

# SR wheel block



03.2019

*Partner of Experts*

**STAHL**  
CraneSystems



# SR wheel block

The SR wheel block is used wherever loads need to be moved. This is possible in crane, trolley and systems building as well as in custom applications and special constructions. Compact, powerful and maintenance-friendly. Users, crane manufacturers and system builders like the robust wheel block, which is designed on the basis of proven, low-maintenance components. Controlled serial production of the standard components affords you economic advantages. The SR wheel block is a generally acknowledged quality product of the highest order.

Used for your individual solutions, the SR wheel block from STAHL CraneSystems comes in six different sizes for wheel loads from 5,000 kg to 30,000 kg. Thanks to different mounting configurations, the wheel block can be used universally and flexibly. For out-of-the-ordinary requirements, our experts in the development department will devise special solutions tailored to your needs.

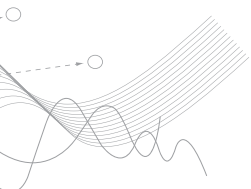
Various special designs are available for use under special conditions. IP 66 protection is, for example, necessary for use in the open without protective cover or when water jets are present. Optional guide rollers or protection against derailment contribute to the increased safety of your system. You can even use the SR wheel block in potentially explosive environments. On request, you can obtain the complete wheel block programme in explosion-proof design for Zone 1, Zone 2, Zone 21 and Zone 22. It's no coincidence that we are one of the market leader for explosion-protected lifting technology and crane components.

## The facts

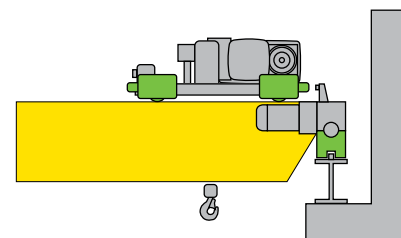
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- Six sizes for wheel loads from 5,000 kg to 30,000 kg
- Three standard configurations for connection to customer structures
- Low-maintenance direct drive with two speeds
- Strong, durable standard components
- Maintenance-free anti-friction bearing
- Optionally with frequency-controlled motors
- Optional version with angle drive
- Optionally in explosion-proof design according to ATEX and IECex
- Other versions on request



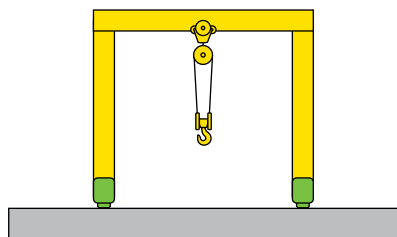


Various designs and trolley versions for the SR wheel block cover a variety of applications. They are tailored individually to your specific requirements. The travel drives are generally equipped with pole-changing travel motors. But here, too, we are open to your wishes. Our wheel blocks are renowned worldwide for their flexible and varied use.

