

## Chains and Sprockets for the Steel and Aluminum Industries



Products for the entire processing  
in the steel and aluminum industries

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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.

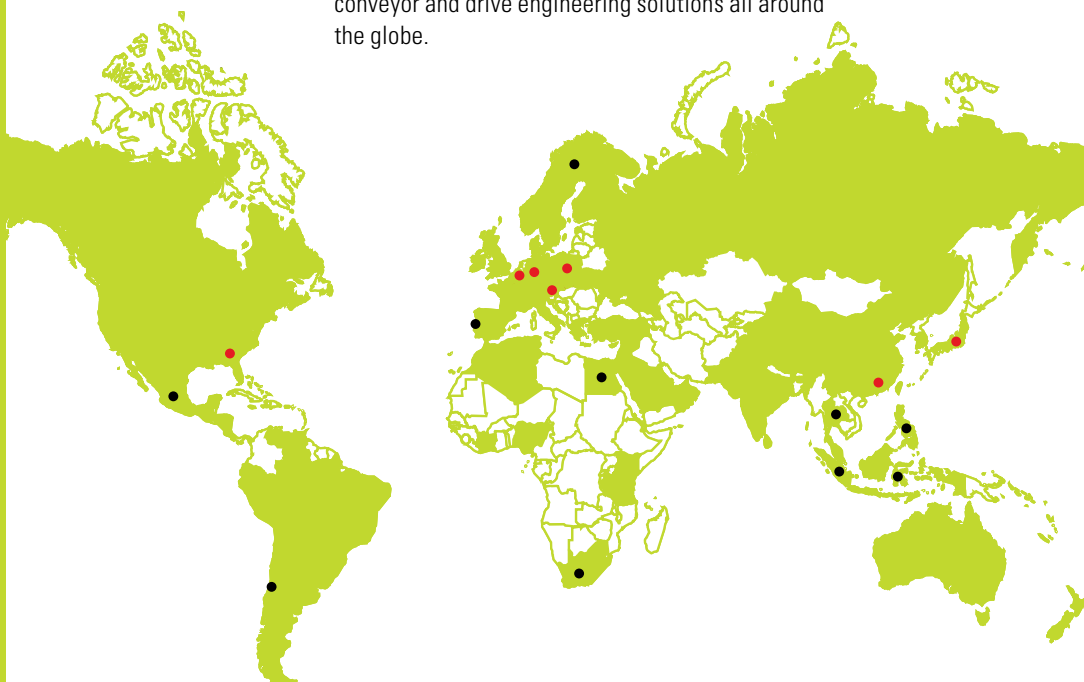
Today, the KettenWulf Group, with production facilities in Europe and Asia, is a market leader and one of Europe's largest producers of conveyor chains, roller chains and sprockets. More than 1200 employees develop, produce and market tailor-made conveyor and drive engineering solutions all around the 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**

For more than 80 years the KettenWulf Group has been developing and manufacturing special conveyor chains for the steel-, metallurgical and aluminum industries worldwide.

Our product range covers conveyor chains for the entire production process- from stockyard technology for coal and ores, to applications in powder metal facilities, furnaces, steelworks, casting machines and roller mills up to the point of transport and looping chains for quality improvements in hot and cold-rolled areas.

High-performance products of premier quality, strict compliance to the most extreme specifications, innovation and a complete focus on our customers' demands form the basis for our leading reputation. Our products convince through their latest technology, quality and reliability.

## We are Partners of the Steel Industry

**KettenWulf offers innovative chain technology for all conveyor applications in the steel- and metallurgical industry**





# KettenWulf Products for all Applications in the Steel Industry

To cope with the special and complex technical requirements of the various steps of the manufacturing and final processing of steel, our research and development division in cooperation with our customers is striving to provide most modern chain technologies.

The requirements related to our products such as reduction of abrasion related wear on reclaimer

chains in iron ore and coal mixing beds, temperature resistance of conveyor chains in hot material transport and highest precision of roller chains in looper applications, only represent a small part of the technical requirements for which we have come up with innovative and successful solutions.

