



THIELE Chain Sprockets



Chain Sprockets

THIELE pocket wheels constitute the perfect solution when it comes to creating an efficient drive system.

Chain wheels and system components are widely used in the light materials handling industry. The integration of Richard Hippenstiehl Maschinenbau into the THIELE business group has enabled THIELE to expand its range of products and broaden its existing expertise in drive and conveying technology.

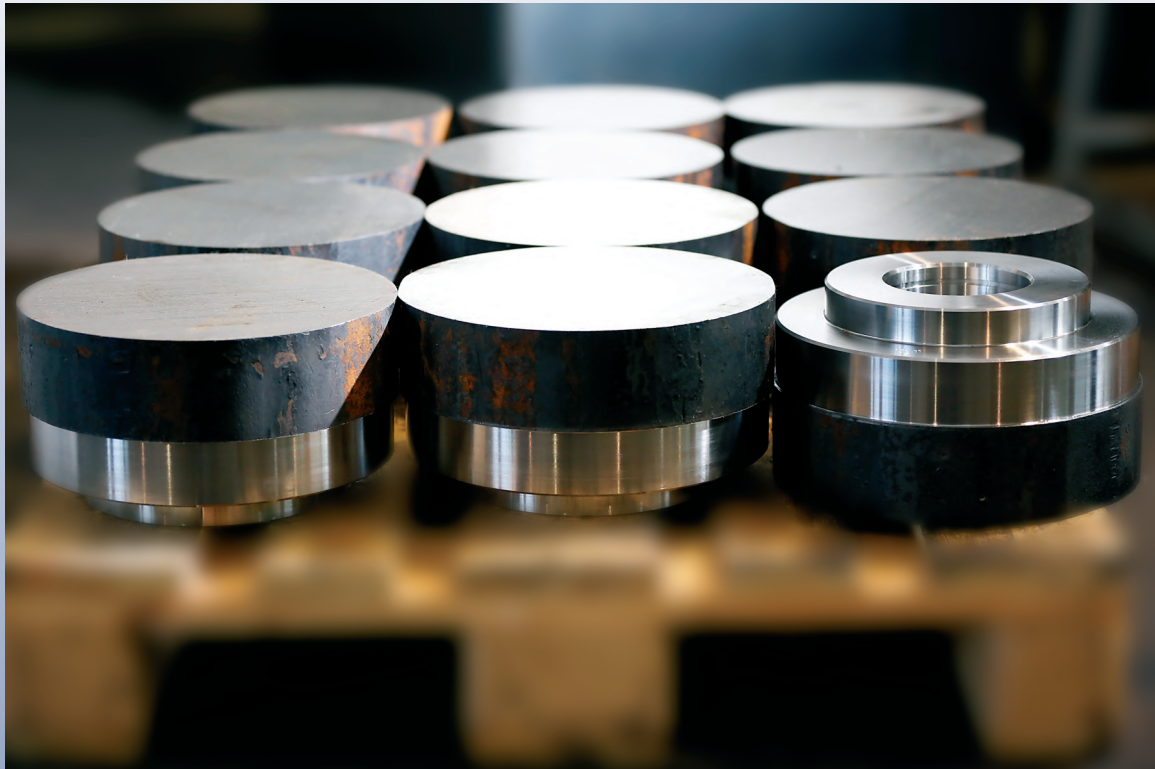
THIELE's fully modernised plant and equipment pool is now able to supply a wide range of components, including shafts, V-belt pulleys, one-piece and multi-piece chain sprockets and pocket wheels for drive and return systems.

THIELE pocket wheels and system components operate with round steel chains to provide a perfectly matched solutions for all kinds of applications.

The round steel chain is a durable and solid example of engineering that outperforms the bushed chain, the steel link chain and the fork link chain as a drive medium.

THIELE can now draw on years of experience in the manufacture, development and application of drive and return sprockets and has already produced system solutions for a whole portfolio of technically challenging situations.

The company has manufacturing facilities capable of producing components measuring 50 to 1.000 mm in diameter and 50 to 3.500 mm in length.



