



# F 20



Capacity  
**20 T**



Boom Height  
(With Fly Jib)  
**21.8 M**



Snatch Block  
**15 T Lifting**



Creep Speed  
**1.3 kmph**



Axle  
**Heavy Duty**

## SPECIFICATIONS



### RATED CAPACITY

20 Tonnes at 1.5 m radius  
 900 kg at 16 m radius  
 Max Height 19.5 m  
 SWL based on 85% stability & strength (IS 4573)



### VEHICLE PERFORMANCE

Speed Max 40 kmph  
 Creep Speed 1.3 kmph



### DRIVE

2 Wheel Drive optional 4 Wheel Drive



### ENGINE (BS IV)

Volvo - Eicher make CEV BS IV Diesel Engine, Model E494TCI - High Pressure Common Rail System (HPCR) Technology, Turbo Charged Water Cooled, ECU Control Engine Management System, Developing 74 Kw/101HP @ 2200 RPM or Equivalent Engine.



### CLUTCH (HYDRAULIC)

Single, dry type friction clutch plate  
 Low effort hydro pneumatic clutch



### BRAKES

2WD - Service Brakes Fully air operated brakes on front wheels, pneumatically assisted hydraulic brakes on rear wheels.  
 Parking Air operated, spring actuated, fail safe brakes on front wheels. Pneumatically assisted, spring loaded, fail safe, hydraulically actuated brakes on rear wheels.  
 4WD - Service Brakes Fully air operated brakes on front and rear wheels.  
 Parking Air operated, spring actuated, fail safe brakes on front and rear wheels.



### TYRES

8 nos.-12 x 24-20 PLY



### HYDRAULIC SYSTEM

Main Pump Tandem Hydraulic vane pump main  
 Control valve Main control valve 3 spool double acting with a built in relief & auxiliary valves  
 Outrigger 2 Spool  
 Control valve Double acting type



### STEERING

Full power orbitrol with twin hydraulic double acting rams  
 40° articulation on either side



### ELECTRICAL SYSTEM

24V, DC



### BOOM

4 parts boom, 3 parts hydraulically powered & fully synchronized, 4<sup>th</sup> part power extended & manually pinned for safety



### HOIST

15T hydraulically operated with 6 falls Built in safety brakes



### WHEEL BASE

4880 mm



### DIMENSIONS

Overall Length 10900 mm  
 Overall Width 2700 mm  
 Overall Height 3300 mm



### WHEEL TRACK

Front 1960 mm  
 Rear 1960 mm



### OPERATING WEIGHT

Front Axle 9275 kg  
 Rear Axle 10200 kg  
 Total 19475 kg



### TURNING RADIUS

7.85 m



### STANDARD ACCESSORIES

All Weather Cabin with Unrestricted Visibility  
 Rear View Camera with LCD  
 Equipment Monitoring System (telematics)  
 Front Outriggers  
 Wheel Guards  
 FM Radio and Mobile Charger  
 Battery Cut off Switch



### OPTIONAL ACCESSORIES

Safe Load Indicator with Hydraulic Cut Off  
 Air Conditioned Cabin, Man Carrying Basket  
 Fire Extinguisher  
 Fly Jib  
 Beacon Light  
 Pilling Application  
 Spreader Bar  
 Helper Seat Platform



### TRANSMISSION

VECV make Synchromesh Gearbox,  
 Auxiliary gearbox for high & low range.



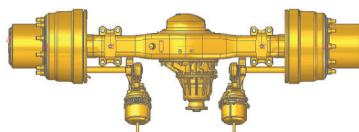
### AUXILIARY GEARBOX

Specially designed AGB developing lowest creep speed & high torque



### AXLES

Front Heavy duty rigidly mounted front wheel drive axle  
 Rear Mounted with semi-elliptical springs



