

Chains and sprockets for the bulk material handling industry



Products for all processes of the
bulk material handling industry for
conveying bulk material

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The KettenWulf Group



The main factory in Kückelheim not only houses the company headquarters, but also the »KettenWulf Competence Center«. This provides world-wide support for customers in all technical issues.

KettenWulf was founded in Kückelheim, Germany, in 1925. Thanks to powerful economic growth in the second half of the 20th century, the company developed from a small sized factory into a leading brand producer of chains and sprockets.

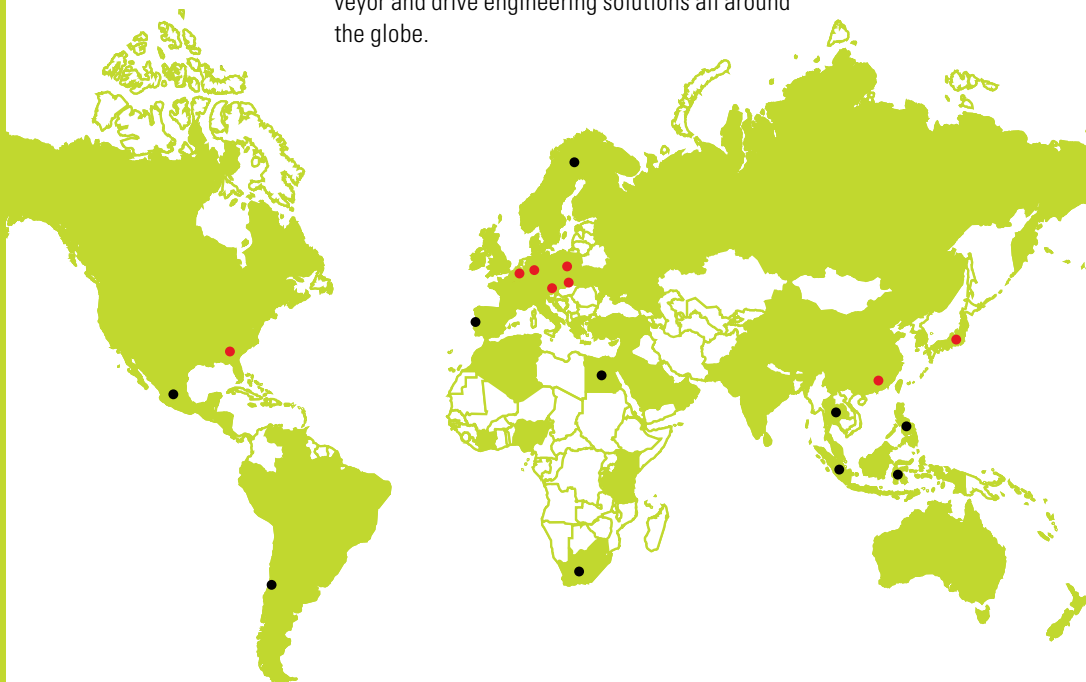
Today, the KettenWulf Group, with production facilities in Europe and Asia, is a market leader and one of Europe's largest producers of conveyor chains, roller chains and sprockets. More than 1000 employees develop, produce and market tailor-made conveyor and drive engineering solutions all around the globe.



Illustration top right: Our central European storage facility in Ghent, Belgium, provides more than 9,000 square metres of storage area.

Illustration center right: KettenWulf in Ferlach, Austria.

Illustration bottom right: The chinese production and sales facility in Hangzhou.



■ The green areas show the countries to which KettenWulf exports its products.

- Production/branch office
- Sales agency

Leading original equipment manufacturers in the bulk material handling industry trust KettenWulf. We count equipment manufacturers to our customers which production sites are distributed all around the world and with whom we develop and manufacture innovative and efficient products on highest quality levels in a partnership co-operation.

For almost all transportation processes in the bulk material handling industry KettenWulf supplies optimal chain constructions. Together with our customers we compile the correct solution, no matter, whether it concerns the transport of rough or fine grained bulk materials or of goods with corrosive or abrasive characteristics.