**Pan conveyor chain  
for sinter transport**



**Cold strand chain  
as start-up chain for  
continuous casting**



**Coil transport chain**



**Pan conveyor chain  
for scrap transport**



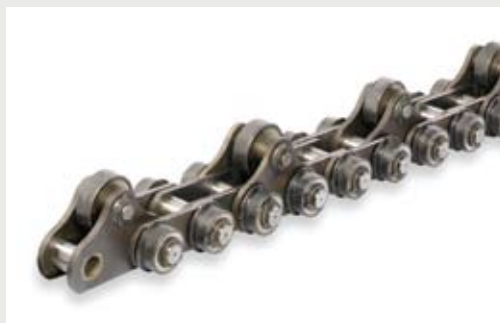
**Special duplex chain  
for looping tower**



**Deep link chain for  
steel sheet continuous  
conveyor**



**Special tappet chain  
for cooling bed  
pipe transport**







**KettenWulf chain technology for coil conveyors with center distances of more than 100 meters and total loads of more than 700 tons.**

The manufacture and supply of state-of-the-art reclaimer chains for handling of coal, iron ore and other additives as well as pan conveyor chains for the charge preparation are one of the applications in which we have proven our superior technical capabilities.

Conveying mediums of highly abrasive character with temperatures up to 900 degrees Celsius call for extreme properties of our products.

The success of our chains in the various applications is based on the selection out of a variety of special materials with increased resistance to high temperatures and wear and a high precision in the manufacture and heat treatment of the individual chain components.

The high degree of approval of the KettenWulf technology among plant operators confirms our concept.

## Chains for Pig-Iron Preparation

**Iron ore loading and  
preparation facility**

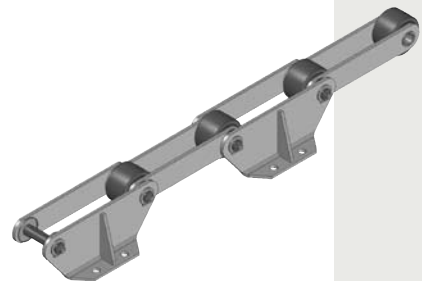
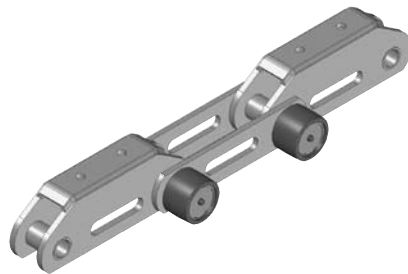




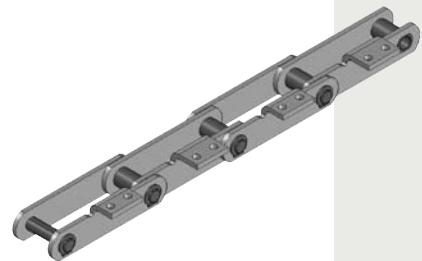
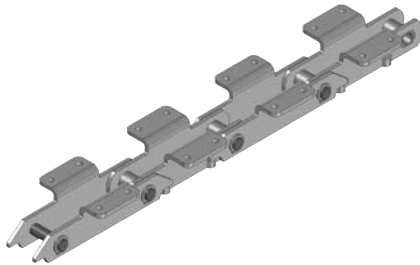
## From Stockyard Technology to Charge Preparation

KettenWulf's innovative chain concepts comprise lifetime lubricated support rollers and chain joint sealing systems for reclaimer chains as well as special attachments and highly wear resistant chain joints for pan conveyor applications in conveying of iron ore, coal and other additives.