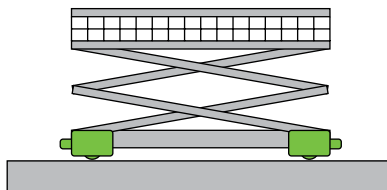


**Examples**

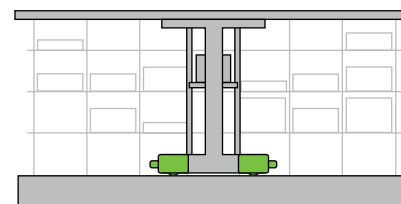
**Crane installations**



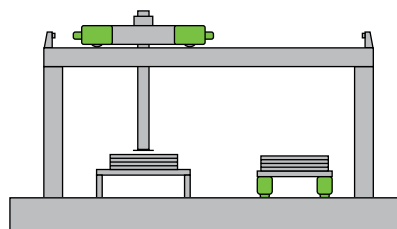
**Portal cranes**



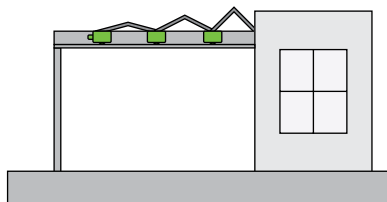
**Lifting platforms**



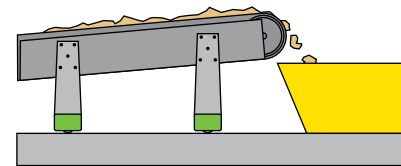
**Storage and retrieval machines**



**Transportation systems**



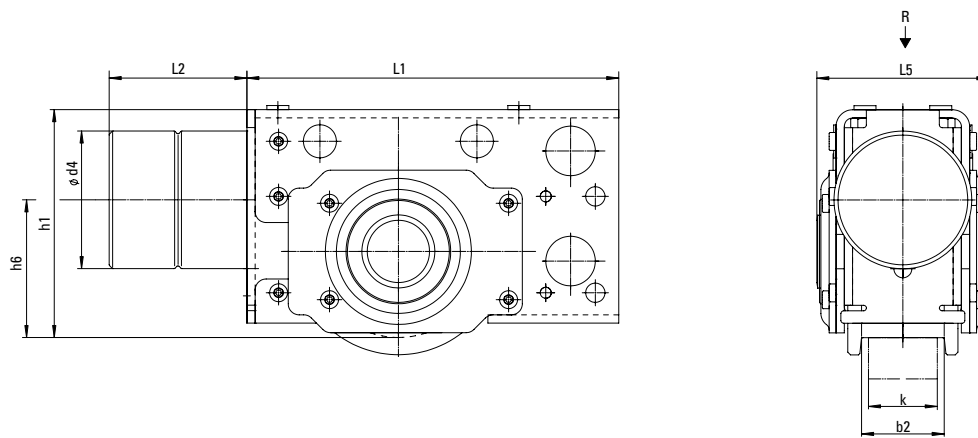
**Architectural applications**



**Conveying systems**

# The technology

It is a reassuring feeling to know what technology there is in the SR wheel block. The largely maintenance-free standard components of the modular wheel block are matched to each other optimally. They guarantee constant performance, long service life and high efficiency. One important feature of this wheel block is its simple, universal and flexible mounting thanks to prepared connections.