KettenWulf develops and produces special chains and sprockets for the transportation of almost all bulk materials:

- » clinker, gypsum and clay during the cement production
- » granulates in fertilizer production
- » coal, coarse-grained ore, crushed stone, limestone and slate in the mining industry
- » biomass, coal, slag and quartzite in power stations
- » polymers of basic materials in the plastic production
- » wood chips in the wood and paper industry
- » steel chips in the automobile and metalworking industry
- » recycling materials in valuable material sorting equipment

We are partners to the bulk material handling industry

KettenWulf offers innovative chain technology for various conveyor systems in the bulk material handling industry.



Solutions for steel conveyors, reclaimers systems and bucket elevators

The transport of bulk materials by special chains ranks among the most efficient transportation solutions. For many applications in the bulk material handling industry, like e.g. pan conveyors, hinged-slat conveyors, drag chain conveyors, scraper reclaimers in the blending bed technology up to high speed bucket elevators, KettenWulf offers trend-setting chain technology.

Under consideration of the special operating conditions, the local circumstances and the conveying job to be addressed, KettenWulf offers an optimal consultation for the selection and specification of the chain and the sprocket as well as the technical support.

Back locked conveyor chain with bended link plates for pan conveyors.



Scraper chain with increased attachment link plates and out-board lifetime lubricated support rollers.



Central chain for high speed bucket elevators.



High flow rates of material with temperatures of up to 500 °C, axle distances of up to 250 meters, complicated conveyor design lines, high lifting heights and conveying capacities of over 1000 m³/h are the challenges to the conveyor systems in the bulk material handling industry.

KettenWulf meets these special requirements with the highest precision in the geometry of the single chain components, optimal press fitments and fatigue enduring materials with highest surface qualities.

Chains for apron conveyors

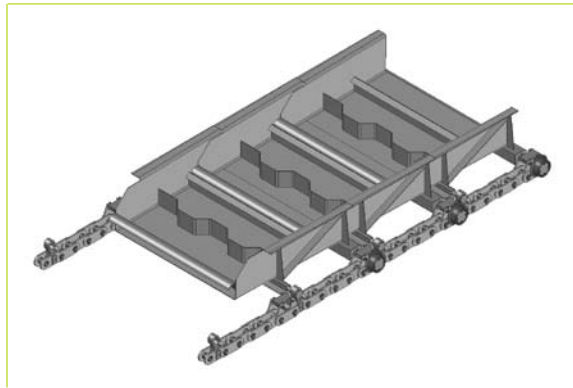
KettenWulf supplies special chains for various conveyor systems, e.g. for hot sinter conveying in sintering plants.



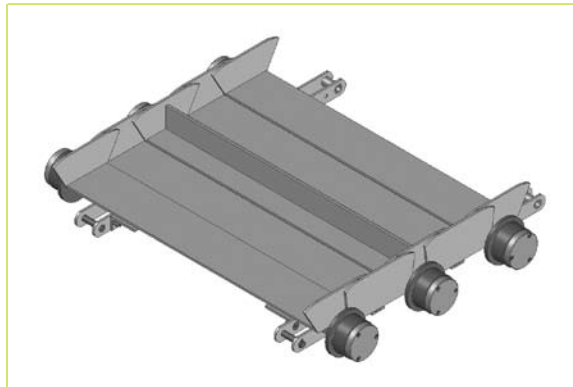
Optimal connections of steel pans and chains

There is a great variety of conveyor systems available and the range of available KettenWulf chains is just as large. We supply customized chain technology for all conveyor systems, like e.g. apron conveyors, hinge apron conveyors, bucket conveyors or deep drawn pan conveyors.