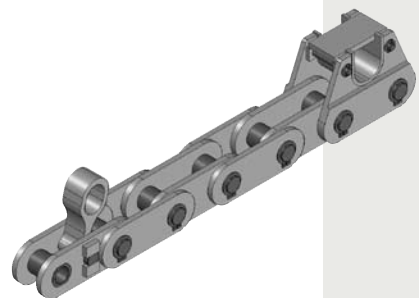
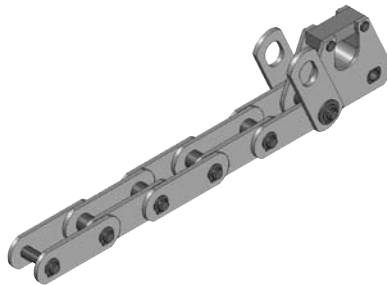
**Scraper chains for reclaiming systems**



**Pan conveyor chains for sinter transport**



**Short pan conveyor chains for coal and iron ore conveying**



No matter whether used in ingot casting or continuous casting lines KettenWulf chains have proven their reliability in daily practise.

Used in continuous casting operations and in the transport of slabs and billets KettenWulf products have stood out in their performance.

Temperatures of up to 1000 degrees Celsius and weights of up to 30 metric tons per piece do require a comprehensive know-how in chain technology.

Competence through intense cooperation with leading equipment manufacturers combined with experience gained from various field operations worldwide mean a maximum degree of operational security and lifetime of the installed conveyor chains to KettenWulf customers.

## Chains for Pig-Iron Moulding

Round strand continuous casting



# From Continuous Casting to Ingot Mould Conveying

Successful chain technology in pig-iron moulding is based on complex geometries, highly wear resistant chain joints and temperature resistant materials.

**Cold strand chain  
as start-up chain**



**Special roller chain for  
cold strand conveying**



**Slab conveyor chain**



**Special block link  
chain for ingot  
mould conveying**





KettenWulf offers specially developed chain technology for all conveyor applications used in the onward processing of slabs and billets to sheets, strips, profiles and pipes.

Extreme wear resistance, high weights per piece of up to 35 t with temperatures up to 900 degrees Celsius and a maximum of length precision on matched chain strands are met by the KettenWulf chain technology.

## Chains for Onward Processing

Hot strip coil transport



# Rolling Mill Technology to Strip Processing

KettenWulf chain technology is being supplied for the transport of coils in the hot or cold rolling area, for the conveying of sheets, profiles and pipes as well as for looping tower applications meeting the high requirements for wear resistance and fatigue strength.

**Illustration 1:**  
Deep link chain for  
steel sheet conveyor



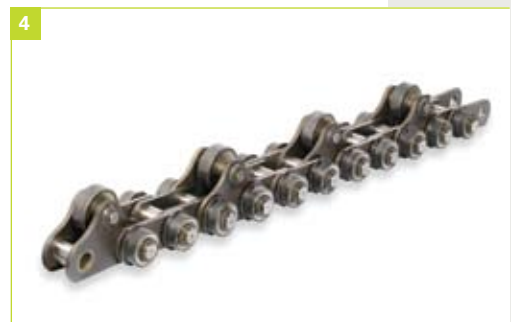
**Illustration 2:**  
Pipe carrier chain in  
the cooling bed



**Illustration 3:**  
Hump conveyor chain  
for hot coil transport



**Illustration 4:**  
Chain with tappet  
for pipe transport



**Illustration 5:**  
Special roller chain  
for strip looper



**Illustration 6:**  
Duplex-roller chain with  
anti-twisting device  
for looping tower



Top class KettenWulf chain technology can be found in the conveying of sheets, pipes and billets as well as in the transport of wire and steel coils.

High speeds and temperatures, extreme ambient conditions and high product weights determine the concept of the chain technology.

KettenWulf products have proven their suitability in the practical application for more than 80 years.

