

Load Capacity Charts

► To start the application, double click the file **run.bat**.

Note!

Check the following security settings in Internet Explorer:

- Allow the application through the firewall.
- Activate Active Scripting.

Liebherr-Werk Nenzing GmbH

english

Type

LR1300

Version

9839368


B

Unit length	[m]
Unit weight	[t]
Type	LR1300
Version	9839368
Modification	78843

LIEBHERR

Boom configuration

C



D

exit






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Area A	
<div> <div>english</div> <div></div> </div>	► Select language (optional).
<div>Crane model</div> <div>LR1300</div>	Displays the type
<div>Version</div> <div>9839151</div>	Displays the version of the load capacity chart
<p>Note! After choosing the boom configuration on the home page, the menu for the specific load chart configuration appears in area A.</p>	
<div> <div>Main boom head</div> <div>2821-2</div> <div>Main boom length</div> <div>20.0</div> <div>Counterweight</div> <div>124.0</div> <div>Carbody counterweight</div> <div>57.0</div> <div>Foot print</div> <div>2-wide track</div> </div>	<p>► Choose configuration.</p> <p>(figures in the grey field are machine-relevant information) (figures in the white field are measurements)</p> <p>The different boom heads (e.g. 2821-2) are pictured in the preface.</p>
<p>Note! If an invalid configuration is selected, subsequent fields change automatically to a permitted value and are highlighted in red.</p> <div> <div>Main boom head</div> <div>2821-2</div> <div>Main boom length</div> <div>56.0</div> <div>Counterweight</div> <div>124.0</div> <div>Carbody counterweight</div> <div>57.0</div> <div>Foot print</div> <div>2-wide track</div> </div>	









Area B	
<div>Unit length [m]</div> <div>Unit weight [t]</div>	Displays the units for length and weight: [m] and [t] or [ft] and [lbs]
<div>Crane model LR1300</div> <div>Version 9839151</div> <div>Modification 70940</div>	Displays the type Displays the version of the load capacity chart Displays the revision level of the load capacity chart

Area C	
	<p>► Click the required boom configuration.</p> <p>Note! Hover the mouse over an image to see the name of the boom configuration.</p> <p><i>The results may take a few minutes to load due to the large amount of data involved!</i></p>

Area D	
<p>Note! The symbols will only appear if a boom configuration was selected on the home page.</p>	
Symbol	Function
 Home	<p>Go to home page The home page showing boom configurations is displayed.</p>
 Preface	<p>Show preface The preface for the selected boom configuration is displayed in PDF format and can be printed if required.</p>



	Erectability charts	Show erectability charts The erectability charts for the selected boom configuration are displayed in PDF format and can be printed if required.
	all load capacity charts	Show all load capacity charts All load capacity charts for the selected boom configuration (incl. preface and erectability charts) are displayed in PDF format and can be printed if required. <i>The results may take a few minutes to load due to the large amount of data involved!</i>
	this load capacity chart	Show this load capacity chart The load capacity chart for the specific configuration within a boom configuration is displayed in PDF format and can be printed if required.
	Detail	Show a detailed view of the load capacity chart The load capacity chart display is supplemented by the reeving data (optional).
	metric/imperial	Show metric/imperial units Toggles the display of all values between SI and US units. The function has no effect on the PDF display (optional).
	exit	End application



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Comparative display of load capacity chart in HTML and PDF formats

The "main boom" configuration is used as an example.

HTML Interface (Left):

- Configuration Menu:**
 - Main boom head: 2821-1
 - Main boom length: 20.0
 - Counterweight: 124.0
 - Carbody counterweight: 57.0
 - Foot print: 2-wide track
- Unit Information:**
 - Unit length [m]: LR1300
 - Unit weight [t]: 9839368
 - Type: 78843
 - Version: 9839368
 - Modification: 78843

PDF Document (Right):

- Header:**
 - Version: 9839368/78843/
 - Degree rating: 360°
 - Foot print: 2-wide track
 - Counterweight [t]: 124.0
 - Carbody counterweight [t]: 57.0
 - HPT foot: 2821-1
 - HPT head: 2821-1
- Table:**

Radius [m]	Main boom angle [°]	Rope pulley height [m]	Load capacity [t]
12.0	62.5	19.5	137.0
13.0	59.1	18.8	125.6
14.0	55.6	18.1	115.8
16.0	47.9	16.3	99.8
18.0	39	13.9	86.0
20.0	27.5	10.4	74.4
21.0	19	7.6	69.5
- Table Header:** 20.0 m Main boom, Load fall point Boom HPT head (2821-1)

Arrows indicating data flow:

