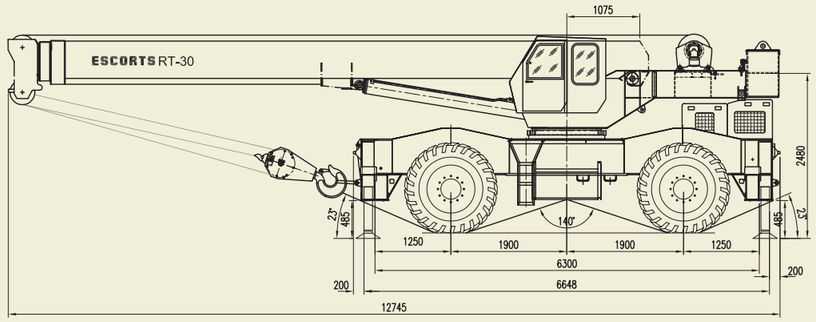
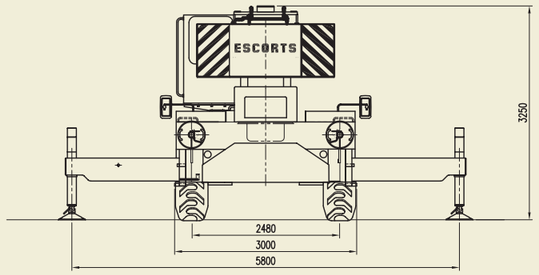
ESCORTS

Other Specifications	RT 30
Max. lift capacity	32T
Main hydraulic pump	Fixed displacement gear type
Max. flow	220 l/min
Circuit pressure	260 kg/sq.cm.
Hoist winch rope:	
Dia	16mm
Length	175 m
Boom	3 section hydraulically telescopic rectangular box type boom made of 4 high tensile steel sections welded together
Gross Vehicle weight	28,300 kg approx.
Counter weight	6.1T
Tyres	18.00 x 25-32 PR 4 nos. earthmover Type

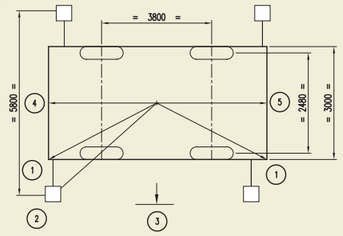
Performance Parameters	
Boom Derricking	-1 deg. to + 83 deg.
(Unladen)	In 45 sec (approx)
Boom telescoping	10 m to 25 m in
(Unladen)	75 sec (approx)
Gradeability	50% (unladen)
Max. Travel speed	30 kmph
Slew Speed	0-3 rpm (unladen)
Turning circle Dia (kerb)	14 m
Max. Rope Speed	60 m/min

RT 30:
32 TONNES
ROUGH TERRAIN
HYDRAULIC
MOBILE CRANE





OUTREACH DIAGRAM



DEDUCT FROM RADIUS
1. 3690mm 2. 4590mm 3. 3130mm 4. 3385mm 5. 3385mm

All Dimensions above are in mm and are variable within ±5%

Escorts Construction Equipment Limited

Plot No. 219, Sector- 58, Ballabhgarh, Distt. Faridabad- 121004, Haryana, India
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E-mail: marketing@escorts-ecel.com, Website: www.ecel.com

LIT/MKTG/RT30/11-11

ESCORTS RT 30

Rough Terrain Hydraulic Mobile Crane

- **Maximum Capacity**
  32 MT AT 3M Radius on Outriggers 360° Slew
- **Maximum Capacity**
  20.9 MT AT 3M Radius on Tyres Over front
- **3 Part 25 M Boom**
- **4x4 Wheel Drive with 4-Wheel Steer**

Technical Data

Technical Data

Chassis
- Torsion resistant with rigid steel structure

Engine
- Suitable water cooled diesel engine of adequate HP. Fuel tank capacity 300 litres

Transmission
- Power shift transmission with built-in torque convertor with adequate speeds. Driven by engine through propeller shaft and controlled through speed controller from the crane cabin side dashboard

Brakes
- Service : Foot operated, air assisted hydraulic brake acting on all wheels
- Parking : Hand operated, spring loaded fail-safe air brake on front axle

