

CRANE SPECIFICATION

Please find below crane specification.

| | DESCRIPTION | |
|----|--|---|
| 1 | Make, model and country of origin. | LIEBHERR LHM 1300 Litronic Manufactured in Austria |
| 2 | Maximum capacity at all spreader positions | 35.0t @ 32m, 19.1t @ 45m |
| 3 | Overall length | 20.25m (66.1m boom down) |
| 4 | Overall height | 60.5m |
| 5 | External Width (Outriggers extended & retracted) | 13.8m (12.0m Retracted) |
| 6 | Maximum lift height under spreader | 39 m approximately |
| 7 | Maximum lowering height below wharf level. | 10m approximately |
| 8 | Minimum and maximum outreach | 3.9m - 37.8m |
| 9 | Spreader side shift balancing distance | 1200mm (10% imbalance 40') |
| 10 | Spreader rotation angle | Unlimited |
| 11 | Minimum turning circle | 8.8m (Inner) |
| 12 | Axle loadings of unloaded crane | 53 tonne |
| 13 | Outrigger pad loadings under maximum loading | 178 t (static) 230 t (dynamic) |
| 14 | Total weight of machine – laden and unladen | 327 t |
| 15 | Hoisting speeds – laden and unladen | 27 m/min @52 t, 90 m/min @10 t |
| 16 | Travel speeds – laden and unladen | 40.8 m/min (5 km/h) |
| 17 | Maximum gradability – unladen | 10% |
| 18 | Maximum operational wind speed | 20 m/min |
| 19 | Make and model of engine | Mercedes Benz OM 444 LA |
| 20 | Engine capacity and rated output | 491 kw @ 1900 RPM |
| 21 | Fuel tank capacity & approx. Running time | 3660 l, 130 running Hours |
| 22 | Make and model of transmission | Hydraulic Drive System |
| 23 | Make of principal hydraulic components | Rexroth |
| 24 | Make of hoist ropes used | Original Manufacturer |
| 25 | Make and details of braking system | Air over Hydraulic |
| 26 | Tyre sizes, options and recommended pressures | 14.00 – 24 Michelin XVC 10 bar |
| 27 | Sales records of similar machines | Established global supplier |

4. TECHNICAL DESCRIPTION

4.1. TECHNICAL DATA

4.1.1. DIMENSIONS AND WEIGHT

| | |
|--|---|
| Length of undercarriage: | 17,80 m |
| Width of crane with folded outriggers: | 4,76 m |
| Height of crane with erected tower: | 28,10 m |
| Height of crane with horizontal tower: | 6,95 m |
| Outrigger support area: | 19,35 x 14,30 m |
| Weight of crane: | 307 tonnes (fully rigged with spreader) |

4.1.2. ENGINE

| | |
|---------------------------|--|
| Manufacturer: | Daimler Benz industrial engine turbo charged (intercooler) |
| Type: | OM 444 LA |
| Number of cylinders: | 12 |
| Max. output (IFN rating): | 491 kW at 1900 rpm |
| Cooling: | Water |
| Air cleaner: | Dry – type |

4.1.3. PUMP DRIVE TRANSMISSION

Two transmission gearboxes to drive 17 hydraulic pumps:

- 2 pumps for hoisting
- 3 pumps for slewing
- 2 pumps for luffing
- 1 pump for generator
- 2 pumps for power steering
- 7 pumps for oil cooler and general supply

4.1.4. ROTARY CONNECTION

17 way connection to supply the hydraulic and pneumatic consumers on the undercarriage (hydraulic rotary connector). 64 way connection to supply all electric consumers on the undercarriage (slip ring connector).

4.1.5. TRAVEL GEAR

Constant delivery hydraulic motors at axle 2,3 and 4 powered by three hydraulic pumps (hoisting pumps and one slewing pump) of the central power pack.

| | | |
|---------------|----------------------|------------------------|
| Axles: | Axles 1, 5, 6 | steered, non – driven |
| | Type: | L 91 |
| | Manufacturer: | Kessler & Co |
| | Axles 2, 3, 4 | Planetary hub, steered |
| | Type: | LT 91 V PL 300 |
| | Manufacturer: | Kessler & Co |