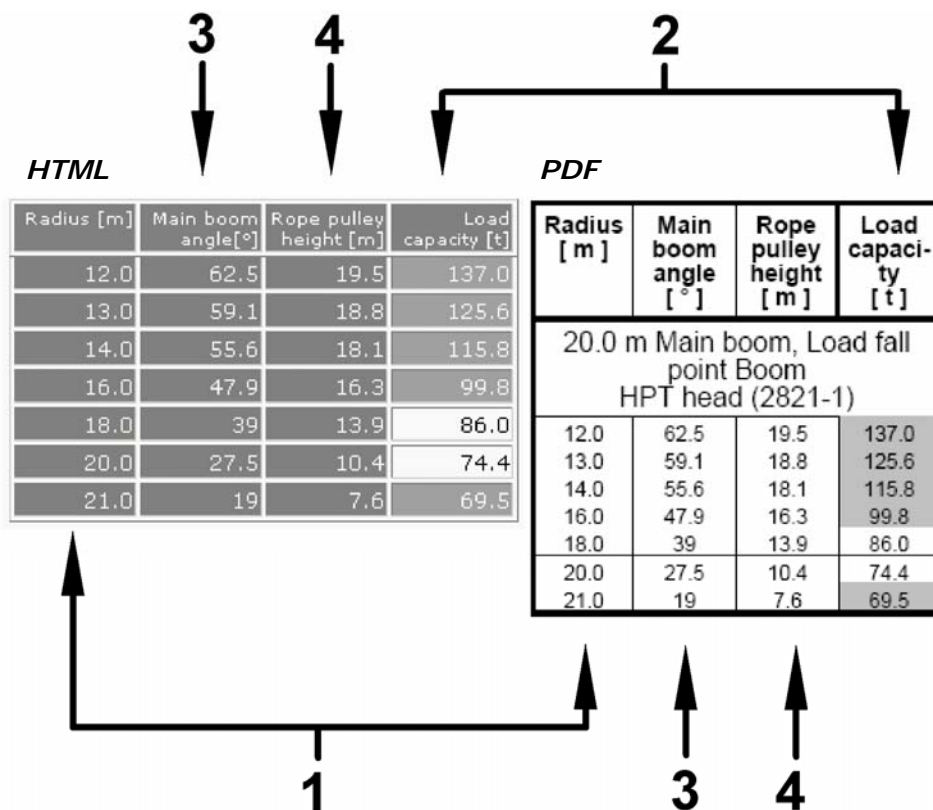
- 1 (Red):** Configuration menu items to PDF header.
- 2 (Green):** Unit information to PDF header.
- 3 (Blue):** Table data to PDF table.
- 4 (Black):** Degree rating to PDF header.

- 1 The configuration selected in the left-hand menu appears in the header in the PDF file or in the table header.
- 2 The version and the revision level of the load capacity chart appear in the header in the PDF file.
- 3 The table appears in a similar format in the PDF file.
- 4 The load capacity chart is valid for a degree rating of 360°.



Layout of the load capacity chart in an HTML file and as a PDF

The "main boom" configuration is used as an example.



The load capacity chart is based on the radius (outreach) **1**. For each radius (outreach) the corresponding maximum permitted lifting capacity **2** can be seen in the rightmost column. From the radius (outreach) result the corresponding main boom angle **3** and rope pulley height (vertical lift) **4**.

The maximum permitted load capacities highlighted in grey **2** are limited by the structure itself. The maximum permitted load capacities highlighted in white **2** are limited by the tilting moment.

The following example illustrates the layout of the table with a boom configuration of "Main boom + luffing jib + derrick".

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Main boom head
2821-1

Main boom length
59.0

Jib type
2316-2

Jib head
2316-1

Jib length
26.0

Counterweight
124.0

Carbody counterweight
57.0

Foot print
2-wide track

Load fall point
1-Jib head

Ballast type
Suspended counterweight

Ballast weight
120.0

Ballast radius
13.0

Main boom angle 75[°]				Main boom angle 65[°]		
Radius [m]	Jib angle[°]	Rope pulley height [m]	Load capacity [t]	Jib angle[°]	Rope pulley height [m]	Load capacity [t]
29.5	65.0	83.0	69.9 (58.4)			
30.0	63.8	82.8	69.6 (57.3)			
32.0	58.7	81.6	65.8 (53.0)			

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Version: 9839368/78843/

Degree rating: 360 °

Foot print: 2-wide track

Counterweight [t]: 124.0

Carbody counterweight [t]: 57.0

Ballast type: Suspended counterweight

Ballast radius [m]: 13.0

Ballast weight [t]: 120.0

LR1300

Load capacities main boom + luffing jib + derrick

HPT foot: 2821-1

HPT head: 2821-1

2

↓

88° Main boom angle				83° Main boom angle			75° Main boom angle			65° Main boom angle			45° Main boom angle		
Radius [m]	Jib angle [°]	Rope pulley height [m]	Load capacity [t]	Jib angle [°]	Rope pulley height [m]	Load capacity [t]	Jib angle [°]	Rope pulley height [m]	Load capacity [t]	Jib angle [°]	Rope pulley height [m]	Load capacity [t]	Jib angle [°]	Rope pulley height [m]	Load capacity [t]
59.0 m Main boom, Load fall point 1-Jib head NDL head (2316-1) 26.0 m luffing jib															
29.5							65.0	83.0	69.9 (58.4)						
30.0							63.8	82.8	69.6 (57.3)						
32.0							58.7	81.6	65.8 (53.0)						
34.0							53.3	80.2	58.7 (48.0 R)						

1

↑

4

↑

5

↑

3

↑

The load capacity chart is based on the radius **1**. Locate the column with the relevant main boom angle **2**. For each radius (outrreach) and main boom angle the corresponding maximum permitted load capacity **3** can be seen in the right column. From the radius (outrreach) and the main boom angle result the corresponding jib angle **4** and rope pulley height (vertical lift) **5**.

By switching to load fall point 2-main boom head, the structure of the table changes:

*) Instead of the jib angle **4** the main boom angle is shown.

*) Instead of the main boom angle **2** the offset is shown. The offset is the difference between the main boom angle and jib angle.

The load capacities in brackets are the minimum load capacities (SWLmin) at which the suspended counterweight lifts from the ground when the load is taken up.

