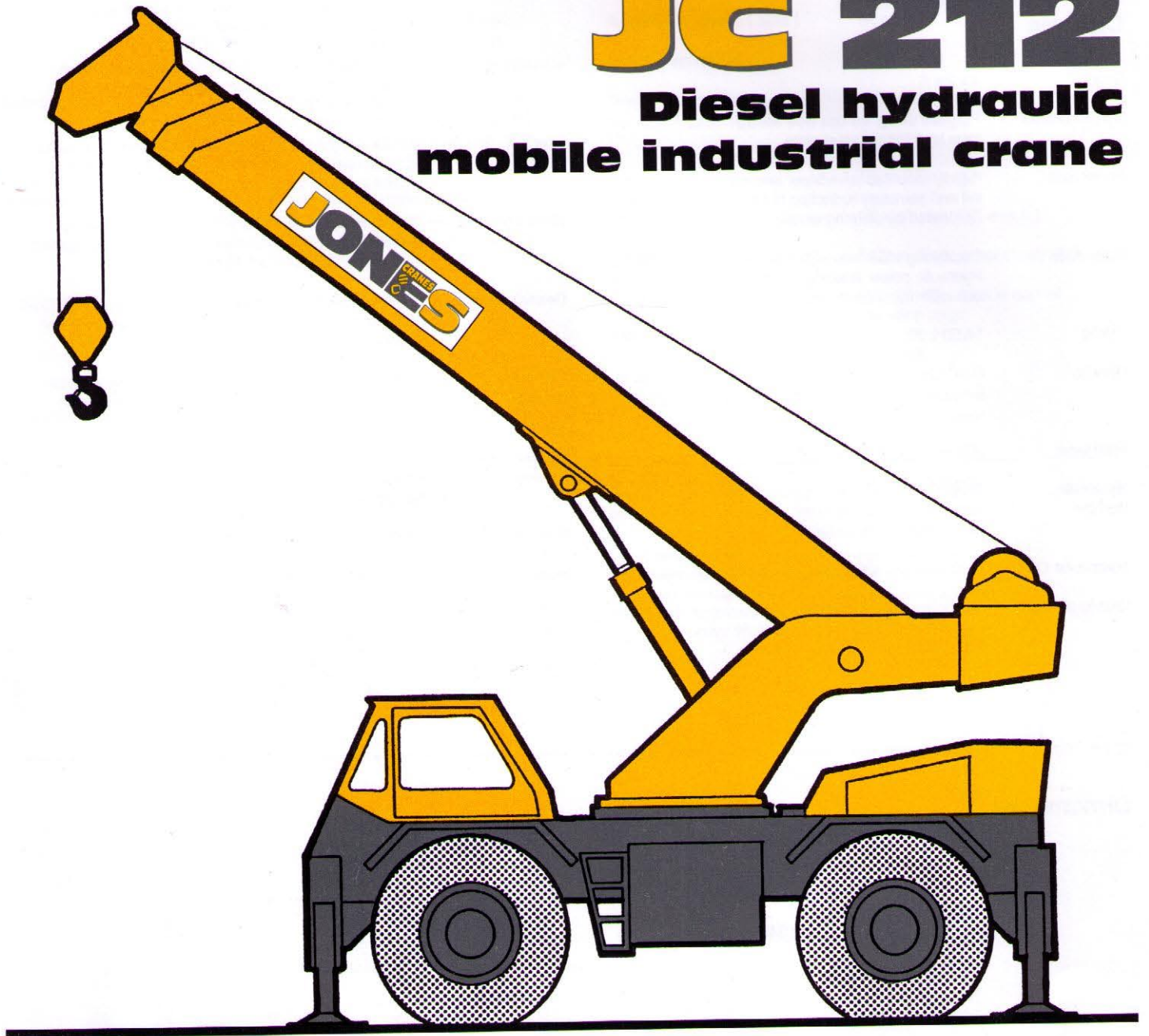


# JONES CRANES ES

## JC 212

**Diesel hydraulic  
mobile industrial crane**



- Maximum capacity - 12.000 kg
- Two section boom 6.4 - 10.1 m
- Maximum travel speed - 50 km/h
- Maximum tip height - 19.5 m