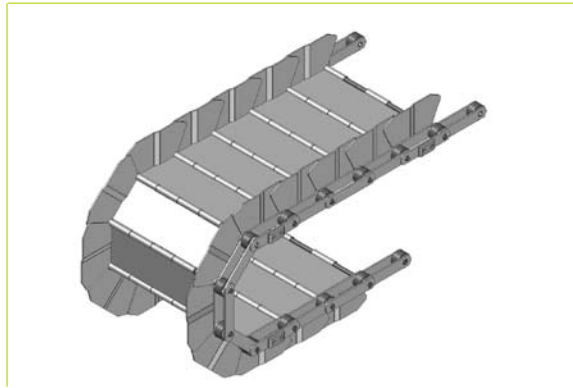
Apron conveyor with baffle plate.



Short plate conveyor with pressed pans.



Hinged short plate conveyor for the transport of recycling material and other coarse-grained bulk materials.



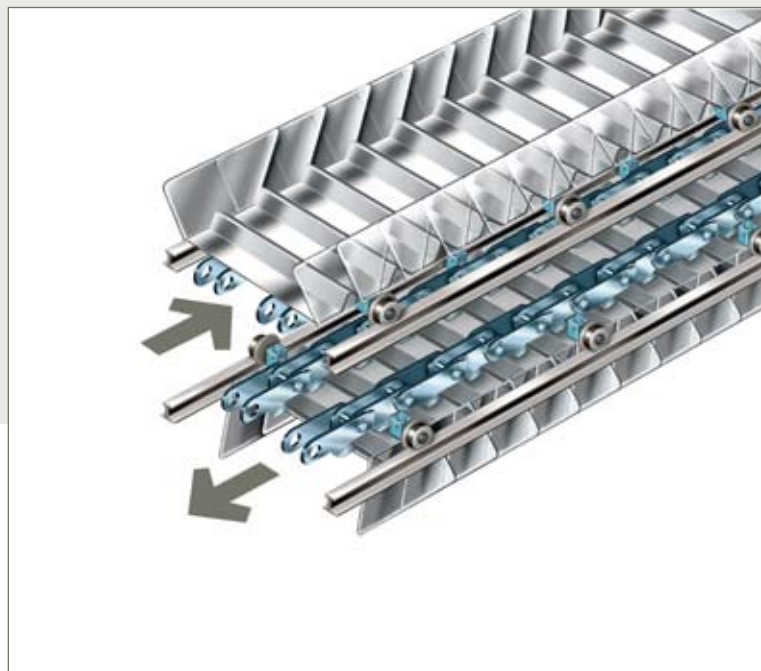
Chain technology for apron conveyors

Apron conveyors are equipped with attachment angles on one side or both sides of the chain which is either executed as single or double strand serving as the conveyor's traction element. The claim for quality of our products which are geared to the individual requirements of each conveyor application, offers a crucial competition advantage to our customers.



