

FR 20

PICK AND CARRY
CRANE



MAXIMUM RATED CAPACITY
20 t



MAXIMUM BOOM LENGTH
18.23 m **20.83 m**
(manual extension) (with fly jib)



HD WINCH
5 t



COMPACT MACHINE
2.98 m
(Machine Height)



STABILITY
85%



OVERVIEW

The FR 20 is a very compact pick and carry mobile crane from Franna product range and is specially designed for Indian market for higher lifting capacity applications (up to 20 Tonne) with 85% stability factor. This 4WD crane has a powerful CEV Stage-IV emission compliance engine, with heavy duty Auxiliary Gear Box (AGB) and axles for all type of crane application.

This crane combines safety and comfort with smooth steering flexibility, providing the operator with the ability to lift and manoeuvre in tight spaces. The heavy-duty U section fabricated boom with welding on the neutral axis offers superior durability and a competitive edge while lifting heavy loads.



Telematics



5T HD Winch



Smooth Clutch



Single Luff Cylinder



Manual Boom Extension rod



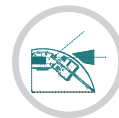
Lowest Turning Radius



5 Hook Positionings



U-Section Boom



Articulation Limit Switch



Winch Mounted under Boom

TECHNICAL DESCRIPTION

01. Boom

Maximum boom length (manual extn.)	18.23 m
Maximum boom length (fly jib)	20.83 m
Maximum tip height (fly jib)	20.4 m
Boom elevation angle range	-5°/60°
Articulation	40° R / 40° L
Fixed lug	20 tonne
Machinery hook (rhino)	8 tonne

02. Winch

Maximum Line Pull (1st layer)	5 tonne
Single speed winch (raising 4th layer)	50 m/min
4 Part Hook block	10 tonne max rated capacity, fully compensated hook height whilst telescoping the boom

03. Engine & Transmission

Standard engine	VECV E483 CEV Stage IV
Engine power	74 kW@2200 rpm
Engine torque	385 Nm
Fuel Type	Diesel
Fuel Capacity	270 litre
Transmission	VECV ET60 Synchronesh gear box with 10 forward and 2 reverse speeds with crane/travel mode selector switch
Clutch	Single, dry type friction clutch plate (self-adjusting)
Clutch Actuation	Pneumatic assisted hydraulic clutch with clutch booster provision

04. Hydraulic System

High Pressure Vane pump	46 cc/rev
Maximum working pressure	220 bar
Hydraulic Oil	125 litre

05. Axle Loadings (with attachments) & Turning Radius

Front Axle	6720 kg
Rear Axle	10200 kg
Total	16920 kg
Turning Radius	6.77 m

06. Brakes

Service	Fully air operated 'S'cam dual circuit brakes on front & rear axles
Parking	Air operated, spring actuated, fail safe brakes

07. Tyres & Rims

Front	11.00x20-16PR (4 No.)
Rear	11.00x20-16PR (4 No.)

08. Electricals

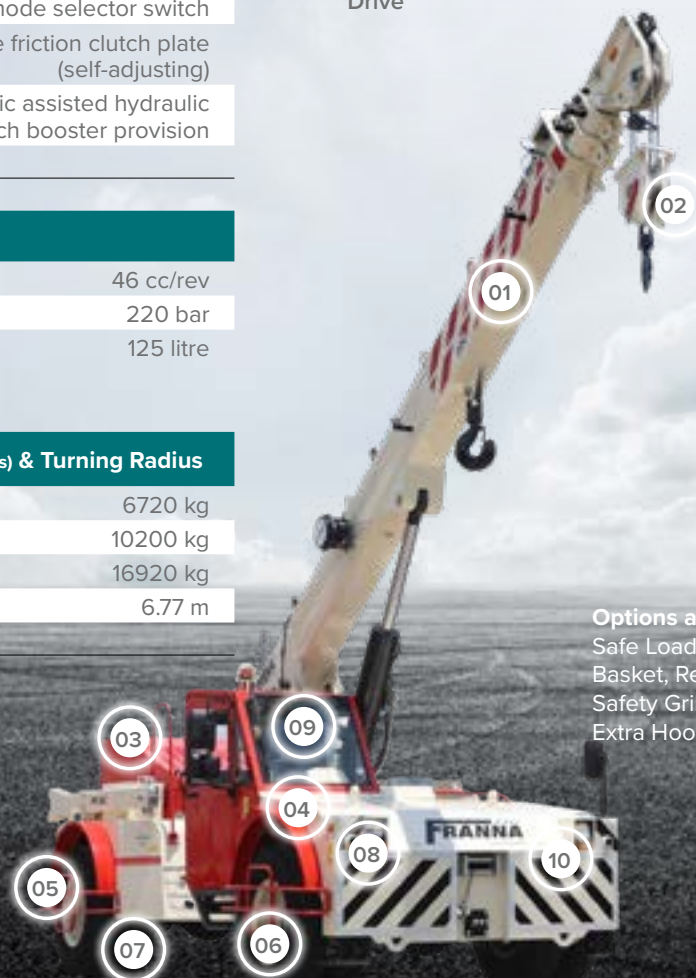
System	12V DC
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09. Steering

