

SPECIFICATION FOR 35 - 40 TE MOBILE CRANE

S.N	Description	Specification for indent
A	General Specification	
1	Type	Rough Terrain crane
2	Capacity	35 to 40 MT
3	Boom Type	Telescopic
4	Boom Length (On fully extended condition)	Not less than 30 meters
B	Rated Capacity	
1	Maximum Capacity (On outriggers)	Vendor to specify
2	Radius at which Maximum Capacity	Vendor to specify
3	Minimum Capacity (On Outriggers)	Vendor to specify
4	Radius at which Minimum Capacity	Vendor to specify
5	Maximum Capacity with Fly Jib (On Outriggers)	Vendor to specify
6	Radius at which the maximum capacity (with fly Jib)	Vendor to specify
7	Maximum Capacity on Tyres	Vendor to specify
8	Minimum Capacity with Fly Jib	Vendor to specify
9	Radius at which the Minimum capacity (with fly Jib)	Vendor to specify
C	Boom	
1	Boom Type	Telescopic, Full power, sequence sychronized, single lever control, sliding on adustable & Replaceable low friction wear pads
2	No of Boom Sections	Vendor to specify
3	Basic Boom Length	Between 9 to 12 meters
4	Maximum Boom Length (in all sections extended condition)	Not less than 30 meters
5	Boom lifing arrangements	Double acting Hydraulic cylinder with integral hold valve
D	Boom Luffing	
1	Minimum Angle	Not more than -1 degrees
2	Maximum Angle	Inbetwwen 76 to 80 degrees
E	Boom Slewing system	
1	Slew system	360 degrees continuous rotation
2	Slew brake system	Required. Party is to be mention the type
3	Slew Speed	Vendor to Specify
4	Slewing Lock	Required. Party is to mention the type
F	Hoist system	
1	Type	Hydraulic
2	Winch Capacity	Vendor to specify
3	Drum Type	Grooved
4	Wire Rope Type	Vendor to specify
5	Wire Rope Diameter	Vendor to specify
6	Line Speed (Unladen)	Vendor to specify
G	Hook Block	
1	Capacity	Vendor to specify
2	No of Sheaves	Vendor to specify
3	Type of Sheaves	Vendor to specify
4	Maximum No of Falls	Vendor to specify
5	Type of Hook	Rams-Horn Type
6	Additional Hooks	
7	10-15 Te capacity	Required
8	Single Hook	Required
H	Engine	
1	Make	Should be of reputed make like Cummins, Caterpillar, Mercedeze Benz, Volvo etc
2	Fuel	Diesel
3	No of Cylinders	Vendor to specify

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4	Emission standards	BS III or latest
5	Engine cooling media	Water/coolant cooled
6	Power	Vendor to specify
I	Transmission	
1	Drive	4 x 4 (with the provision of driving rear wheels only)
2	Drive selection to drive Rear wheels only	Vendor to Specify
3	Gear Box Type	Vendor to Specify
4	Forward Speeds	Vendor to Specify
5	Reverse Speeds	Vendor to Specify
6	Speed Range selection (Low/High Selection)	Vendor to Specify
7	Maximum Speed	Vendor to Specify
8	Clutch	
9	Traveling speed and Gradeability	
10	Maximum Gradeability Angle	Should not be less than 45 degrees
11	Minimum Speed	Vendor to Specify
12	Maximum Speed	Vendor to Specify
J	Steering	
1	Type	Power Steering
2	Steering on Front wheel	Required, Type to be mentioned by the party
3	Steering on rear wheel	Required, Type to be mentioned by the party
4	Steering modes	
5	Front Only	Required, Type to be mentioned by the party
6	Rear Only	Required, Type to be mentioned by the party
7	Crab	Required, Type to be mentioned by the party
8	Cordinated	Required, Type to be mentioned by the party
9	Minimum Turning Radius	Vendor to specify
K	Type of Brakes	
1	Type of wheel brakes	Vendor to specify
2	Type of Parking Brake	Vendor to specify
L	Operator Cabin	
1	Type	All weather, totally enclosed steel construction, full vision type cab with all crane functions control levers, driving controls, engine instrumentations, steering wheels
2	Operator Seat	Comfortable seat provided such that all instrumentations,
3	Windows	Fitted with safety glass
4	Door	Lockable sliding door,
5	Interior lighting	Required
6	Fan	Required
7	Electric wiper for glasses	Required
	Minimum Indications in Dashboard	
1	Low Engine Oil Pressure	Required
2	High Engine/coolant Temperature	Required
3	Rear Wheel steer indicator	Required
4	Battery Charging	Required
5	Low Battery	Required
	Minimum instrumentation for Engine required in the cabin	
6	Engine Oil pressure Gauge	Required
7	Fuel Gauge,	Required
8	Engine coolant Temperature	Required
9	Voltmeter	Required
10	Tacho-Hour Meter	Required
M	Control system	
1	Type of control system	Vendor to Speciffy
2	Electronic Display in the cabin	Required
	Minimum display required in the Electroinc Display	
3	Boom angle	Required
4	Boom Length	Required

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5	Radius	Required
6	Maximum Permissible Load	Required
7	Load	Required
8	Audio/Visual Warning	Required
9	Over loading	Required
N	Hydraulic System	
1	Pump	Vendor to specify
2	Type of Pump	Vendor to specify
3	Driver of the pump	Engine (through PTO,Gear train etc)
4	Valves	Vendor to specify
5	Filters	Vendor to specify
6	Reservoir Capacity	Vendor to specify
7	Pressure relief valves	Vendor to specify
O	Fly Jib	
1	Type	Vendor to specify
2	Offset Mechanism	Vendor to specify
3	Angle of Offset	Vendor to specify
P	Outriggers	
1	Type (Minimum Requirement)	Horizontal & Vertical Cylinders, Inverted jacks with integral holding valves
2	Control (Minimum Requirement)	Independent control for each outrigger from the cabin
Q	Operating Timings	
1	Steering	Vendor to specify
2	Derricking in	Vendor to specify
3	Derricking out	Vendor to specify
4	Telescoping in - out	Vendor to specify
5	Slewing (360 degrees)	Vendor to specify
R	Safety	
1	Oscillation Lockouts	Required, which permits only oscillation with boom centered over front
2	Over Load Warning	Required
3	Over Hoist Warning	Required
S	Minimum Asscories required	
1	Rear View Mirror	Required
2	Back-up Alarm	Required
3	Front Stowage Well	Required
4	Tool Kit	Required
5	Fire Extinguisher	Required
6	Tow Hook on chassis frame	Required
7	360 Degree Beacon Lights	Required
8	Cab spot light	Required
T	Electicals System	
1	Voltage	Not more than 24 V
2	Type of earthing	Negative earthing
3	Battery Capacity	Vendor to Specify
4	No of Batteries	Vendor to Specify
5	Alternator (driven by engine) for battery charging	Required
6	Minimum lighting requirement	
7	Two Head lights	Required
8	Two Tail lights	Required
9	Front and Rear Working light	Required
10	Side lights	Required
11	Stop lights	Required
12	Parking lights	Required
13	Flashing direction indicators	Required

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14	Reverse lights	Required
U	Tyre Size	
1	Front	Vendor to Specify
2	Rear	Vendor to Specify
V	Overall Dimensions	
1	Length	Vendor to Specify
2	Width	Vendor to Specify
3	Height	Vendor to Specify
4	Weight	Vendor to Specify
5	Minimum Ground Clearance	Vendor to Specify