**THE JONES NAME FOR CRANES**



## Power unit and transmission

<b>Engine</b>	Four cylinder water cooled diesel engine producing 75 kW (100 b.h.p.) at 2500 rpm.
<b>Transmission</b>	Torque converter with full powershift giving 6 forward and 6 reverse gears

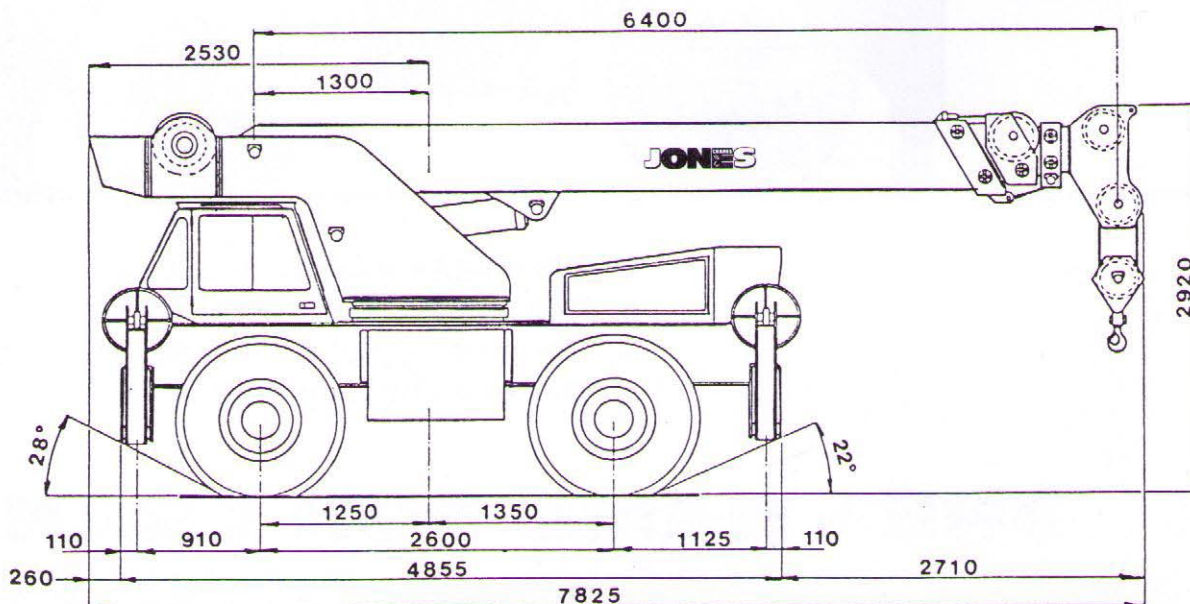
## Chassis

<b>Drive</b>	4 x 2 x 4
<b>Construction</b>	Purpose designed box type section frame fabricated from high tensile steel plate.
<b>Front axle</b>	Rigidly mounted drive/steer axle with central differential and planetary reduction hubs. Full power steering Controlled by steering wheel.
<b>Rear Axle</b>	Oscillating steer axle with manual oscillation lock out. Hydraulic power steering by tiller mounted in driver's cab with rear steering indicator light.
<b>Tyres</b>	14.00 x 20
<b>Brakes</b>	Dual circuit air over hydraulic service brakes to all wheels. Cable operated disc type parking brake to front wheels.
<b>Fuel tank</b>	205 litres ( 45 gallons )
<b>Hydraulic pumps</b>	Three gear type hydraulic pump system. One tandem pump and one single pump. Total capacity 333 litres/ min. Hydraulic oil cooler.
<b>Hydraulic Oil</b>	Tank capacity 430 litres ( 95 gallons )
<b>Outriggers</b>	Four independent cantilever type outrigger beams operated by double acting hydraulic cylinders controlled from the driver's cab