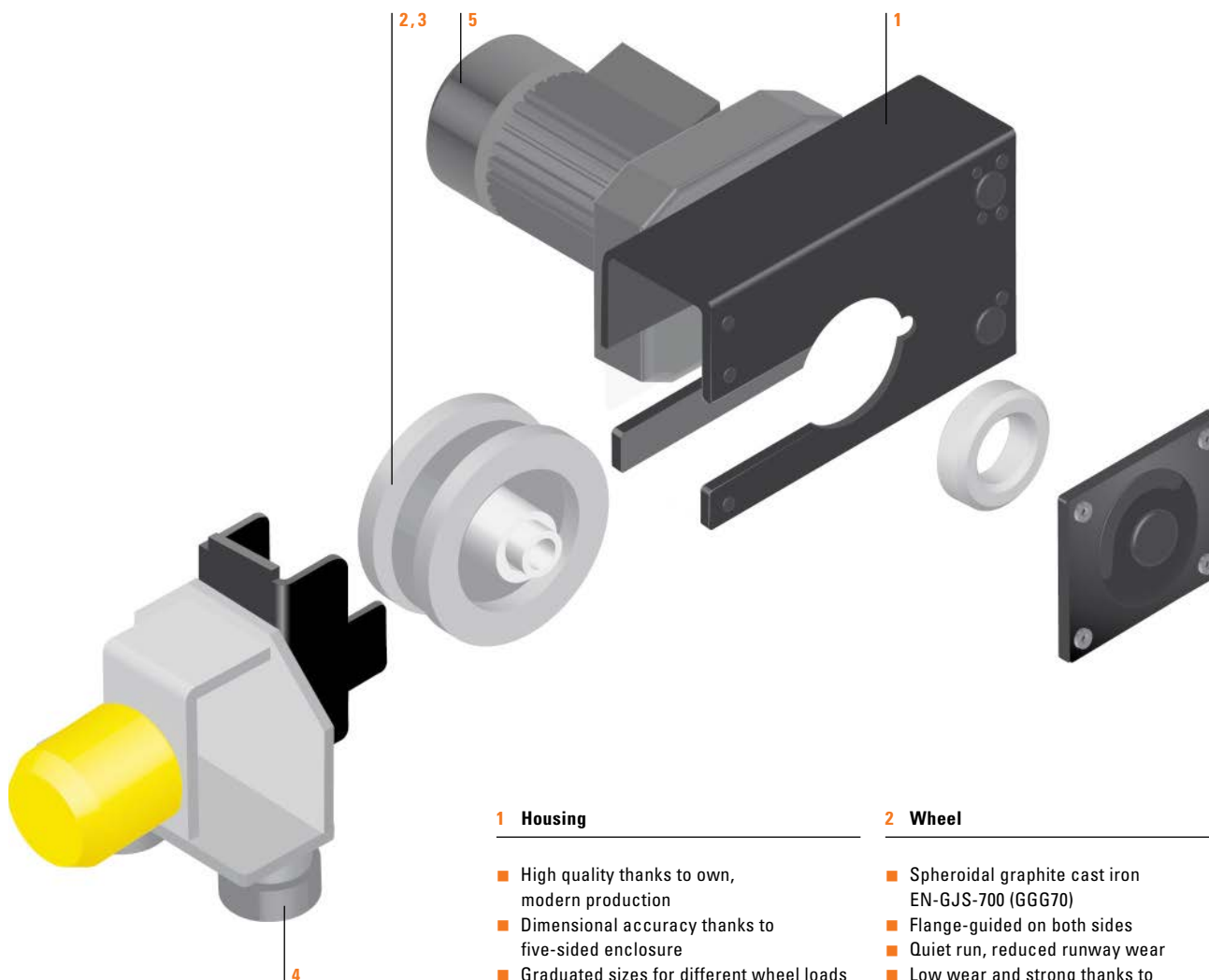


Side view

Front view

## Technical data (subject to change)

| Type                       | SR 125 | SR 160     | SR 200     | SR 250         | SR 315         | SR 400          |
|----------------------------|--------|------------|------------|----------------|----------------|-----------------|
| Wheel- $\varnothing$ in mm | 125    | 160        | 200        | 250            | 315            | 400             |
| Max. wheel load in kg      | 5,000  | 7,000      | 10,000     | 16,000         | 22,000         | 30,000          |
| L1 in mm                   | 273    | 345        | 408        | 437            | 500            | 658             |
| L2 in mm                   | 100    | 125        | 125        | 160            | 160            | 200             |
| L5 in mm                   | 135    | 172        | 189        | 208            | 230            | 322             |
| h1 in mm                   | 165    | 190        | 235        | 295            | 350            | 440             |
| h6 in mm                   | 100    | 100        | 100        | 100            | 100            | 155             |
| $\varnothing d4$ in mm     | 100    | 125        | 125        | 160            | 160            | 200             |
| Rail width k in mm         | 40, 50 | 40, 50, 60 | 40, 50, 60 | 40, 50, 60, 70 | 50, 60, 70, 80 | 60, 70, 80, 100 |



### 1 Housing

- High quality thanks to own, modern production
- Dimensional accuracy thanks to five-sided enclosure
- Graduated sizes for different wheel loads
- Optionally with buffer

### 2 Wheel

- Spheroidal graphite cast iron EN-GJS-700 (GGG70)
- Flange-guided on both sides
- Quiet run, reduced runway wear
- Low wear and strong thanks to self-lubrication
- Maintenance-free anti-friction bearing thanks to lifetime lubrication

### 3 Wheel change

- Easy inspection of flange wear
- Easy replacement of the wheel: after removing the buffer flange, the wheel can be pulled out from the front after pulling off the bearing and bearing flange.

### 4 Guide rollers and derailment protection

- Applications: for extra wide rails, to reduce travelling resistance, to reduce skewing forces, to minimise runway wear
- Minimisation of cornering forces and wear
- Wheel design without flange, the opposite side is equipped with a derailment protection device.
- Larger rail widths possible

### 5 Drive

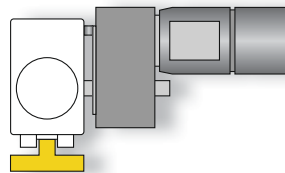
- Pole-changing travel motors
- Low-maintenance direct drive (vertical/horizontal) with torque support
- Optionally single or centralised drive or without drive
- Optionally with frequency-controlled motors
- Space-saving angle drive

## The options

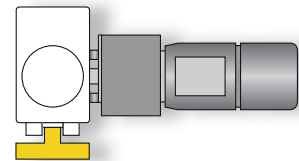
It is always possible to make things better. Although first class as a standard product, you have the possibility to make your SR wheel block even safer, more economical and easier to use with a variety of mechanical, electrical and electronic add-ons. This also increases the lifetime of the wheel blocks. The range of add-ons makes it possible for you to improve the performance of the wheel block and to adapt it to your personal requirements. Below we show a few examples of equipment and options. If you need further information, please visit our website at [www.stahlcranes.com](http://www.stahlcranes.com) or contact us directly.

### Standard travel drive

The travel drive is mounted ex works upright on the wheel block with a torque support. The standard drive can optionally also be mounted horizontally against the wheel block.



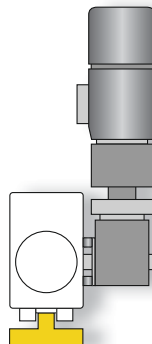
Vertical



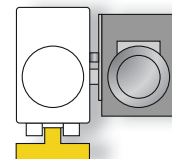
Horizontal

### Angle travel drive

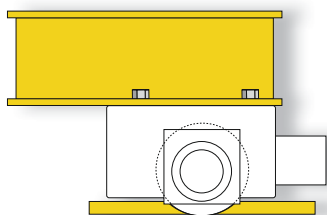
The angle travel drive saves valuable space and guarantees optimal accessibility for maintenance work even in confined spaces. It is used, for example, in portal cranes or in storage technology when passing through recesses.