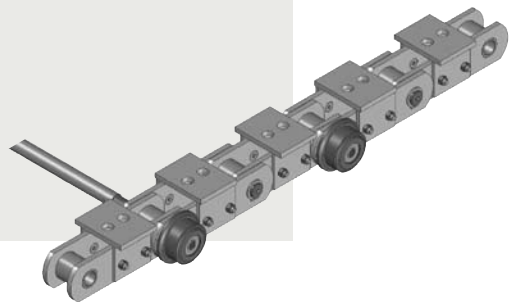
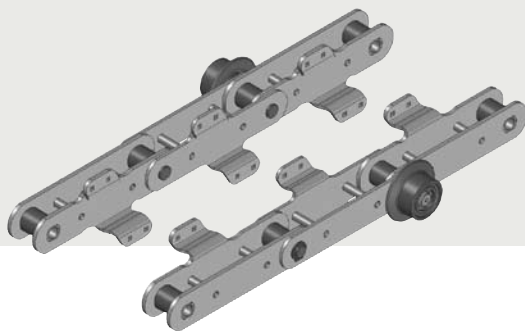
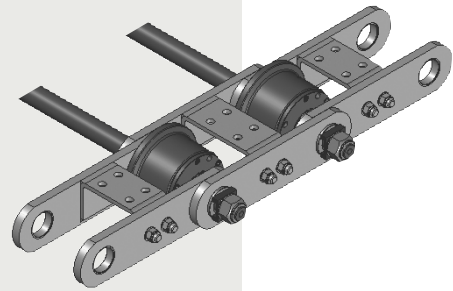
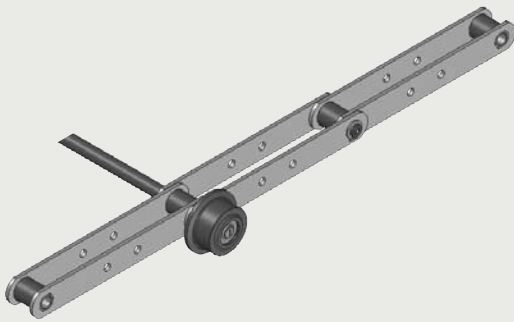
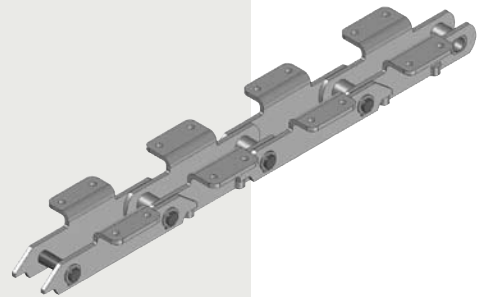
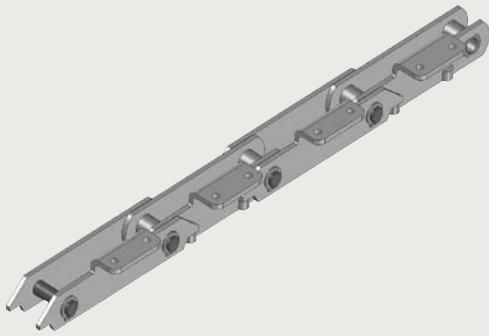
Back locked conveyor chain with bended link plates.

Schematic exposition of an apron conveyor:
The aprons are carried by double strand bush conveyor chains with either flanged inboard chain rollers or flanged outboard support rollers fixed to the conveyor apron taking care of the coasting movement within the conveyor.



Conveyor chains with pitches of 160 mm, 250 mm, 315 mm or bigger and breaking loads of 200 to 3,000 kN offer the possibility to properly address a variety of different customer's requirements.

The special chains for apron conveyors, illustrated below, show an excerpt from our range of tailor-made chains.



The stacking and homogenizing of bulk materials, in particular of raw material and coal, is done by means of reclaiming systems of various designs. For this application KettenWulf offers a wide selection of conveyor chains, designed for the special demanding on-site conditions like high impact loads, abrasive and corrosive media, heat and dust.

Chains for reclaimer systems

KettenWulf offers a broad selection of special conveyor chains, e.g. for a reclaimer in a circular storage hall.



Specific executions for most different stockpile equipment

KettenWulf special chains and sprockets ensure a troublefree heavy duty storage operation under severe operational conditions in storage equipments such as bridge-type scraper reclaimers, portal reclaimers, side scrapers or circular homogenising storage systems.

Side scraper with double strand chain.



Boom of a bucket reclaimer with double strand conveyor chain.



Reclaimer boom with double strand conveyor chain and bucket guiding rollers.



Bucket reclaimer in a biomass stockyard.



Chain technology for reclaimer systems

For the employment in abrasive and corrosive media, KettenWulf developed different sealing systems geared for the individual application. These sealing systems protect the chain joint against penetration of dirt, humidity and other media. While extending the service life these sealing systems simultaneously reduce the maintenance cost of the chain.



Scraper reclaimer chain with outboard lifetime lubricated support roller.

Illustration above:
Cross section through a reclaimer chain with completely sealed chain joint.