## Crane superstructure

<b>Superstructure frame</b>	Welded high tensile steel structure on which is mounted the telescopic jib, hoist unit, derricking cylinders and counterweight. The superstructure is capable of unlimited slewing in either direction and rotates on a slew bearing, which is sealed against the ingress of dust and water.
<b>Main Boom</b>	Two section boom of box section type construction comprising base and telescopic section extending from 6,4 m to 10,1 m.
<b>Control Valves</b>	Individual control valves allowing independent or simultaneous operation of the crane functions operated by control levers in the driver's cab.
<b>Hoist motion</b>	Gear type hydraulic motor driven through planetary double reduction gear unit with 'fail safe' spring applied hoist brake and counterbalance valve.
<b>Derrick motion</b>	Single double acting hydraulic cylinder to give maximum control and fitted with integral pilot operated counterbalance check valves. Elevation 0° to 72°.
<b>Slewing motion</b>	Hydraulic driven slew pinion through planetary double reduction gear unit. Multidisc type slew brake. hand operated slew lock.
<b>Jib telescoping motion</b>	Double acting cylinder mounted within the jib structure, fitted with integral pilot operated counter balance valve.
<b>Hoist rope</b>	13mm diameter x 110 m long
<b>Hook block</b>	Two sheave block for maximum duty
<b>ELECTRICAL System</b>	24 volt electrical starting and charging circuits. Full road lighting to EEC requirements.

## Dimensions



## Driver's Cab

<b>Construction</b>	Fully enclosed all steel construction, two door driver's cab mounted on crane chassis giving maximum all round vision through safety glass windows.
<b>Fittings</b>	Fully upholstered driver's seat with hydraulic damper, adjustable for height, rake and leg length. Cab front screen wiper and rear view mirrors.
<b>Instruments</b>	Full cab instrumentation for engine and transmission oil pressures and temperatures, air pressure, fuel and travel speeds, battery charging, road lighting and direction indicators.
<b>Controls</b>	Normal automotive road controls including steering wheel for front axle, tiller for rear steer, transmission gear selector, forward and reverse shift. Crane controls for all functions are mounted in the cab.

## Safety equipment

<b>Standard</b>	Control lever lockout of hoist, derrick, telescope and slew. Anti two block system.
<b>Optional</b>	Audible and visual rated capacity indicator

## Paint

<b>Finish</b>	High gloss finish. Grey chassis and cab with yellow superstructure.
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## Performance data

### OPERATING

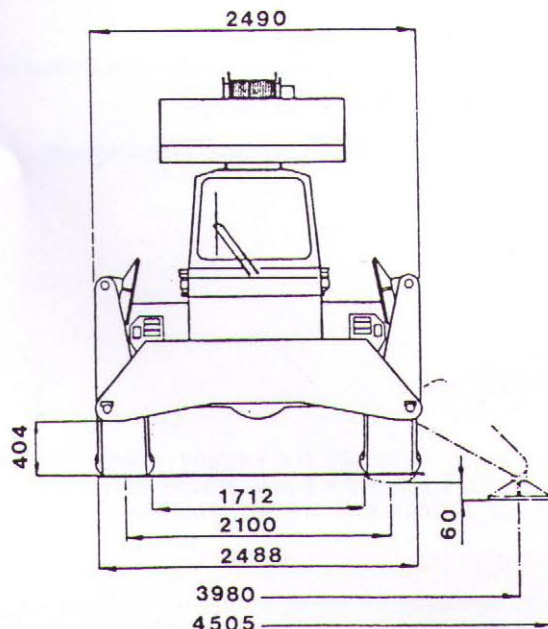
<b>Line pull</b>	3000 kg. ( 29 kN )
<b>Single line speed ( Max )</b>	98 m/min
<b>Boom Derrick Up</b>	15 seconds
<b>Boom Derrick Down</b>	14 seconds
<b>Boom extension</b>	24 m/min
<b>Slew Speed</b>	Up to 2,5 r.p.m.
<b>Travel speed</b>	50 km/h max. ( 31 m.p.h )
<b>Turning radius</b>	5,08 m (Four wheel steer)