Steering
- Fully hydraulic, controlled from the crane cab via hydraulic rotary joint to the chassis
- Four steering modes-2 wheel (front), 2 wheel (rear), 4 wheel and crab. Auto-reversal mechanism to ensure correct steering wheel control irrespective of the position of the superstructure in relation to the chassis

Electricals
- 24 Volts system
- 2 main head lamps, 2 brakes and flashing trafficator lamps at rear, 2 flashing trafficator lamps at front, 1 work lamp

Outriggers
- Four nos. out & down type, hydraulically operated with fail-safe dual lock valves
- Control is effected via electro hydraulic valves, individually or simultaneously

Hydraulic System
- Main hydraulic double pump / single pump connected to the transmission
- Four nos., 3 position, proportional control valves, operated through hydraulic joystick enabling simultaneous independent crane operations and progressive speed control
- Hydraulic cylinders specially designed for sustaining all operating and shock loads
- Safety valves in all hydraulic cylinders for protection against pipe and hose ruptures
- Piston rods hard chromed and protected from dirt by scraper rings
- Counter balance valve (in derricking and hoist circuit) to provide controlled derricking and hoisting operation under load

Axle
- Front: Drive & steer, rigid frame mounted
  Rear: Drive & steer, centrally pivoted, lateral oscillating with hydraulic locking device

Drive
- 4x4 for off the road movement, all wheel drive
- 4x2 for road travel, front axle drive

Wheels
- Wheel rim 13.00 x 25.00 offset disc
- Tyre inflator (standard)

Technical Data

Crane cab All Weather Comfort
- Sheet metal structure, sliding door, large sized safety-glass windows, adjustable driver's seat, hinged windscreen pane, interior lights, indicator for torque converter and gear box oil temperature, compressed air pressure gauge, fuel level gauge, pressure guage for hydraulic system of superstructure, rpm meter, hour meter and pilot lamps for engine monitoring. Self centering type control levers. All controls for crane travelling operations within easy reach

Superstructure
- All welded rigid construction counterweight: Removable, bolted to the superstructure

Ring Gear Assembly
- Single ball bearing slewing ring fitted between carrier and superstructure

Slewing Gear
- Fixed displacement hydraulic motor, planetary gear drive including spring loaded multiple disc brakes, released hydraulically
- Free wheeling safety device for automatic alignment of boom over the load 360 degree continuous slew

Boom
- Derricking through single cylinder with integral safety brake valve for controlled lowering

Hoist Winch
- Drive: Hydraulically motor driven planetary gear box type
- Brakes: Automatic fail-safe spring applied hydraulic release multiple disc brake, together with counter balance valve to control lowering speed
- Over hoisting protection: Over hoist limit switch is provided with hydraulic cut -off in the event of over hoisting of snatch block

Hook Block
- 4 sheaves reeved for 8/9 part line

Electronic Safe Load Indicator
- Indicates actual load, rated load , load radius and boom elevation angle at any particular instant. In overload conditions there is audio visual warning and all such hydraulic operations that tend to increase the load moment (unsafe operations) are automatically cut-off while operations like derricking in and hoisting down still being possible

Optional Extra
- Lattice Boom extension 8.5 m
- Auxiliary hoisting gear with rope length 110 m (approx) and rope dia 14 mm
- High tension warning device
- Cab heater & demister
- Spark arrestor
- Fog lights
- Spare wheel & tyre
- Digital data recorder
- 6 tonnes hook block
- Fire extinguisher
- Marker lights
- Cold climate kit
- Air conditioner