## Transport of Finished Products

Transport of steel sheets to the cold straightening equipment



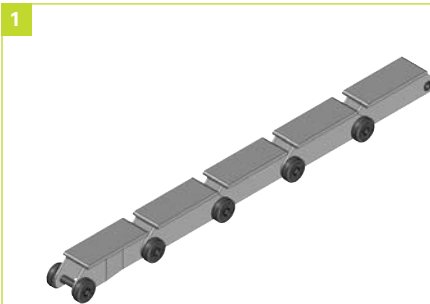


## Transport Solutions for Different Products

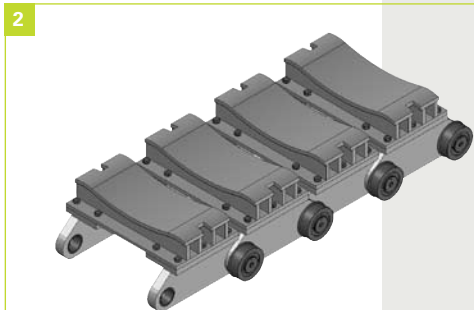
Individual solutions to the chain conveying of finished products can be achieved through our manufacturing capabilities.

Individualized chain attachments and low maintenance rollers may be used for the transport of all kinds of finished products.

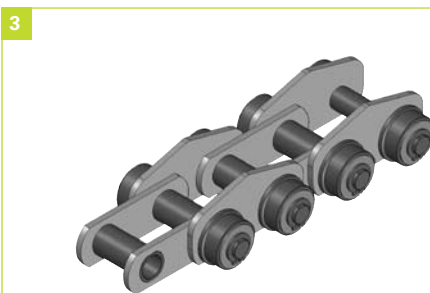
**Illustration 1:**  
Carrier chain for  
sheet transport



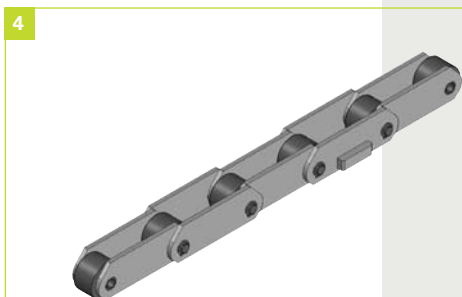
**Illustration 2:**  
Tray chain for  
coil transport



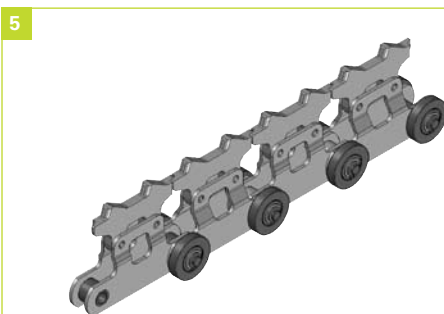
**Illustration 3:**  
Hump link plate chain  
for pipe transport



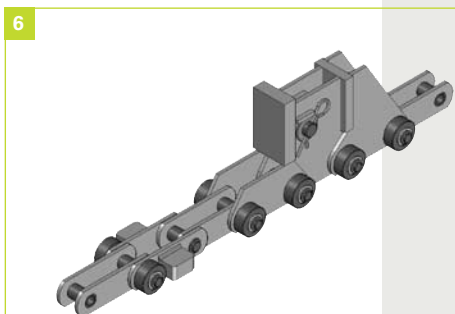
**Illustration 4:**  
Deep link chain  
for transport of  
steel profiles



**Illustration 5:**  
Conveyor chain for  
wire transport



**Illustration 6:**  
Carrier chain for  
billet transport



The huge range of various conveying applications in primary and secondary equipment of the steel making and finishing process requires a high degree of competence in chain manufacturing.

KettenWulf concepts have proven themselves in different machinery and plants worldwide.

## Chains for Secondary Conveying

Apron conveyor for  
steel scrap transport



## Scrap Transport to Forging Manipulator

**Apron conveyor chain  
for scrap transport**



**Draw Bench Chain**



**Plastic plated pan  
conveyor chain for  
careful transport of  
sheets and coils**



**Corrosion resistant  
pan conveyor chain for  
cooling conveyor in the  
aluminum industry**



**Lantern pinion for  
forging manipulator**





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/ISO/ANSI gearing our product range covers individual solutions with optimal tooth profiles and wheel sizes.

Whether you are in need for sprockets of superior material, special heat treatment or sprockets with induction hardened teeth – KettenWulf has the solution.