4.1.6. SUSPENSION

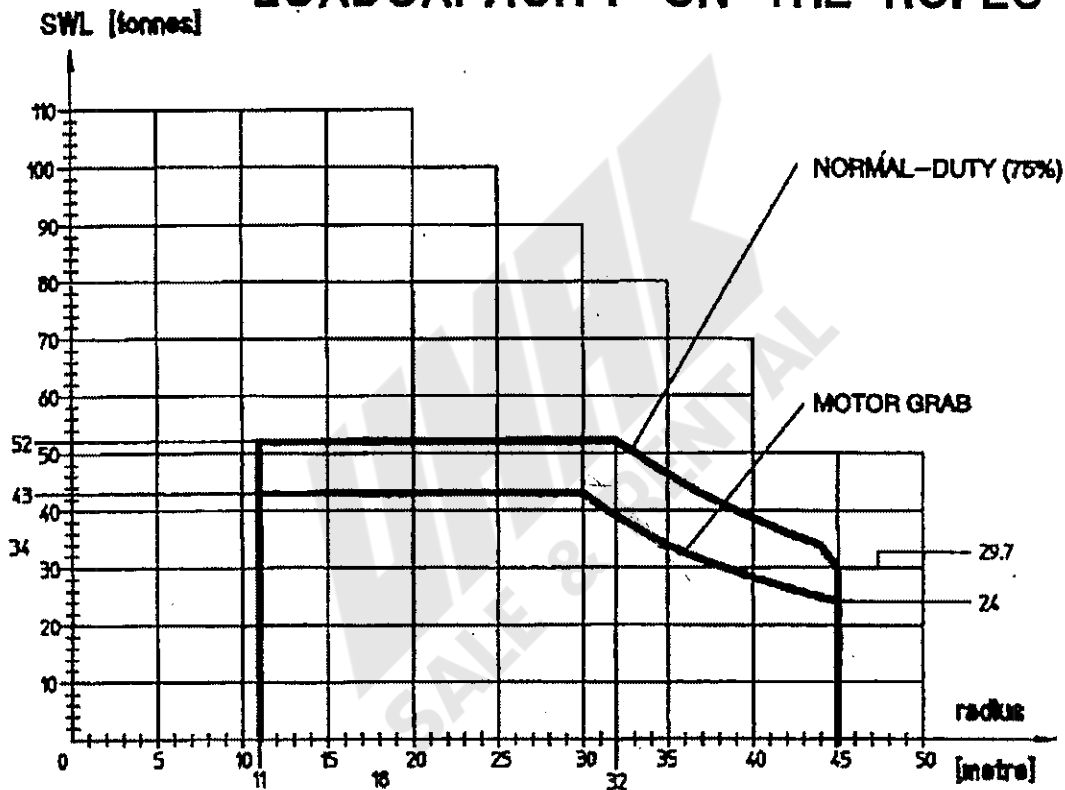
Axles 1, 2, 3 and 4, 5, 6 are linked together by swing beams with axle equalisation.

4.1.7. TYRES

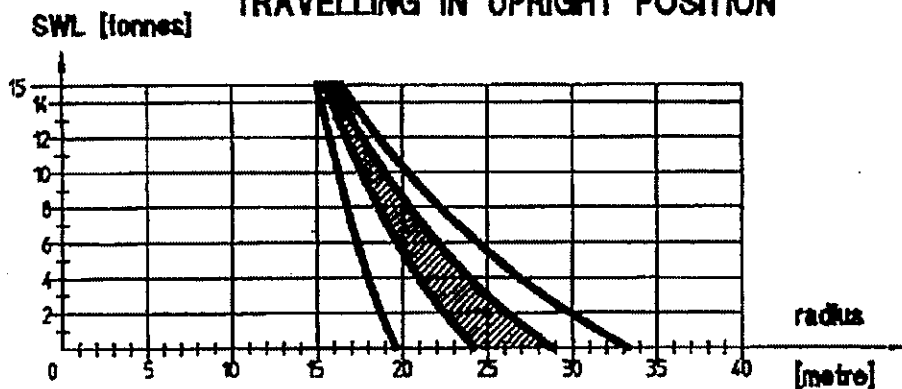
| | |
|----------------|---------------------------|
| All axles: | Twin tyres |
| Tyre size: | 14.00 – 24, Micheline XVC |
| Tyre pressure: | 10 bar |