### HEAVY DUTY AXLE

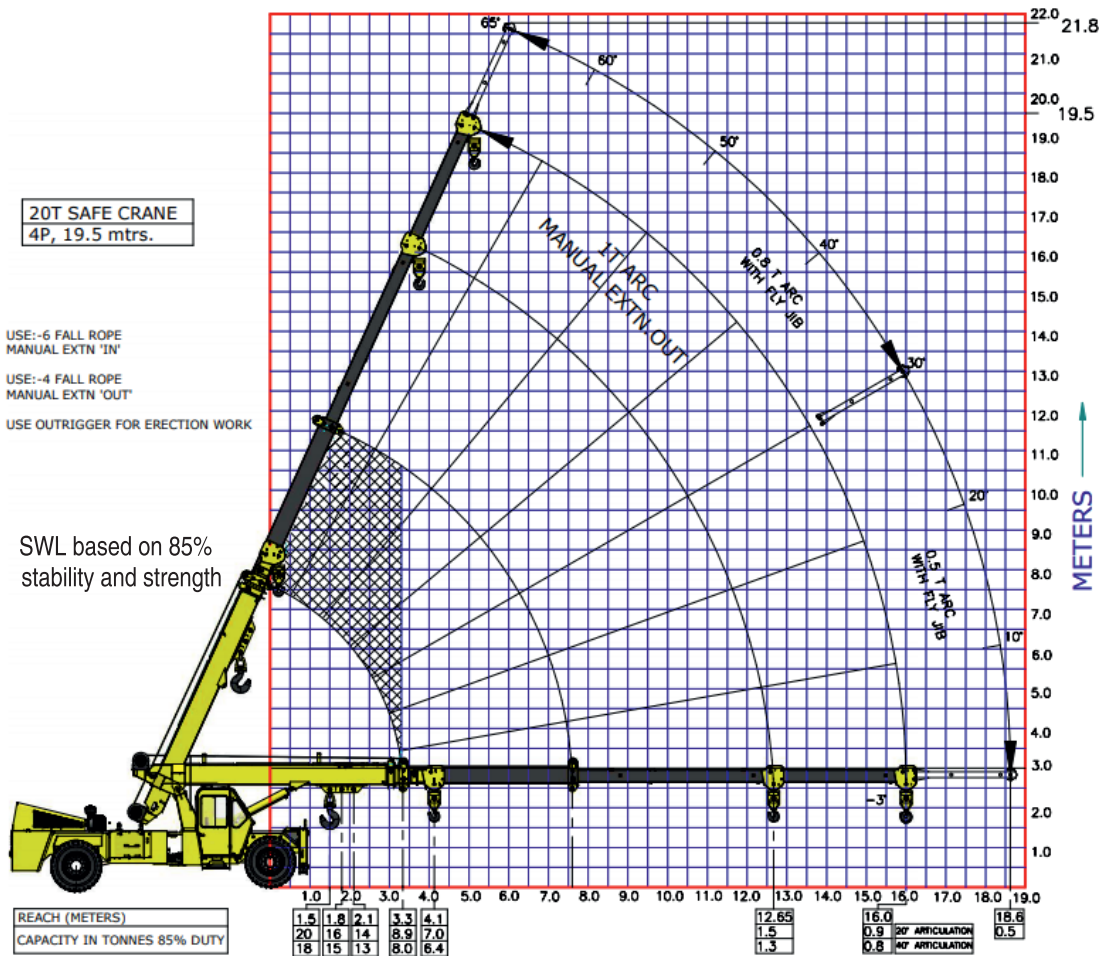
Heavy duty 37.3 ton hub reduction axle for heavy load applications

## LOAD CHART F 20

20T SAFE CRANE  
4P, 19.5 mtrs.

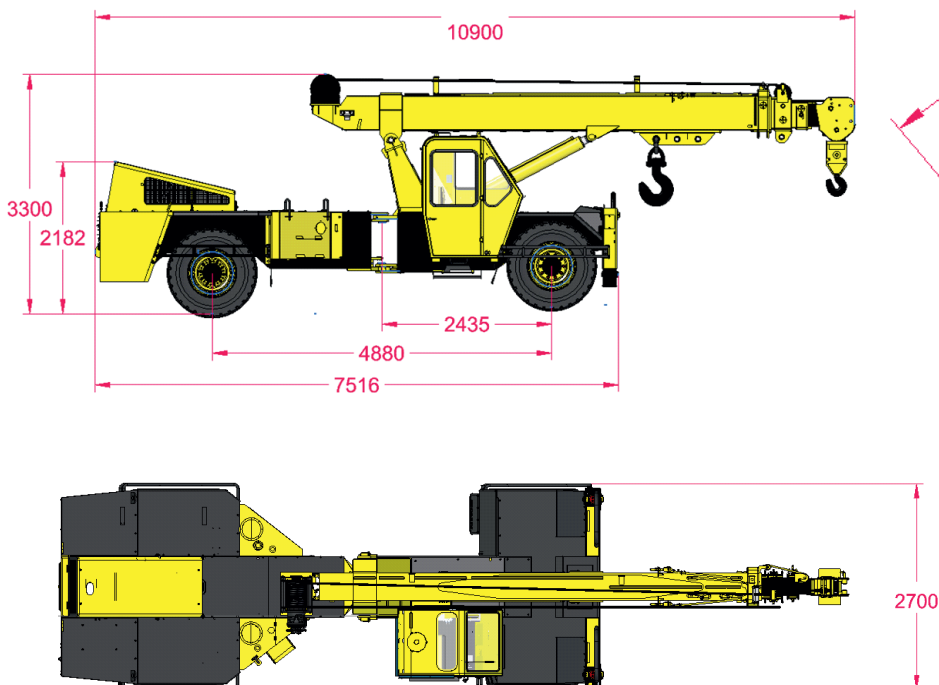
USE:-6 FALL ROPE  
MANUAL EXTN 'IN'  
USE:-4 FALL ROPE  
MANUAL EXTN 'OUT'  
USE OUTRIGGER FOR ERECTION WORK

SWL based on 85%  
stability and strength



Rated loads are calculated for operation on leveled surface.