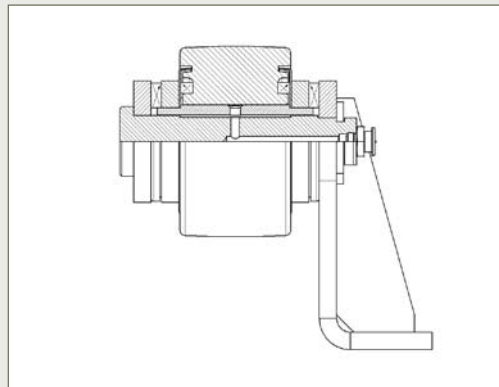
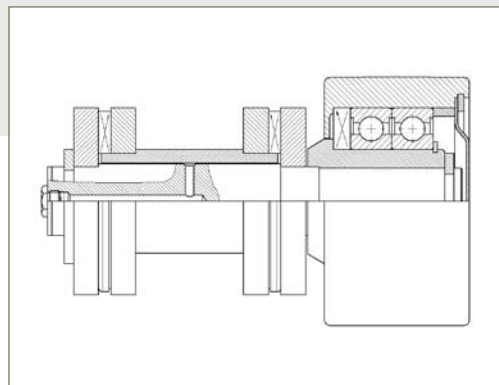
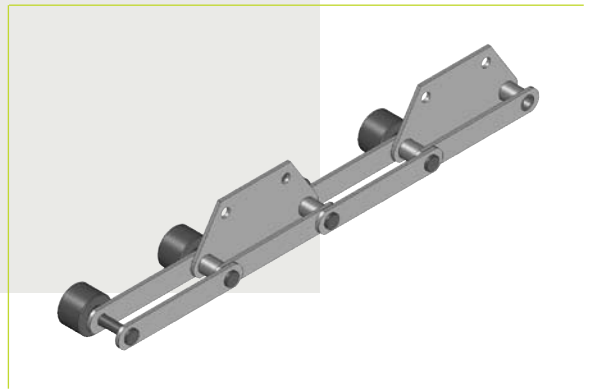
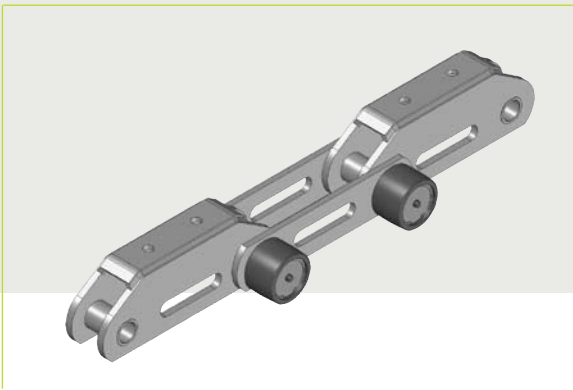
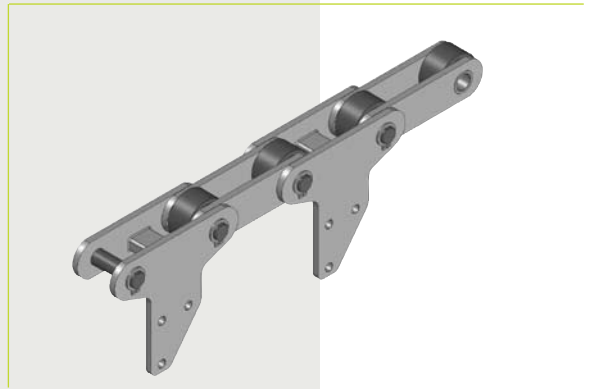
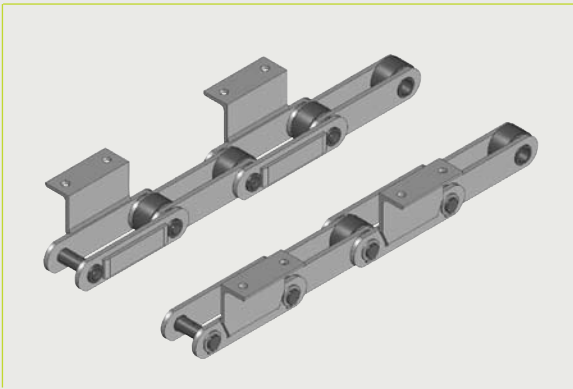
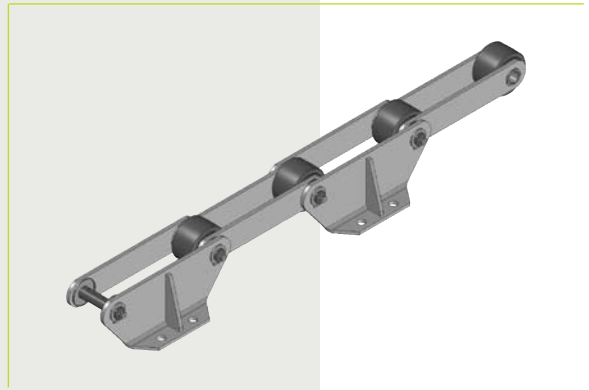
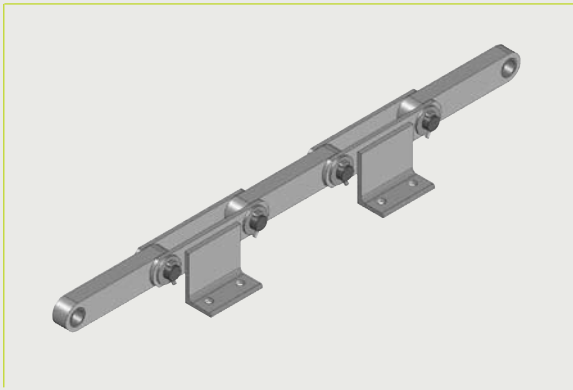