## KettenWulf Sprockets

KettenWulf manufactures all executions and sizes of sprockets as per customer's specifications



## Optimum Tooth Designs for all Chain Types

We provide matching sprockets for all types of chains. Besides producing sprockets with DIN standard tooth forms, our CNC machines also allow us to produce sprockets with optimized tooth shapes. Products made of high-grade materials, heat treated and with additionally induction-hardened teeth are the standard in our company. Our production spectrum includes all sprocket designs,

including sprockets with one-sided hubs, split-type sprockets, sprockets with detachable tooth shells or tooth segments, shear-pin sprockets, pinion sprockets, as well as sprockets with patented noise-reduction features and wheel systems.

**Illustration 1:**  
Fork link chain sprocket  
in split execution

1



**Illustration 2:**  
Sprocket in split  
execution

2



**Illustration 3:**  
Sprocket with de-  
tachable 2-parted  
toothed rim

3



**Illustration 4:**  
Triplex-roller  
chain sprocket

4



**Illustration 5:**  
Lantern gear sprocket

5



**Illustration 6:**  
Sprocket with de-  
tachable 3-parted  
toothed rim

6



## Products for Complete Drive Systems

As a leader in conveyor and drive technology, KettenWulf has established itself in the market as a supplier of special components. Apart from manufacturing drive and tail shafts, we design and produce complete drive shaft systems, comprising of shaft, sprockets and bearings.

**Assembly and final quality control of a complete drive shaft system**



**Illustration 1:**  
Complete drive  
shaft assembly for  
the steel industry

**Illustration 2:**  
Complete tail  
shaft assembly



*For further information please visit our web site [www.kettenwulf.com](http://www.kettenwulf.com).*



**KettenWulf Betriebs GmbH**  
Zum Hohenstein 15  
D-59889 Eslohe-Kückelheim  
Germany  
T + 49.(0) 2973.801-0  
F + 49.(0) 2973.801-2296  
service@kettenwulf.com  
www.kettenwulf.com

**KettenWulf Betriebs GmbH**  
Export Branch Office  
An der Eisenbahn 4  
D-28832 Achim  
Germany  
T + 49.(0) 4202.523 58-0  
F + 49.(0) 4202.523 58-49  
export@kettenwulf.com  
www.kettenwulf.com

**KettenWulf GmbH**  
Division Ferlacher Förderketten  
A-9163 Unterbergen 25  
Austria  
T + 43.(0) 4227.25 27  
F + 43.(0) 4227.35 94  
office@kettenwulf.com  
www.kettenwulf.com

**KettenWulf NV**  
Division Dyna Chains  
Venecoweg 20A - De Prijkels E17  
B-9810 Nazareth  
Belgium  
T + 32.(0) 9.243 73 73  
F + 32.(0) 9.221 56 03  
service@ketten-wulf.be  
www.kettenwulf.com

**Hangzhou Wulf Chain Co. Ltd.**  
40 Tangning Road, Yunhe Town  
Yuhang District  
311102 Hangzhou  
P.R. China  
T + 86.(0) 571.861 899 00  
F + 86.(0) 571.861 899 50  
info@wulfchain.com.cn  
www.kettenwulf.com

**Wulf Chain USA, LP**  
The Woodlands at Riverside  
8110 Troon Circle SW, Suite 170  
Austell, GA 30168-7852  
USA  
T + 1.678.433 0210  
F + 1.678.433 0215  
usa@wulfchain.com  
www.wulfchain.com

**KettenWulf**  
Representative Office Poland  
ul. Ogrodowa 34 B\4  
PL-65-001 Zielona Góra  
Poland  
T + 48.(0) 68.325 43 37  
F + 48.(0) 68.325 43 37  
poland@kettenwulf.com  
www.kettenwulf.com

**KettenWulf**  
Representative Office Japan  
Monoh 4-chome, 14-13  
Minoh-shi  
Osaka 562-0001  
Japan  
T + 81.72.796 24 24  
F + 81.72.722 20 99  
japan@kettenwulf.com  
www.kettenwulf.com