### GENERAL

	Weight with crane in normal travelling order.
<b>Axle Loads</b>	
<b>Front axle</b>	7,500 kg.
<b>Rear Axle</b>	6,500 kg.
<b>Total</b>	14,000 kg
<b>Maximum Gradient</b>	40% ( Unladen )

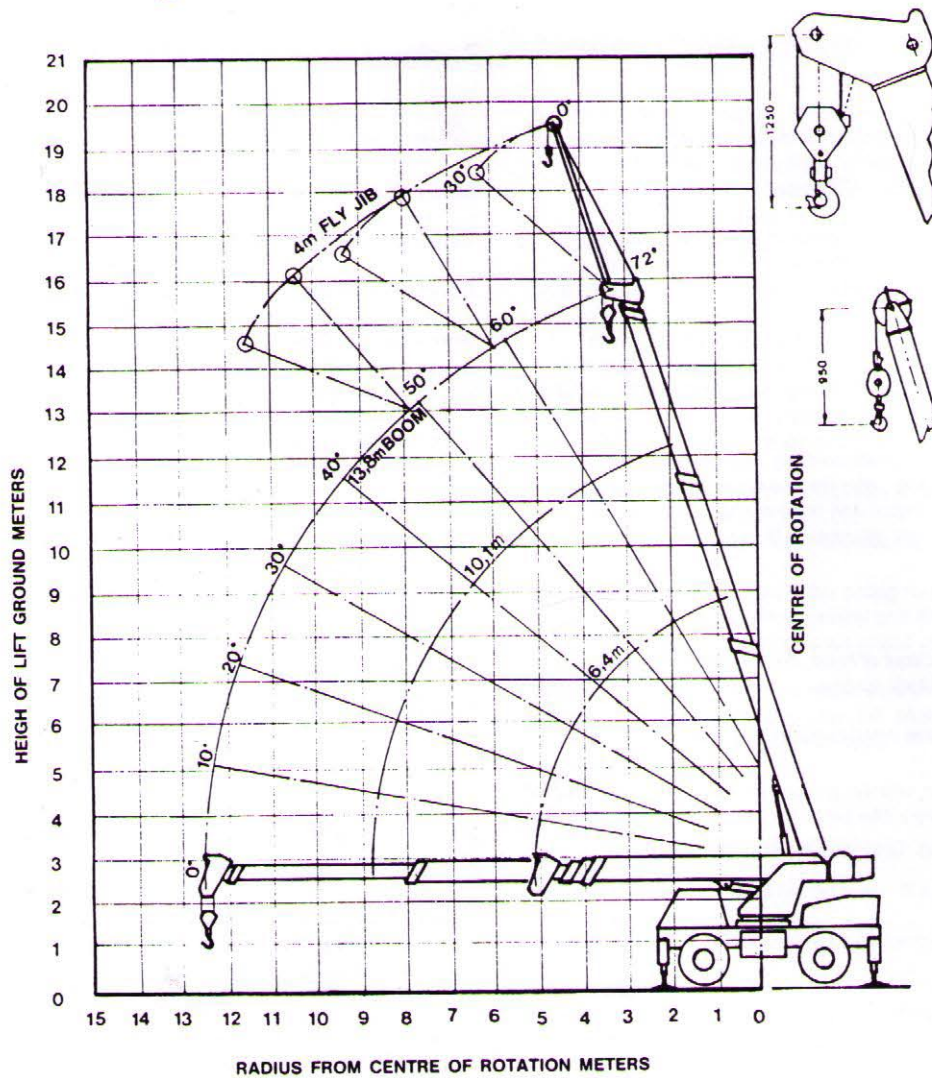
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# Heights of lift



