



## DIN 15421 - or similar....

We design and manufacture your products according to your demands. Standards and regulations just serve as construction base. Fine adjustments and modifications are executed correspondingly to your requirements.

## Rope pulleys with deep groove ball bearings extremely robust and reliable

Warmly welcome!

Rope pulleys are heavy-duty components which are subject to high loads.

Our high quality components are required, when maximum safety and reliability are needed.

High safety standards and permanent availability of the transport systems are major aspects for long-standing customers who trust in BÖHMER quality.

BÖHMER-products are in permanent use by crane manufacturers, in smelting works, on transshipment stations, maritime freight handling agencies and many other crane operators.

What we can do for you:

Long-term experience and ongoing commitment in research and development enable us to offer customer and application-tailored solutions.

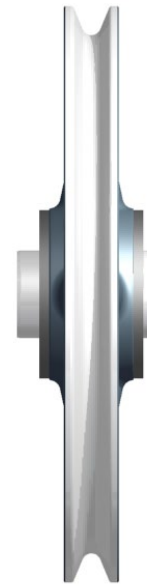
Rope pulleys are designed according to standards, customer's drawings or construction proposals by our engineering department that have been authorised by you.

As technical base standards serve, customer's drawings, technical data, load calculations or just simple sketches. The rest will be done by our experts.

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## Example of designation

Rope pulley with a ground diameter  $d_2 = 630\text{mm}$ , shaft diameter  $d_5 = 110\text{mm}$ , groove radius  $r_1 = 14\text{mm}$

### Rope pulley 630 x 110 x 14 - BIS 3021

In case of inquiry or order please specify:

- special sizes / modifications
- material for the sheave (see site 4)

## Remarks

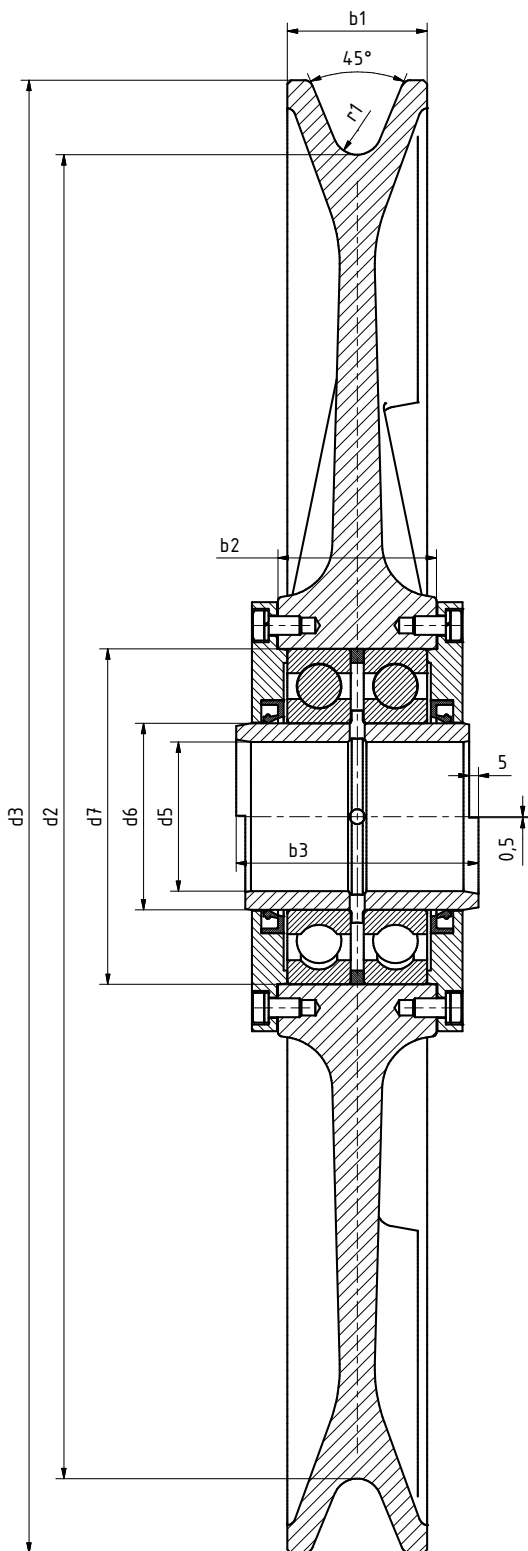
- profile and tolerances according to DIN 15061-1
- surface quality of all machined surfaces according to DIN ISO 1302
- dimensions of hub and bearings according to DIN 15062
- principles to rope drives; calculation and construction according to DIN 15020-1
- edges of the hub bore bevelled  $2\text{mm} \times 45^\circ$

## No rope pulley is like the other...

Rope pulleys only rarely base on regular standards. Often used are special constructions of the groove radius, the bearings or the material. According to individual operating conditions, the components are subject to totally different requirements which only can be met by detailed construction adjustments.