Steering	Full power orbitrol with twin cushioned double acting rams with 40 deg articulation either side
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10. Vehicle Performance & Drive

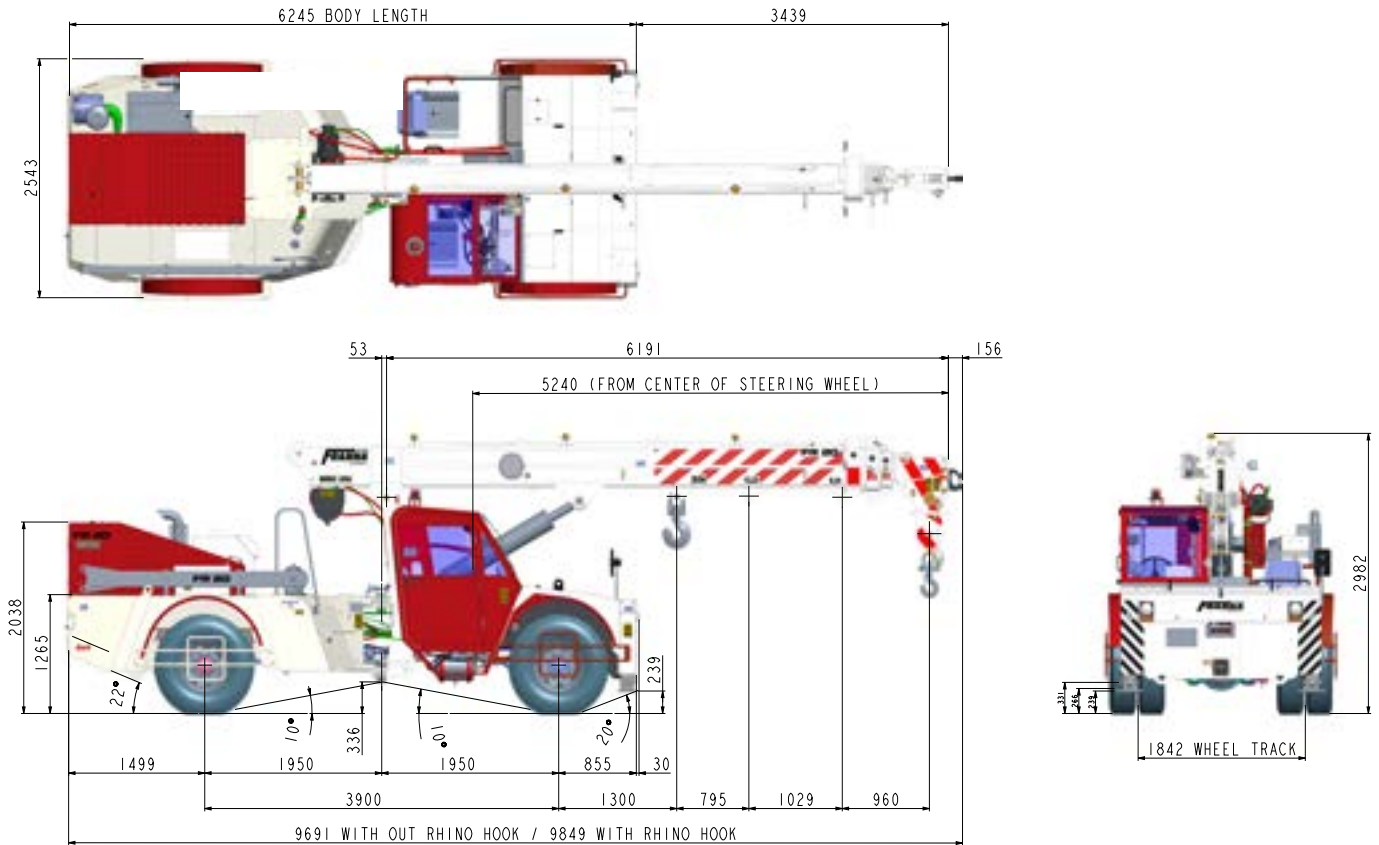
Max Speed	40 km/h
Gradeability	30% (laden), 50% (unladen)
Drive	4x4