Load Chart

LIFTING CAPACITIES (IN METRIC TONNES)
ON OUTRIGGERS FULLY EXTENDED AND SET
SLEWING RANGE 360°

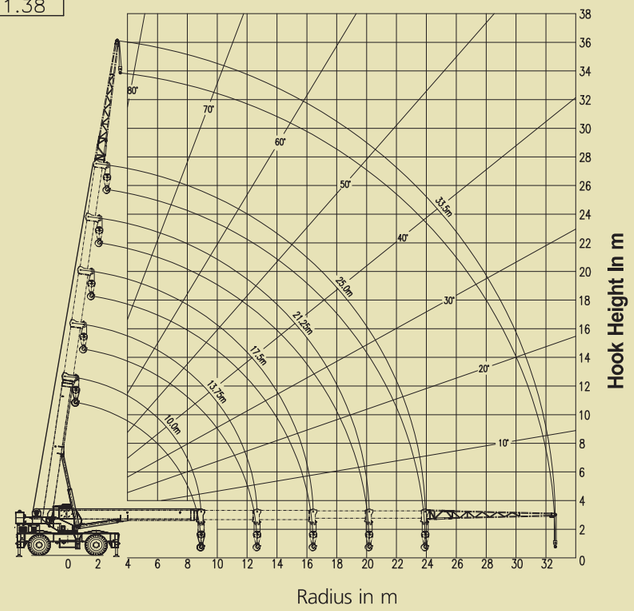
Working Radius (m)	Boom Length (m) 10.00	13.75	17.50	21.25	25.00	Boom Extension (8.50) 33.50
3.0	32.00					
3.5	26.70					
4.0	23.30	18.20				
4.5	20.60	18.20				
5.0	18.45	18.20	14.00			
6.0	15.15	15.05	14.00	10.20		
7.0	12.75	12.60	12.40	10.20	8.10	
8.0	10.95	10.80	10.70	9.80	8.10	4.50
9.0		9.35	9.20	8.85	8.00	4.30
10.0		7.90	7.80	7.90	7.15	4.09
11.0		7.00	6.80	6.85	6.60	3.90
12.0		6.20	6.10	6.25	6.00	3.69
13.0			5.45	5.60	5.55	3.52
14.0			4.90	5.05	5.15	3.34
15.0			4.45	4.55	4.65	3.22
16.0			3.95	4.15	4.20	3.08
17.0				3.80	3.85	2.95
18.0				3.50	3.55	2.83
19.0				3.20	3.30	2.73
20.0				2.90	3.00	2.61
21.0					2.75	2.53
22.0					2.55	2.44
23.0					2.35	2.37
24.0						2.28
25.0						2.20
26.0						2.07
27.0						1.91
28.0						1.77
29.0						1.64
30.0						1.48
31.0						1.38

LIFTING CAPACITIES (IN METRIC TONNES)
MOBILE UPTO 4 KMPH SPEED
OVERFRONT

Working Radius (m)	Boom Length (m) 10.00	13.75	17.50	21.25	25.00
3.0	20.90				
3.5	18.80				
4.0	17.05	17.00			
4.5	15.55	15.50			
5.0	14.35	14.25	14.15		
6.0	12.30	12.25	12.15	12.10	
7.0	9.85	9.75	9.65	9.95	10.10
8.0	7.90	7.80	7.70	8.05	8.10
9.0		6.45	6.35	6.60	6.75
10.0		5.40	5.30	5.60	5.70
11.0		4.60	4.55	4.75	4.95
12.0		3.90	3.85	4.10	4.25
13.0			3.30	3.55	3.65
14.0			2.85	3.10	3.25
15.0			2.50	2.70	2.85
16.0			2.20	2.40	2.55
17.0				2.10	2.30
18.0				1.85	2.00
19.0				1.65	1.75
20.0				1.45	1.60
21.0					1.45
22.0					1.30
23.0					1.15

LIFTING CAPACITIES (IN METRIC TONNES)
FREE ON WHEELS
SLEWING RANGE 360°

Working Radius(m)	Boom Length (m) 10.00	13.75	17.50	21.25
3.0	14.85			
3.5	13.00			
4.0	11.55	11.44		
4.5	10.30	10.20		
5.0	9.30	9.25	9.15	
6.0	7.30	7.20	7.10	7.30
7.0	5.70	5.60	5.50	5.70
8.0	4.60	4.40	4.30	4.65
9.0		3.65	3.60	3.80
10.0		3.00	2.95	3.15
11.0		2.50	2.40	2.60
12.0		2.10	2.00	2.20
13.0			1.70	1.85
14.0			1.35	1.55
15.0			1.15	1.35
16.0			0.95	1.15
17.0				0.90
18.0				0.75
19.0				0.60
20.0				0.50



Lifting Capacities for supported operation only on firm level ground. Weight of 40T hook block=450 kgs.
Lifting capacity= actual load+ hook block +Lifting equipment. With boom extension assembled, ratings shown will be reduced.
These lifting capacities do not exceed 85% of the tipping load.