DEGREES
- LENGTHS IN METRES
- LOAD IN KILOGRAMS

KEY:

14200	RC @ ARTIC:	0°	PITCH:	-2.3	ROLL:	-1.0
10300	RC @ ARTIC:	20°	PITCH:	-2.3	ROLL:	-3.0
6900	RC @ ARTIC:	35°	PITCH:	-2.3	ROLL:	-3.5

51 BOOM ANGLE
(3.1) RADIUS AT ZERO BOOM ANGLE

Note: Pitch & Roll angles indicated are representative of lifts based on firm level ground with tyres at specified pressures.

WINCH RATED CAPACITY

2	FALLS	8700
4	FALLS	17500
6	FALLS	26200
7	FALLS	30600
8	FALLS	35000

UNITS:

- ANGLES IN DEGREES
- LENGTHS IN METRES
- LOAD IN KILOGRAMS

KEY:

14200	RC @ ARTIC:	0°	PITCH:	-2.3	ROLL:	-1.0
10300	RC @ ARTIC:	20°	PITCH:	-2.3	ROLL:	-3.0
6900	RC @ ARTIC:	35°	PITCH:	-2.3	ROLL:	-3.5
51	BOOM ANGLE					
(3.1)	RADIUS AT ZERO BOOM ANGLE					

Note: Pitch & Roll angles indicated are representative of lifts based on firm level ground with tyres at specified pressures.

LOAD CHART

RATED CAPACITY CHART PICK AND CARRY (0 - 1.44 km/hr) - FALL BLOCK																										
RAD	BOOM LENGTH TO HEAD SHEAVES - 3rd BOOM RETRACTED										3rd BOOM EXTENDING								RAD							
	7.23	7.50	8.00	8.50	9.00	9.50	10.00	10.50	11.00	12.00	13.00	14.00	15.00	16.00	17.00	18.00	19.83									
m	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	m								
1.0	35000	35000	35000	35000	35000	35000												1.0								
	35000	33300	28500	25000	22300	20100																				
	47	49	52	55	57	59																				
2.0	34100	34200	34200	34300	34300	33600	33000	32300	31800									2.0								
	30600	27400	23300	20500	18300	16600	15200	14000	13000																	
	34	37	42	46	49	52	54	56	58																	
2.5	26800	26900	26900	27000	27000	27000	27100	27100	27100	26300								2.5								
	26100	26200	26200	26300	25400	22200	19800	17800	16300	13800																
	24700	24800	21900	19100	17000	15400	14100	13000	12100	10600																
3.0	22000	22000	22100	22100	22200	22200	22200	22200	22200	22300	22300							3.0								
	21400	21400	21500	21500	21600	21600	19400	17400	15800	13400	11600															
	20200	20200	20300	18200	16000	14400	13200	12200	11300	9900	8800															
3.5	21200	19300	18600	18600	18700	18700	18700	18800	18800	18800	18800	18800						3.5								
	20600	18800	18100	18100	18200	18200	18200	17100	15500	13000	11300	9900														
	19500	17700	17100	17100	15400	13800	12500	11500	10600	9300	8300	7400														
4.0	(3.1)	(3.4)	18	28	34	38	42	45	48	52	56	59						4.0								
			16500	16000	16100	16100	16100	16200	16200	16200	16200	16200	16200													
			16100	15600	15600	15700	15700	15700	15300	12800	11000	9700	8600													
5.0			15200	14700	14800	13300	12000	10900	10100	8800	7800	7000	6400					5.0								
			(3.9)	19	27	33	37	41	44	49	53	56	59													
					14400	12800	12400	12500	12500	12500	12600	12600	12600	12600	12600	12800										
6.0					14000	12400	12100	12100	12100	12200	12200	10600	9300	8200	7400	6800		6.0								
					13200	11700	11400	11400	10300	9400	8000	7100	6300	5700	5300	5000										
					(4.4)	(4.9)	18	26	31	36	42	47	51	54	57	59										
7.0						11400	10300	10300	10100	10100	10100	10100	10200	10200	10200	10300	10400	7.0								
						11100	10000	9800	9800	9800	9800	9000	7900	7100	6600	6100										
						10400	9400	9200	9200	7800	6600	5800	5200	4800	4500	4300										
8.0						(5.4)	(3.9)	17	25	34	40	45	49	52	55	58		8.0								
								9300	8500	8400	8400	8400	8400	8500	8600	8700	8900									
								9000	8200	8100	8100	8200	7800	6900	6300	5900	5200									
9.0										8500	7700	7500	6300	5500	4900	4400	4200	4000	3700	9.0						
										(6.4)	(6.9)	24	33	39	44	48	51	54	58							
											7200	7100	7100	7100	7200	7300	7400	7500								
10.0														6900	6900	6900	6900	6800	6200	5700	5000	10.0				
														6500	6300	6200	4600	4100	3900	3700	3400					
														(7.9)	23	30	38	42	46	50	54					
11.0																		6100	6100	6100	6100	6300	6400	6500	11.0	
																		5900	5900	5900	5900	6100	5600	4900		
																		5500	5300	4400	3900	3700	3500	3200		
12.0																		(8.9)	22	31	37	41	45	51	12.0	
																				5300	5300	5300	5400	5500		5700
																			5200	5100	5100	5300	5400	4800		
13.0																			4800	4500	3800	3500	3300	3000	13.0	
																			(9.9)	21	30	36	40	47		
																					4700	4700	4800	4900		5000
14.0																			4500	4500	4600	4700	4800		14.0	
																			4200	3900	3400	3200	2800			
																			(10.9)	21	29	35	42			
15.0																					4100	4200	4300	4500	15.0	
																					4000	4100	4200	4300		
																					3700	3500	3100	2700		
16.0																			(11.9)	20	28	38		16.0		
																						3800	3800		4000	
																						3600	3700		3800	
17.0																					3400	3200	2600		17.0	
																					(12.9)	20	32			
																							3400	3600		
18.0																							3100	2600		18.0
19.0																										19.0
20.0																										20.0
21.0																										21.0
22.0																										22.0
23.0																										23.0
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