## F20: DIMENSIONS (Ref.) & AREA OF OPERATION





## FEATURES

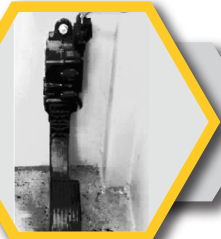


### HYDRAULIC CLUTCH

Low effort hydro pneumatic clutch to reduce operator fatigue.

### ELECTRONIC ACCELERATOR PEDAL

**Accelerator Pedal** - Low effort electronic accelerator pedal reduce operator fatigue.



### ECU EMS SYSTEM

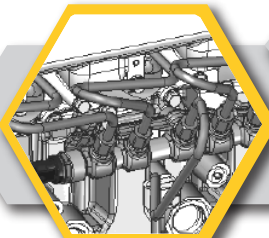
**ECU EMS** – Electronic Control Unit for Engine Management System for Engine diagnosis and troubleshoot.

### IGNITION ON/ OFF

Ignition key to switch off engine, no more use of stop cable to engine put off.



**SWITCH OFF ENGINE**



### HPCR SYSTEM

**HPCR** – High Pressure Common Rail System - HPCR provide cleaner exhaust, deliver more horsepower and fuel efficiency per displacement.

### ROCKER SWITCHES

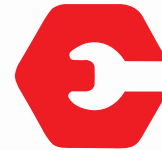
Rocker Switch with more reliable and better aesthetic appearance, low operator fatigue.



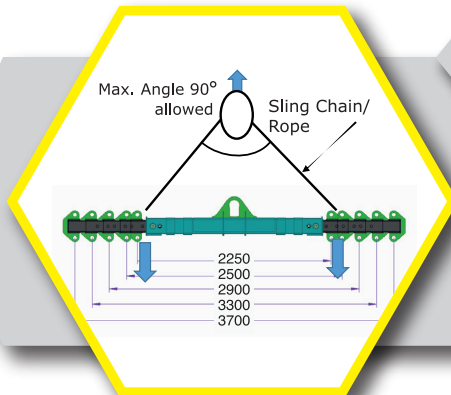
### CLUSTER

Single Digital Cluster with all gauges, fault code detection for engine system, date and time display feature, less number of wiring harness.





## ACCESSORIES



### SPREADER BAR CUM LIFTING BEAM

Spreader Bar is used to aid crane operators in picking up large and sometimes heavy loads. It increase the stability and handling of load during hoisting and traveling with load.

Lifting Capacity- 5 Tonnes to 15 Tonnes

(depending on the crane load chart)

Beam Expend Range: 2250 mm to 3700 mm

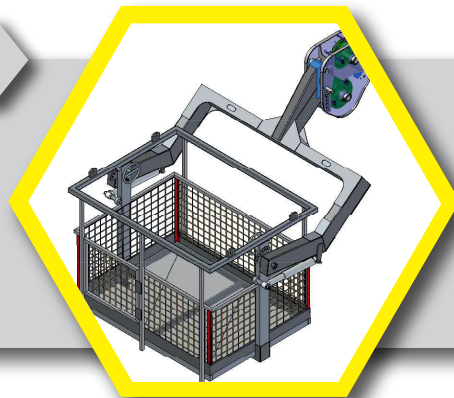
**Note:** Attachment view is for ref. only. Physical part may be differ from provided.