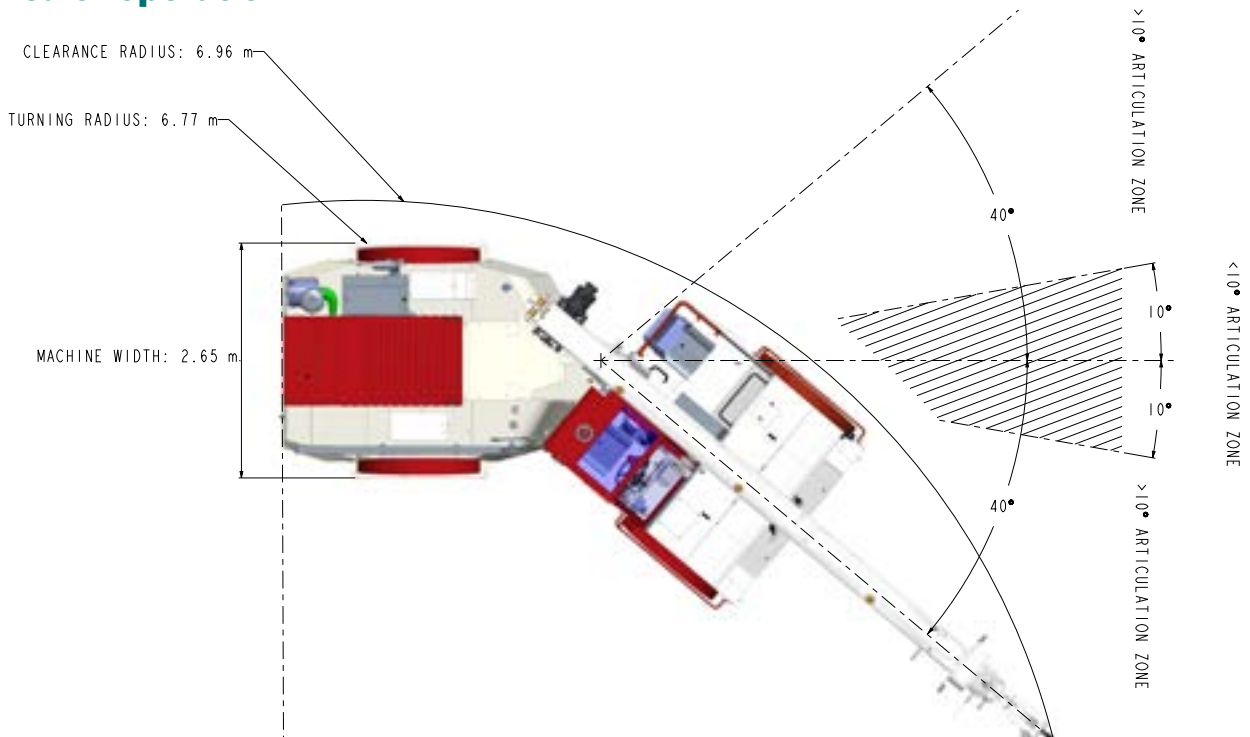
Options available at additional cost:
 Safe Load Indicator (SLI), Fly Jib, Man Basket, Reverse Camera, Drag Winch, Safety Grill, Crash Guard, Rhino Hook, Extra Hook, Spreader Bar

