THIELE
CHAIN SPROCKETS

Pocket Wheels

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Chain Sprockets

THIELE pocket wheels provide the perfect solution for creating an efficient drive system.

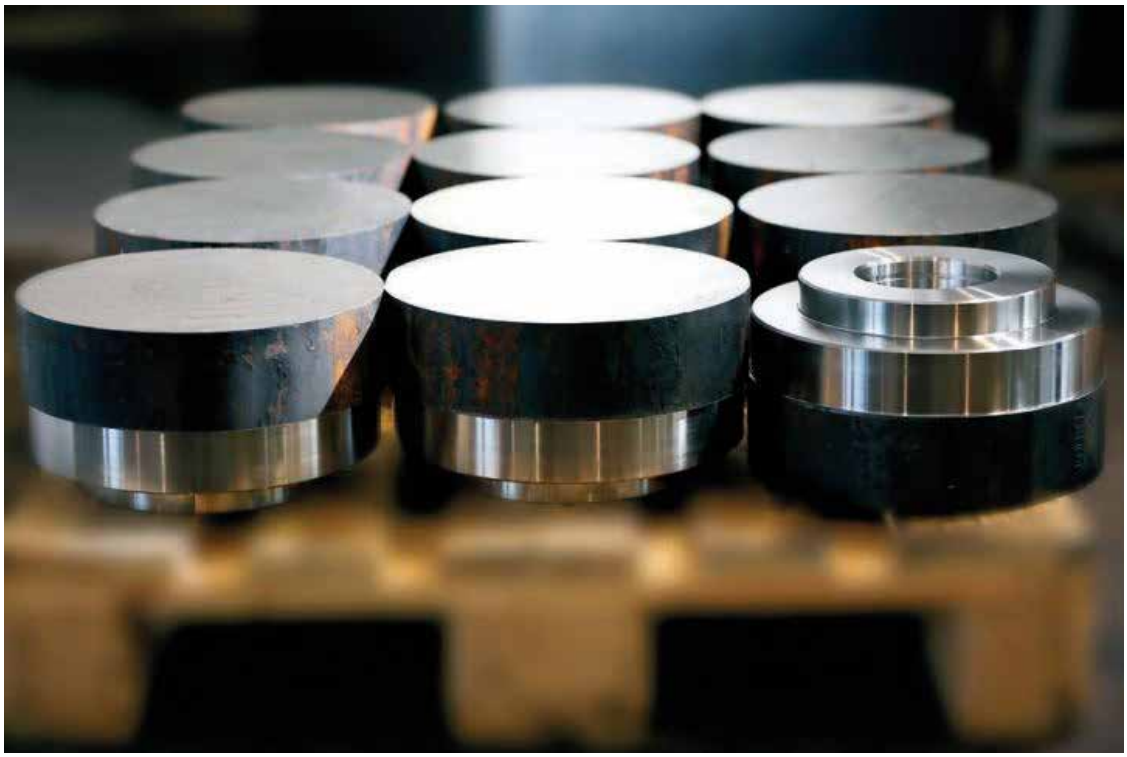
Chain wheels and system components are widely used in the light materials handling industry and complement the range of products in the conveying technology portfolio.

THIELEs fully modern plant and equipment pool is 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 perfectly matched solutions for all kind of applications.
The round steel chains are a durable and solid example of engineering that outperforms compared to the bushed conveyor chains and the fork link chains as a drive medium.

THIELE can draw on years of experience in the production, development and application of drive and tail sprockets and has 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 width.



Chain Sprockets

Chain pockets have multiple contact frequency compared to each chain link. Therefore, partially and inductive contour hardening is applied at the manufacturing stage to increase the wear-resistant properties of the pockets.

The higher the number of teeth or chain pockets, the more silent-running the chain and the lower the rate of wear as well as the degree of imbalance (polygon effect).

Marking:
Each pocket wheel is marked with the manufacturers name „THIELE“, the date of manufacturing, the nominal size of the round steel chains and a traceability code.

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

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

One-piece Pocket Wheels

Dimensions [mm]	No. of Pockets [i]	Outer Diameter [mm]	Pitch Circle Diameter [mm]
18 x 50	8	275	256,9
20 x 60	8	325	308,2
22 x 66	8	360	339
26 x 78	7	375	351,5
28 x 84	8	454	431,5
39 x 90	7	440	405,8
32 x 96	8	520	493,4
36 x 108	8	588	533,6
40 x 120	8	650	615,5
45 x 135	8	738	693,3

The dimensions are exemplary. Excecution as per customer specification.
Hub diameter and depth upon request.

For dimensioning, please provide following data:

- Type of application
- Chain dimension
- Chain standard
- Number of pockets
- Pitch diameter
- Hub diameter
- Hub depth
- Type of fixing the pocket wheel to the shaft (e.g. keyway and key)

By using 3D-software any chain wheel or system component can be supplied tailor-made to customer requirements.

THIELE manufactures 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 essentially depends on what the individual customer has specified for the number of pockets, hub diameters and key/keyway drillings.

THIELE can supply any size of drive and tail sprockets for every kind of lifting and conveying system.