**Here you get what you need!**

**Rope pulleys for bottom blocks with two sheaves  
according to DIN 15408**



dimension d2 x d5	hook no.	rope diameter	d3	d6	d7 H7/r6	b1	b2 -0,2	b3	r1	bearing DIN 625
225 x 45	2,5	9	260	60	110	32	60	100	4,8	6212
280 x 55	4	11	320	70	125	38	65	110	6	6214
315 x 60	5	13	360	70	125	44	65	110	7	6214
355 x 70	6	14	405	80	140	48	70	110	7,5	6216
400 x 75	8	16	455	90	160	52	80	130	8,5	6218
450 x 80	10	18	510	100	180	60	85	130	9,5	6220
500 x 90	12	20	570	110	200	62	95	140	10,5	6222
560 x 100	16	22	630	120	215	70	100	150	12	6224
630 x 110	20	26	710	130	230	72	100	160	14	6226
710 x 120	25	28	790	140	250	80	100	160	15	6228
800 x 130	32	32	890	150	270	90	110	160	17	6230
900 x 140	40	36	1010	160	290	100	115	160	19	6232

**Rope pulleys for bottom blocks with four sheaves  
according to DIN 15409**

dimension d2 x d5	hook no.	rope diameter	d3	d6	d7 H7/r6	b1	b2 -0,2	b3	r1	bearing DIN 625
560 x 140	25	20	630	160	240	62	95	140	10,5	6032
630 x 150	32	22	700	170	260	70	100	150	12	6034
710 x 170	40	26	790	190	280	72	110	160	14	6038
800 x 180	50	28	880	200	310	80	120	170	15	6040
900 x 200	63	32	990	220	340	90	130	180	17	6044
1000 x 220	80	36	1110	240	360	100	130	180	19	6048
1120 x 240	100	40	1240	260	400	112	150	210	21	6052
1250 x 260	125	44	1380	280	420	125	150	210	24	6056

## Our material preselection ...

Choose the optimal material for your application.

Due to many years of experience, we are able to offer you an exclusive preselection of excellent materials. Using the following materials, you are always on the safe side. Next to technical issues, we also consider economic aspects to be able to offer you price and performance in the best relationship.

### Sheaves made of cast steel

short name	heat treatment	tensile strength $R_m$ in N/mm <sup>2</sup>
<b>GE300 (GS-60)</b>	normalised (+N)	520 bis 670
<b>GS-70</b>	normalised (+N)	> 690
<b>G34CrMo4</b>	quenched & tempered (+QT2)	830 bis 980
<b>G42CrMo4</b>	quenched & tempered (+QT2)	850 bis 1000
<b>G50CrMo4</b>	quenched & tempered (+QT2)	900 bis 1100
<b>GS-35NiCrMo14</b>	quenched & tempered (+QT2)	1000 bis 1200
<b>GS-35CrMoV10.4</b>	quenched & tempered (+QT2)	1050 bis 1200
<b>ADIDUR</b>	quenched & tempered (+QT2)	> 940
<b>GS-34CrNiMo6<sup>1)</sup></b>	quenched & tempered (+QT2)	900 bis 1100
<b>GS-33NiCrMo744<sup>1)</sup></b>	quenched & tempered (+QT2)	1050 bis 1250

1) cryogenic steel for use at low temperatures

### Further components

Further components like covers, bushings, distance rings, were normally made of S355J2.

All other parts meet the regulations of the respective standard.

*Do you need special designed components?  
Please specify in your inquiry / order.*

### Further material information

On our website you can download data sheets of all above mentioned materials.

Visit us on:

[www.boehmer-crane-wheels.com](http://www.boehmer-crane-wheels.com)

### Sheaves made of forged steel

short name	heat treatment	tensile strength $R_m$ in N/mm <sup>2</sup>
<b>C45</b>	normalised (+N)	> 560
<b>C60</b>	normalised (+N)	> 650
<b>34CrMo4</b>	quenched & tempered (+QT2)	750 bis 900
<b>42CrMo4</b>	quenched & tempered (+QT2)	800 bis 950
<b>50CrMo4</b>	quenched & tempered (+QT2)	850 bis 1000
<b>30CrNiMo8</b>	quenched & tempered (+QT2)	1000 bis 1200
<b>34CrNiMo6<sup>1)</sup></b>	quenched & tempered (+QT2)	900 bis 1100

1) cryogenic steel for use at low temperatures

### Contour hardening

Some materials enable a special contour hardening in the rope groove to improve the wear performance.

Please contact us for further information. We will gladly inform you about the technical possibilities of the relevant materials.

## General information

### Technical design

The technical design of the rope pulleys needn't automatically correspond to standards. The construction can be adjusted in almost any parameter to fulfil the customer's demands. This corresponds to the geometric design, the materials used as well as different bearings.

All mentioned standards just serve as a basic orientation.

### Materials

The materials mentioned and properties of this BIS collection are obtained from current valid DIN EN standards. Our material preselection is based on experience and does not serve as binding specification. According to your requirements, other materials can be provided.

### Painting and conservation

If there is no specification concerning painting and conservation, our rope pulleys are executed to our standard. This comprises a surface painting with a one-component zinc phosphate primer in RAL 7031 (slate blue) and the conservation of all contact- and function surfaces with Tectyl 506 EH-40.

Customised paintings, as well as complete painting systems to supplier specifications are certainly possible.

### Prices and delivery time

Almost every construction supplied by us is individually designed. Numerous executions make it impossible to give prices in advance. Please ask for price and delivery time. It will be our pleasure to help.



## Your personal contact - competent and friendly

### Inquiry

In order to be able to reply to your inquiry as soon as possible, it is important to provide us with all necessary information.

Please contact us for further information and support!

### Sales

#### *Export*

Tel: +49 (0) 2302 / 961 - 141  
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### Our responsibility

Quality Management according to ISO 9001:2015



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