DIMENSIONS / AREA OF OPERATION

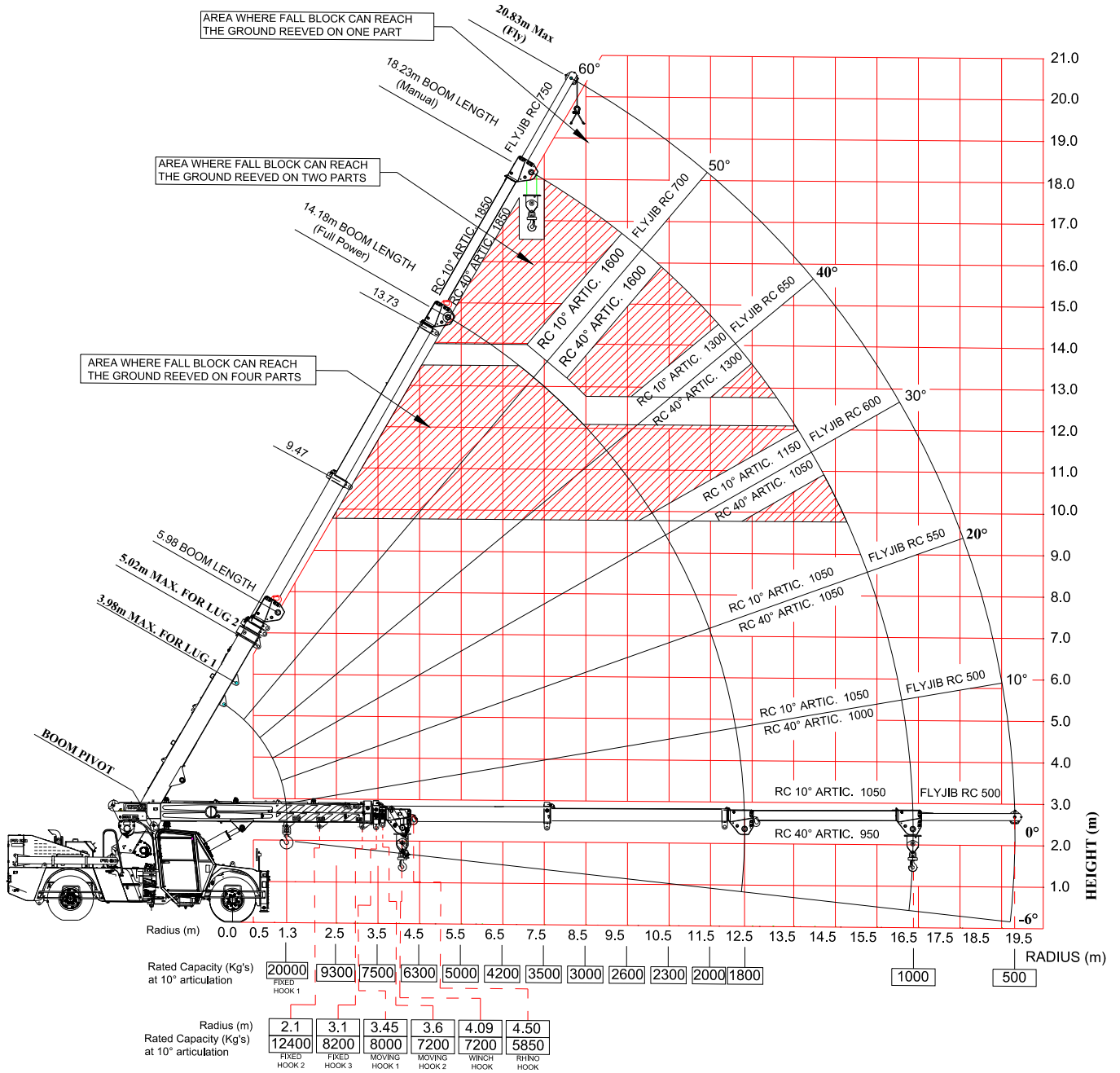
Machine view (All dimensions are in mm)



Area of operation



RADIUS LOAD CHART



Note:

- Rated Capacity Values shown are for the Pick and Carry chart.
- Rhino Hook & Fly Jib shown are provided as per customer request.
- Rope Ø13mm & Min breaking force ≥145kN