### MAN CARRYING BASKET

ATTACHMENT SPECIFICATION		
ATTACHMENT WEIGHT	KG	240
MAX. CAPACITY	KG	235
NO. OF PERSONS.	N°	2
PLATFORM LENGTH	mm	1440
PLATFORM WIDTH	mm	1070

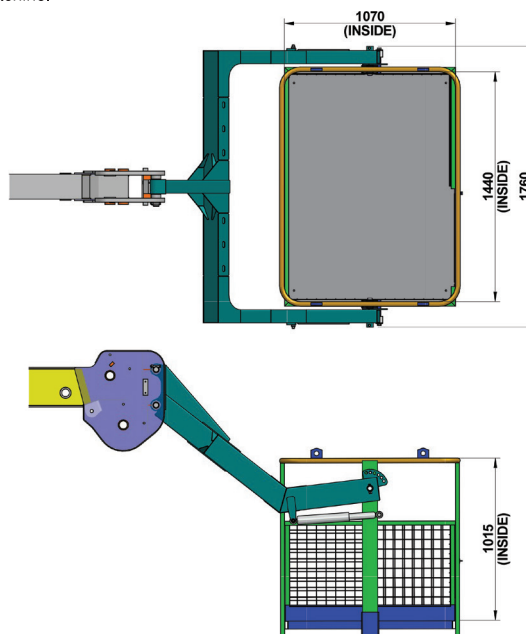
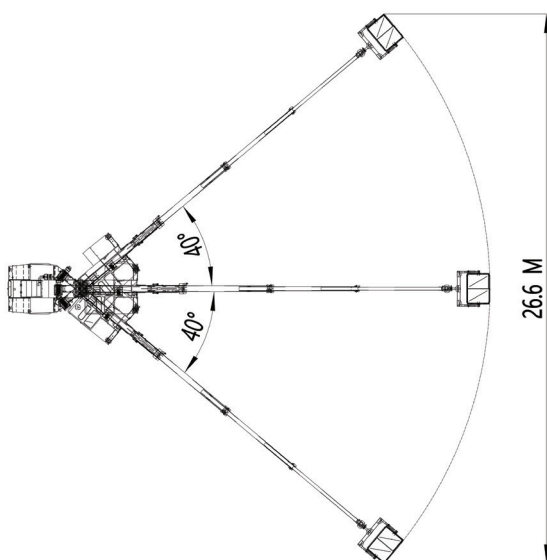
#### Intended use

The machine has been designed to lift people and handle small tool, max load 235 kg or 2 persons



#### BE CAREFUL!

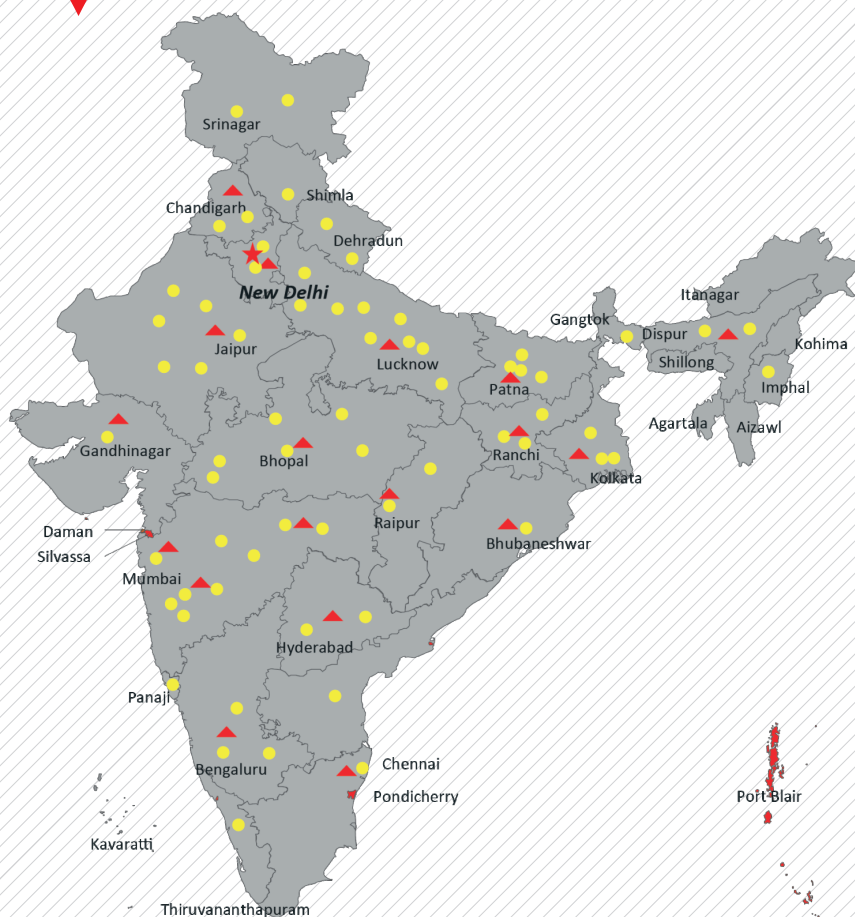
When in the firm the same machine is to be used by more than one operator, working instructions as well as the use and maintenance manual must be conveyed to all the operators in charge of the machine.



ATTACHMENT DIMENSIONS



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