Illustration below:
Cross section of scraper reclaimer chain joint with sealed chain joint and lifetime lubricated outboard support roller.



Our spectrum in the scraper reclaiming systems technology offers a high degree of individual solutions. The following illustrations show a selection of different mounting options for scraper buckets.



The use of KettenWulf bucket elevator chains in mechanical vertical conveying became an indispensable link between different production steps in various industries. Double strand chains as well as central bucket elevator chains, especially in high speed elevator applications, proved themselves under extremist conditions worldwide.

Chains for bucket elevators

Partial view of a cement plant with a variety of different chain applications.



Perfectly prepared for your specific executions



Silo feeding by high performance bucket elevator using central chains.

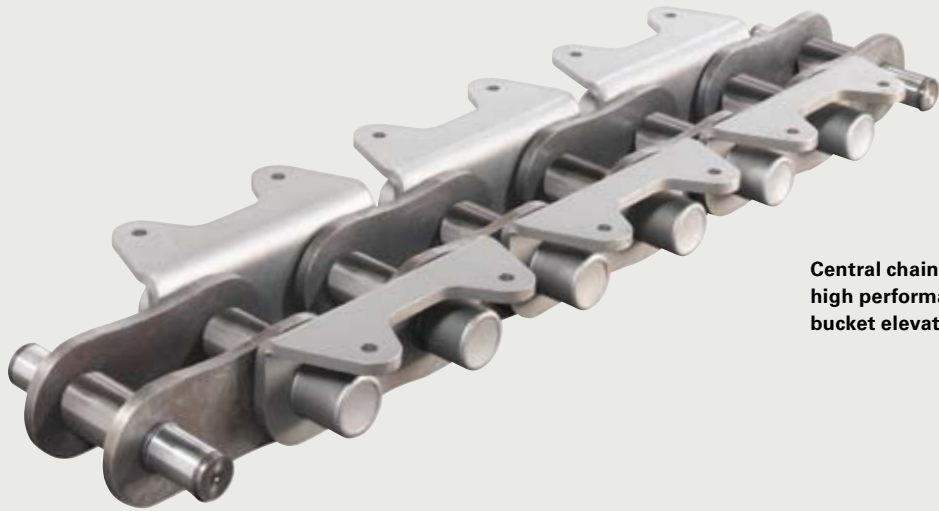
High performance bucket elevators are primarily used for vertical conveying of bulk material, for silo feeding and in clinker milling. KettenWulf bucket elevator chains fulfil highest requirements when it comes to wear resistance, dynamic loads and the conveying of abrasive media in particular.