LOAD CHART

RATED CAPACITY CHART - LIFTING ON WINCH FALL BLOCK																			
RADIUS	BOOM LENGTH (m)																		
	5.98	6.50	7.00	7.50	8.00	8.50	9.00	9.50	10.00	10.50	11.00	11.50	12.00	12.50	13.00	13.50	14.00	14.18	
1.3	10500	10500																	
	10500	10500																	
	56	59																	
2.0	9500	9700	10500	10500	10500														
	9500	9700	10500	10500	10500														
	49	53	56	59	60														
2.5	9300	9400	9600	10500	10500	10500	10200												
	9300	9400	9600	10500	10500	10500	10200												
	43	48	51	54	57	59	60												
3.0	9300	9300	9400	9500	10200	9900	9400	8900	8700										
	9200	9200	9200	9100	9100	9100	9000	8900	9700										
	35	41	46	49	52	55	57	59	60										
3.5	8700	8700	8700	8600	8600	8600	8600	8300	8100	7600	6700								
	7700	7700	7700	7700	7700	7700	7600	7600	7600	7600	6700								
	26	34	40	44	48	51	53	55	57	59	60								
4.0	7400	7500	7500	7500	7400	7400	7400	7400	7400	7100	6200	5600	5300						
	6600	6600	6600	6600	6600	6600	6600	6600	6600	6500	6200	5600	5300						
	10	25	33	38	43	46	49	52	54	56	58	59	60						
4.5	7200	6500	6500	6500	6500	6500	6500	6500	6500	6400	5800	5200	5000	4800	4600				
	6400	5800	5800	5800	5800	5800	5800	5800	5700	5700	5700	5200	5000	4800	4600				
	(4.09)	10	24	32	37	41	45	48	50	53	54	56	58	59	60				
5.0		6300	5800	5800	5800	5800	5800	5800	5700	5700	5400	4900	4700	4500	4300	4100	4000	4000	
		5600	5100	5100	5100	5100	5100	5100	5100	5100	5100	4900	4700	5400	5300	4100	4000	4000	
		(4.60)	10	23	31	36	40	44	46	49	51	53	55	57	58	59	60	60	
6.0			5600	5000	4700	4700	4700	4700	4700	4600	4600	4300	4100	4000	3800	3700	3500	3500	
			5000	4500	4100	4100	4100	4100	4100	4100	4100	4100	4100	4000	3800	3700	3500	3500	
			(5.10)	(5.60)	9	22	29	34	38	41	44	47	49	51	53	54	56	56	
7.0					4600	4200	3900	3900	3900	3900	3900	3900	3500	3300	3200	3100	3000		
					4000	3700	3400	3400	3400	3400	3400	3400	3400	3400	3300	3200	3100	3000	
					(6.10)	(6.60)	9	21	27	32	36	39	42	45	47	49	51	51	
8.0							3800	3500	3300	3300	3300	3300	3300	3100	3000	2900	2800	2700	
							3300	3100	2900	2900	2900	2900	2900	2900	2800	2800	2800	2700	
							(7.10)	(7.60)	8	20	26	31	34	38	40	43	45	46	
9.0									3200	3000	2800	2800	2800	2800	2700	2600	2500	2500	
									2800	2600	2500	2500	2500	2400	2400	2400	2400	2400	
									(8.10)	(8.60)	8	19	25	29	33	36	39	40	
10.0												2800	2600	2400	2400	2400	2300	2300	
												2400	2200	2100	2100	2100	2100	2100	
												(9.10)	(9.60)	8	18	24	28	32	33
11.0														2400	2300	2100	2100	2100	
														2100	2000	1900	1800	1800	
														(10.10)	(10.60)	7	17	23	25
12.3																1800	1700	1600	1550
																1550	1450	1350	1350
																(11.10)	(11.60)	(12.10)	(12.28)

KEY:

- SWL (KG) LESS THAN 10 DEG ARTICULATION
- SWL (KG) GREATER THAN 10 DEG ARTICULATION
- BOOM ANGLE OR (RADIUS AT 0 DEG BOOM ANGLE)

Note: Weight of slings & hook block to be added to load
Read and understand warning notes before operating crane

FEATURES & ATTACHMENT

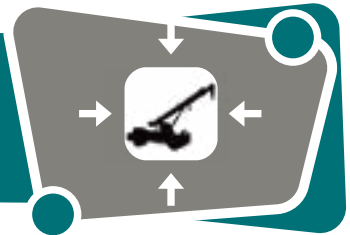


NEUTRAL AXIS WELDING BOOM

Latest boom technology for Heavy duty applications. U section ensures higher lifting capacity with longer life

COMPACT MACHINE

Shortest Turning radius of 6.7 meter makes it ideal machine for City and congested areas.



WINCH MOUNTING

Under boom winch ensures safe operations while working in compact area. Ideal for city and industrial applications

85% STABILITY

Higher safety and stability reduces the chances of accident.

85%



MANUAL EXTENSION ROD

Quick and reliable mechanism for higher height applications

TELEMATICS

24X7 machine update on location, health and performance on one click



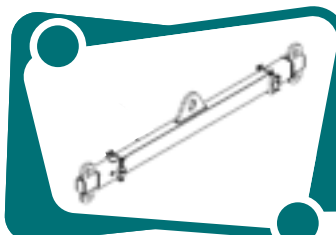
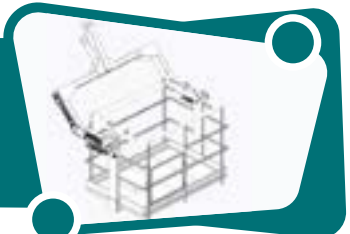
SINGLE LUFF CYLINDER

Increases the visibility and reduces the maintenance.