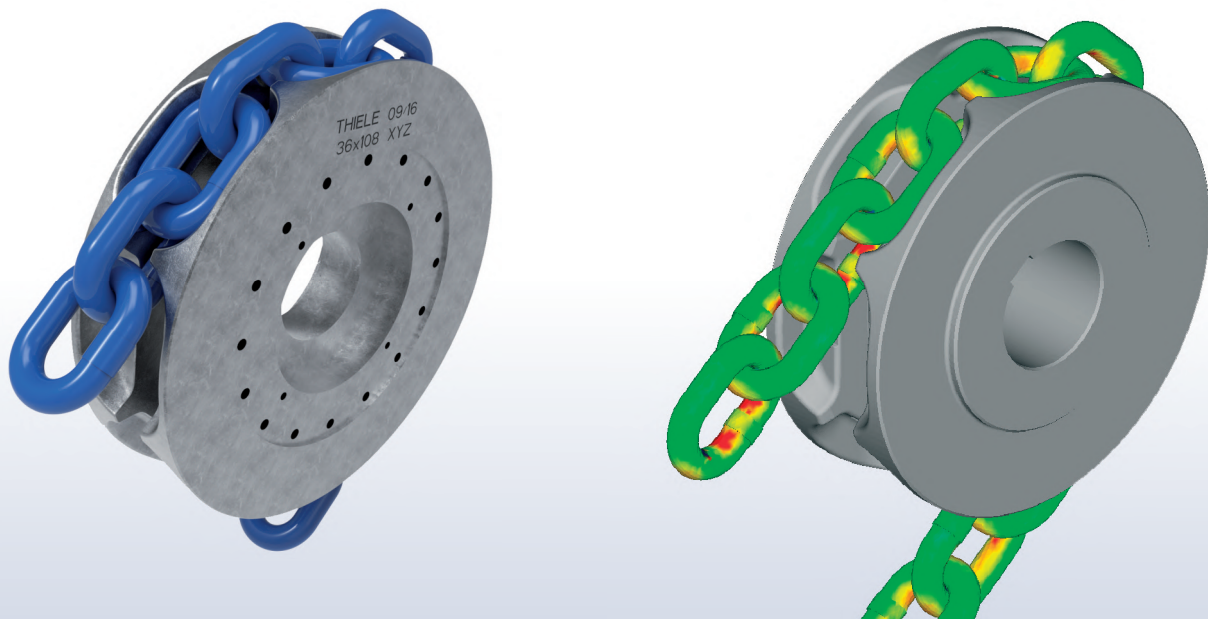


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As the chain pocket is in multiple contact with each chain link partially inductive contour hardening is applied at the manufacturing stage in order to increase the wear-resistant properties of the pockets.

Generally speaking:

The greater the number of teeth or chain pockets, the more silent-running is the chain and consequently the lower the rate of wear and the less the degree of imbalance (polygon effect).

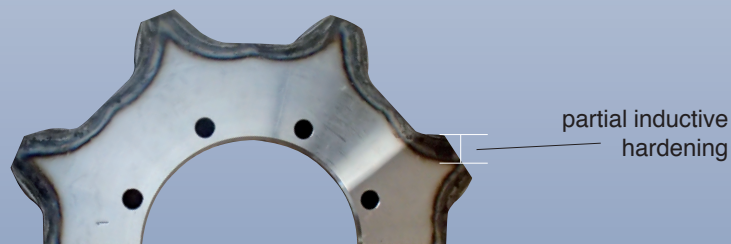


Identification:

Each pocket wheel is marked with the manufacturer's symbol „THIELE“, the date of manufacture, the nominal size of the round steel chains and a traceability code.

The latest FEM technology is used in the upstream design process in order to simulate the low-friction running behaviour generated between the round steel chains and the load-optimised pocket wheels.

Pocket wheels for bulk-materials conveyors and lifting equipment are manufactured from high-alloy stainless steel and feature partial inductive hardening.




The choice of feedstock essentially depends on the intended application and THIELE is able to select from a range of materials from C45 through to manganese and chromium alloyed, heat treated steel of type 42CrMo4.




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One-piece Pocket Wheels

Dimension [mm]	No. of Pockets [i]	Outer Diameter [mm max.]	Pitch Circle Diameter [mm min.]	
18x50	8	275	256,9	 One-piece pocket wheel
20x60	8	325	308,2	
22x66	8	360	339,0	
26x78	7	375	351,5	

Note: The dimensions are exemplary. Execution upon specification.
Hub-diameter and depth upon request.

Dimension [mm]	No. of Pockets [i]	Outer Diameter. [mm max.]	Pitch Circle Diameter. [mm min.]	
28x84	8	454	431,5	 One-piece pocket wheel
39x90	7	440	405,8	
32x96	8	520	493,4	
36x108	8	588	533,6	
40x120	8	650	615,5	
45x135	8	738	693,3	

Note: The dimensions are exemplary. Execution upon specification.
Hub-diameter and depth upon request.

For inquiries, please provide following data:

- specific application
- chain size
- chain specification
- number of pockets
- pitch diameter
- hub diameter
- hub depth
- method of fixing the pocket wheel to the shaft, e.g. keyway and key

Thanks to the latest 3D-programs any chain wheel or system component can now be supplied tailor-made to the customer's requirements.

As well as producing sprockets for industrial uses we also manufacture special chain wheels for practically every application that uses drive systems of this kind.

THIELE chain wheels can be machined from solid billet or produced as welded assemblies.

The design and manufacturing process will essentially depend on what the individual customer has specified for the number of teeth, hub diameter and key/keyway drilling.

This means that THIELE can supply any desired size of drive and return sprocket for every kind of lifting and conveying system.