High speed bucket elevator with central chain as well as drive wheel and return sprocket.

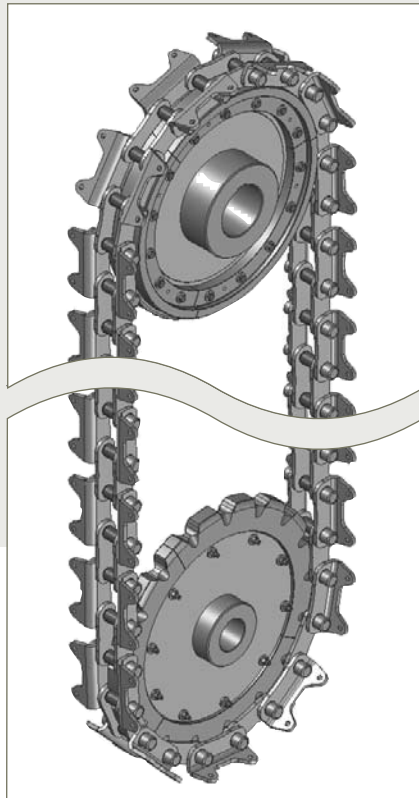
Chain technology for bucket elevators

By using high grade materials and by ensuring highest manufacturing precision KettenWulf offers individual solutions to high-performance bucket elevator applications in double strand and central strand chain executions.



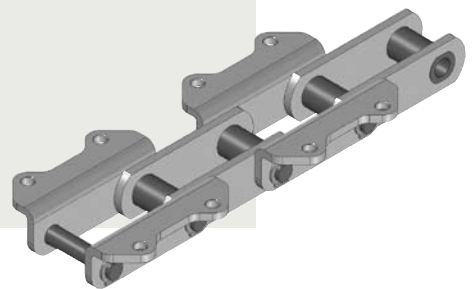
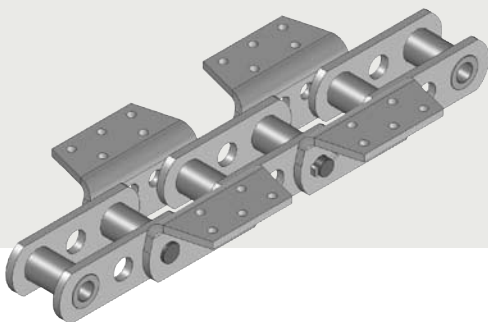
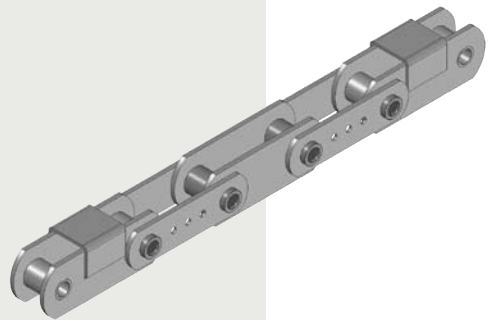
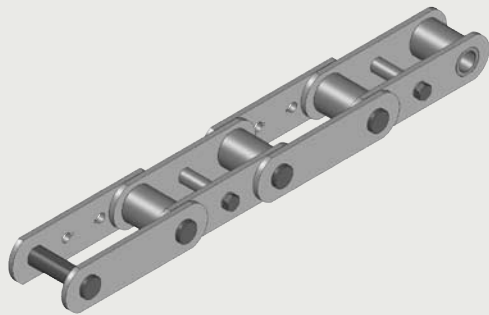
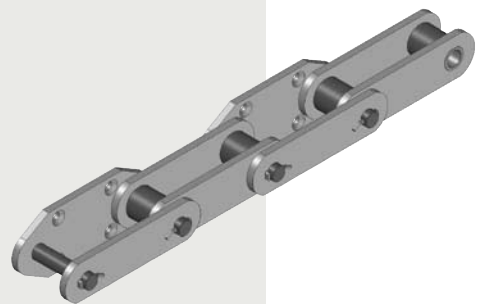
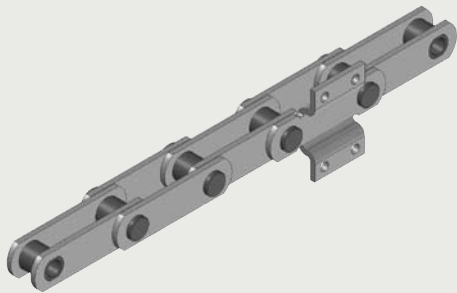
Central chain for high performance bucket elevators.