MAN BASKET

250 kg capacity with Self leveling mechanism

*Optional Attachment

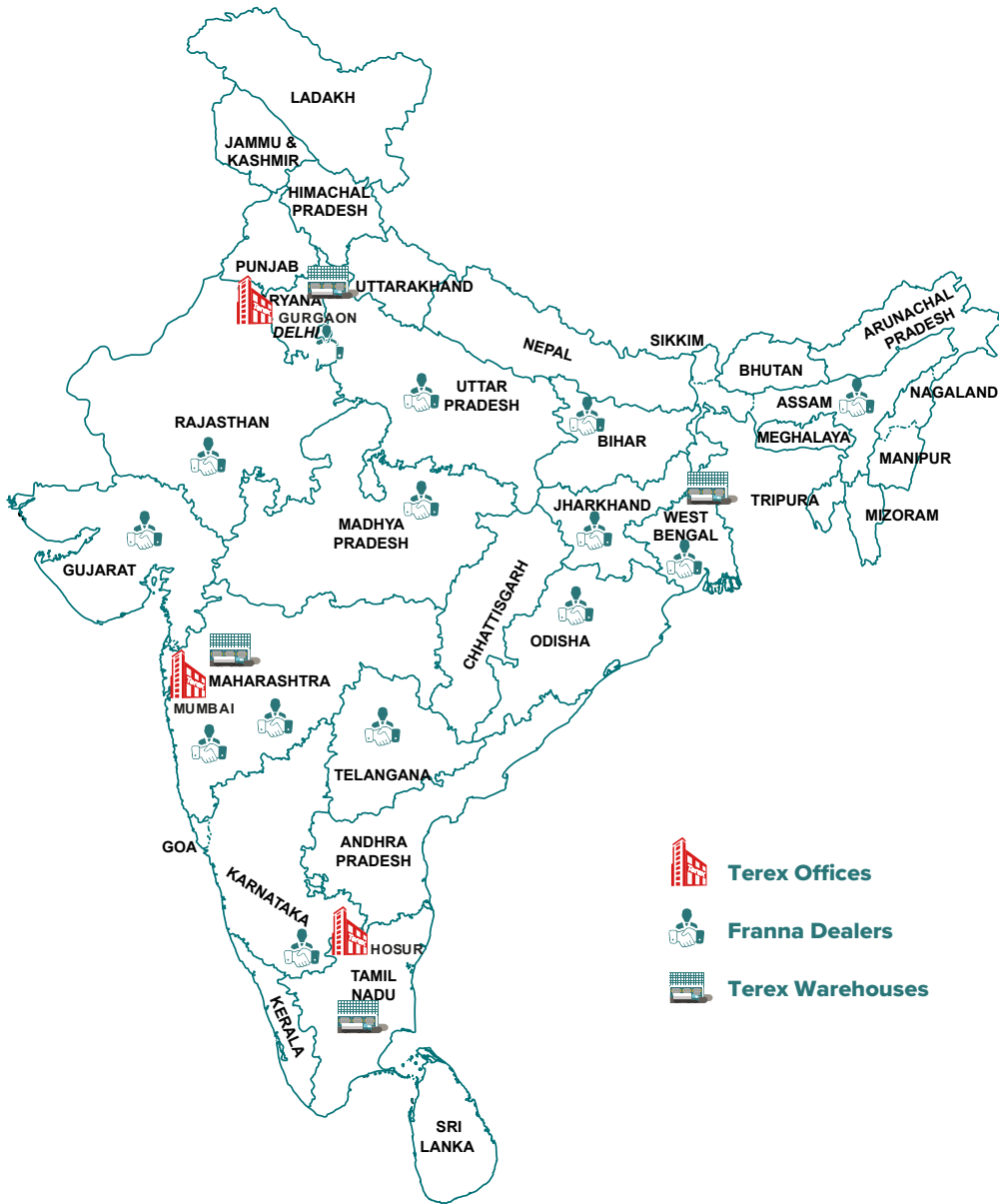





SPREADER BAR

Ideal for oversize load lifting application. Helpful for pipe, steel bars lifting

*Optional Attachment

OUR LOCATIONS



-  **Terex Offices**
-  **Franna Dealers**
-  **Terex Warehouses**

South: Hosur Plant

Terex India Private Limited
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Dealer Stamp: _____

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