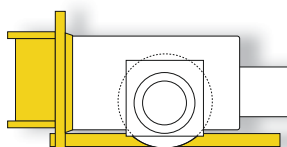
Vertical



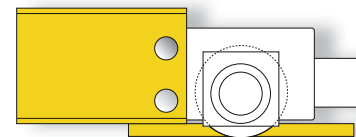
Horizontal

**Mounting possibilities**

**Head connection H**

The steel structure is bolted on directly at the top of the wheel block.


**Welded connection W**

The wheel block end is welded directly to the supporting structure without intermediate flange.

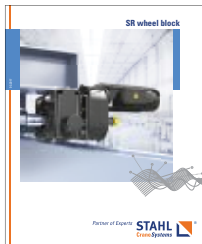
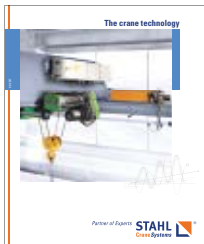
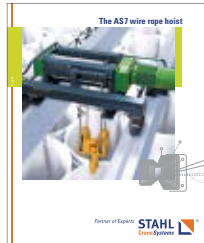

**Inserted connection I**

The wheel block is pushed in between two cheeks and fastened with bolts. Lateral fine adjustment and fastening by threaded pin and nut.

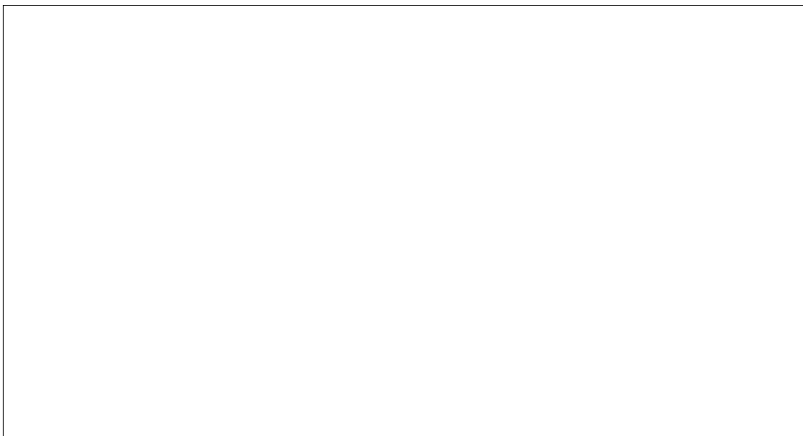
|                                     |                      | Standard                                                                       | Options                                                     |
|-------------------------------------|----------------------|--------------------------------------------------------------------------------|-------------------------------------------------------------|
| Ambient temperature                 | Wheel block          | -20 °C to +40 °C                                                               | -20 °C to +60 °C, -20 °C to +70 °C, -30 °C to +40 °C        |
|                                     | Frequency inverter   | -20 °C to +50 °C (non-condensing)                                              | -                                                           |
| Protection according to EN 60529    |                      | IP 55                                                                          | IP 66                                                       |
| Coating                             | Colour               | Dark grey RAL 7021<br>Prime coat KTL                                           | In all other colours according to RAL colour chart          |
|                                     | Corrosion protection | Steel shot blasting according to DIN EN ISO 12944-4, rust removal degree SA2.5 | -                                                           |
|                                     | Coat thickness       | 20 µm                                                                          | to 240 µm                                                   |
|                                     | Coating              | Polyurethane top coat                                                          | Epoxy resin basis                                           |
| Buffer                              |                      | -                                                                              | A buffer can be mounted on the front end of the wheel block |
| Mounting possibilities travel drive |                      | Standard travel drive<br>Vertical or horizontal                                | Angle travel drive<br>Vertical or horizontal                |
| Travel motor control                | 50 Hz                | Pole-changing<br>5/20 m/min and 10/40 m/min                                    | Frequency controlled<br>Control range 1:10                  |
|                                     | 60 Hz                | Pole-changing<br>6.3/25 m/min and 12.5/50 m/min                                |                                                             |
| Motor supply voltage                | 50 Hz                | 380–415 V                                                                      | All voltages possible                                       |
|                                     | 60 Hz                | 440–480 V                                                                      |                                                             |



You can find this and other brochures at [www.stahlcranes.com/download](http://www.stahlcranes.com/download). We will gladly also send them to you by post.



Presented by



STAHL CraneSystems GmbH  
Daimlerstr. 6, 74653 Künzelsau, Germany  
Tel +49 7940 128-0, Fax +49 7940 55665  
[marketing.scs@stahlcranes.com](mailto:marketing.scs@stahlcranes.com)  
[www.stahlcranes.com](http://www.stahlcranes.com)

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