LIEBHERR HARBOUR MOBILE CRANE TYPE LHM 1300 Litronic

LOADCAPACITY ON THE ROPES



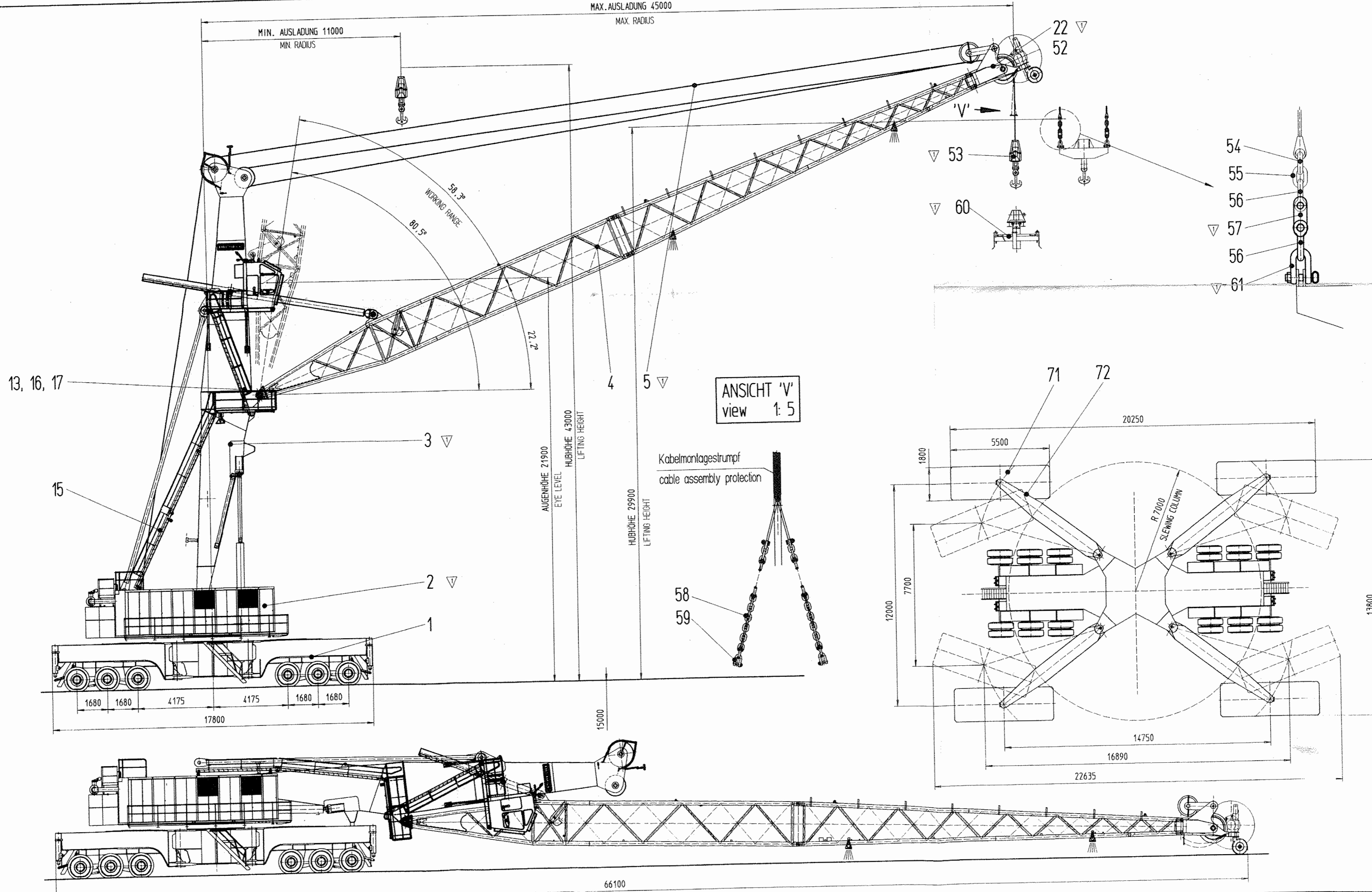
TRAVELLING IN UPRIGHT POSITION



This Chart taken from Liebherr Operation / Maintenance Volume 1 - Section 2.4

MAX. AUSLADUNG 45000
MAX. RADIUS

MIN. AUSLADUNG 11000
MIN. RADIUS



POS. 6 ANBAU AUSLEGER
assembly jib

POS. 7 ANBAU TURM
assembly tower

POS. 8 ANBAU HALTESTANGEN
assembly tie-rod

POS. 9 EINBAU DREHDURCHFÜHRUNG
assembly stipring-collector

POS.10 ANBAU AUFRICHTZYLINDER
assembly erection-cylinder

POS.11 WERKZEUG
tools

POS.12 BESCHILDERUNG
name plates

POS.14 WINDENGETRIEBEKÜHLUNG
rope gear oilcooler

POS.18 REIFENAUFFPUMPEINRICHTUNG
tire inflator equipment
IN SCHALTSCHRANKENRAUM BEFESTIGEN
TO FIT IN THE SWITCH CABINET

POS.200-1000 KUNDENSPEZ. NACHRÜSTSÄTZE
customer specific equipments

WENDERADIUS: AUSSEN R = 16000
INNEN R = 7500

TURNING RADIUS: OUTSIDE R = 16000
INSIDE R = 7500

LHM 1300
SOUTH PORT NEW ZEALAND
2565-000.00.00.000-001

0140 065 14 1/1 A1 363700K

| | | | |
|----------------------------------|---------------------------|-----------|---|
| 94.06.16 94.12.21 94.12.21 | PICHLER MALIN MALIN | CAD hp | 1 |
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