Chain system for high-performance bucket elevator consisting of an un-toothed drive wheel and a return sprocket. All chain wheels are induction hardened.



Due to the high technical requirements for this chain application KettenWulf jointly develops bucket elevator chains suitable for the toughest elevator applications together with its customers.

The below illustrations show a selection of possible bucket elevator chain executions of our range of supply.



Sprockets for complete drive systems

Sprockets are a crucial factor for the efficiency and lifetime of each chain system. In order to ensure the high quality of all products KettenWulf places emphasis on the in-house production of own sprockets. Besides sprockets according to all DIN gearing our product range covers individual solutions with optimal tooth profiles and wheel sizes.

By the employment of high-quality, heat treated steels, we set yardsticks in the quality of abrasion resistant sprockets and drive components.

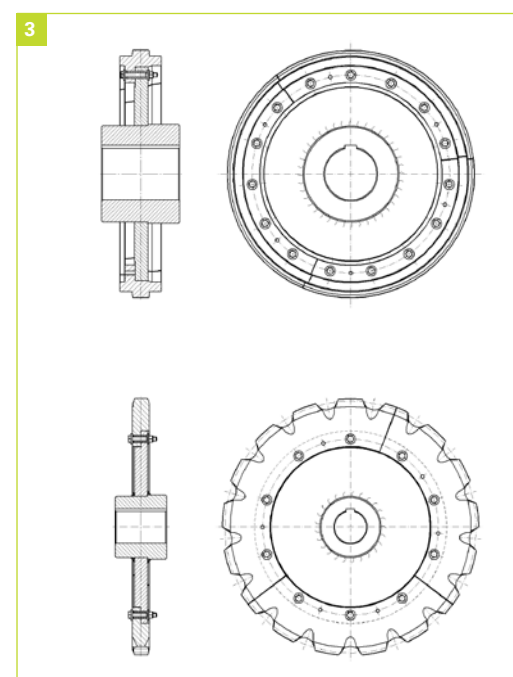
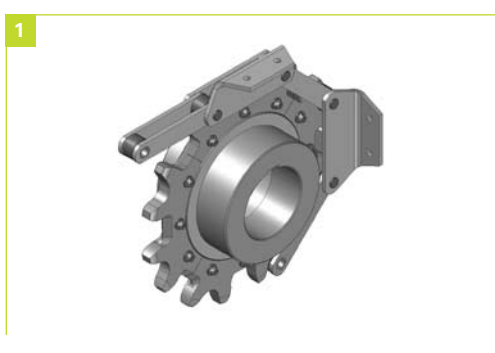
Assembly of a tail shaft unit for use in a bucket elevator.



Illustration 1:
Special sprocket for scraper chains

Illustration 2:
Fork link sprocket for drag chain conveyors.

Illustration 3:
Special sprockets for central chains in segmental construction, induction hardened, optional with toothed or un-toothed rim.



For further information please visit our web site www.kettenwulf.com.

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