## Optional equipment

3 section fully synchronised telescopic boom extending from 6,4 - 13,8 m

3 tonne single line hook

Rated capacity indicator

Four wheel drive in lieu of standard 2 wheel drive

4,0 m Fly jib with pendant overhoist limit switch

Boom mounted working lights

Motion cut outs operated in conjunction with rated capacity indicator

Cab heater

Warning beacons mounted on chassis cab

Cab mounted spotlight

Painting to customer's requirements

**JONES** CRANES  
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# Lifting capacities

## Three section boom

Lifting capacities in kilogrammes to BS 1757:1986 and DIN 15019.2

Working Radius m.	360° LIFTING CAPACITIES ON OUTRIGGERS								FREE ON WHEELS Capacities		
	Main Boom Length in metres.								14.00 x 20 - 18 PR Tyres.		
	6,4	7,0	8,0	9,0	10,0	11,0	12,0	13,8	Boom Length	Over Front	Static 360°
2,50	12000	10000	10000	10000					6,4	8000	6500
3,00	10000	10000	10000	9200	8300				6,4	6900	5900
3,50	8500	8500	8500	8500	8000	7800			6,4	6000	4900
4,00	8000	8000	8000	8000	7800	7600	7400		6,4	5200	3900
4,50	7300	7300	7300	7300	7300	7200	7100	6900	6,4	4600	3400
5,00	6000	6000	6000	6000	6000	6000	6000	6000	6,4	4000	2900
5,50		5000	5000	5000	5000	5000	5000	5000	7,0	3400	2400
6,00			4300	4300	4300	4300	4300	4300	8,0	2900	1900
6,50			3700	3700	3700	3700	3700	3700	8,0	2400	1600
7,00				3300	3300	3300	3300	3300	9,0	1900	1100
7,50				2900	2900	2900	2900	2900	9,0	1600	1000
8,00					2600	2600	2600	2600	10,1	1400	900
8,50					2300	2300	2300	2300	10,1	1200	800
9,00						2100	2100	2100			
10,00							1900	1900			
11,00								1700			
12,00								1500			

4,0 m FLY JIB CAPACITIES			
Boom Angle	Jib Offset		
	0°	10°	20°
72°	1800	1700	1500
60°	1550	1450	1300
50°	1200	1100	1000

- Specified capacities relate only to the machine as originally manufactured and equipped and used in accordance with CP.3010 'Safe use of cranes'. Any modification invalidates this information
- The capacities are in accordance with clause 9.1.3c 'Stability' of BS 1757:1986 'Power Driven Mobile Cranes' with wind forces to tables 5A and 6A of BS 2573, and also comply with DIN 15019.2.
- Capacities are the gross maximum loads that may be freely suspended from the boom head with the crane standing on a firm supporting surface.
- When determining the suspended load, the weight of hook blocks, slings and any other lifting attachment must be added to the weight to be lifted. Five Fall hook block - 180 kgs. Single fall hook block - 38 kgs.
- Free on wheel capacities depend on correct tyre pressure, type and condition.
- Radius is measured with the load suspended.
- Capacities shown above the bold line are based on factors other than stability. For this reason stability must not be relied upon to indicate capacity
- Under normal circumstances it is permissible to attempt to telescope the boom in or out with a suspended load, providing the load/radius is within the capacity shown in the duty chart.
- The boom should not be operated at any combination of length or radius where there is no lifting capacity indicated on the chart. To do so may result in loss of stability of the crane.
- Suspended loads may be transported at speeds of up to 3 km/h. Loads should be carried over the front whenever possible. Axle locks must be engaged before lifting free-on-wheels- except over front within 2,5° either side of the crane centre line.
- Capacities over front apply only within 2,5° either side of the centre line of the crane.

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