



TILEMANN
AUMUNDGROUP

TILEMANN
CHAINS &
COMPONENTS



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OVER A CENTURY OF PRECISION IN CHAIN MANUFACTURING

Founded in Gevelsberg, Germany, in 1900, TILEMANN has become renowned for the precision of its chain manufacturing. As an original equipment manufacturer, the company carries out all fabrication steps in-house. This includes heat treatment, machining, assembly, packaging and dispatch, enabling TILEMANN to provide complete solutions from a single source.

Since 2016, TILEMANN has focused on bucket elevator, scraper, and conveyor chains and acts as the exclusive chain supplier within the AUMUND Group. Close collaboration with the Group's equipment manufacturers enhances the interaction between chain and machine, while new designs and materials extend chain lifetime and reduce weight.

With more than 120 years of experience in high-precision chain manufacturing, TILEMANN combines engineering expertise, application know-how, and international project experience. Chains are developed based on defined criteria such as breaking load, wear resistance, corrosion resistance, and temperature stability to ensure the right solution for each specific application.

TILEMANN employs state-of-the-art production and heat-treatment technologies to meet increasing market requirements, including sustainability targets. Advanced process controls and automation ensure full traceability across the value chain and consistently high quality standards.

TAILOR-MADE CHAIN SOLUTIONS

TILEMANN manufactures chains individually, precisely tailored to customer and project requirements. In close cooperation with plant operators, targeted modifications to chains or components are developed to improve performance, reliability, and plant safety.

With in-house research and development, TILEMANN is able to design suitable solutions even for highly specialized applications. Every TILEMANN chain meets the following key criteria:

- Resistant to extreme temperatures
- Corrosion-resistant
- Low wear characteristics
- High breaking load capacity
- Minimal maintenance requirements

Today, TILEMANN can reference more than 27,000 installations worldwide, supplying high-quality chains and key components to customers across the globe.

INDUSTRIES SERVED

TILEMANN precision chains are used in a wide range of industries worldwide, including:

- Cement, lime, and gypsum
- Chemicals and petrochemicals
- Fertilizer
- Mining and mineral processing
- Steel
- Power generation
- Alternative fuels
- Timber
- Food processing
- Ports and terminals
- Pulp and paper



TILEMANN CHAINS FOR BUCKET ELEVATORS

BUCKET ELEVATOR WITH CENTRAL AND DOUBLE CHAIN

TILEMANN bucket elevator chains are engineered for reliable and continuous operation under demanding conditions. Designed for bucket elevators with central or double chain configurations, they are used across a wide range of bulk material handling processes. Typical applications include the cement, fertilizer, minerals, power, and chemical industries, as well as installations handling alternative fuels. The chains combine high breaking loads

with long service life and low wear, ensuring reliable performance in continuous operation.

The chains are available in various designs and sizes, covering a wide range of pitches and breaking loads to suit different bucket elevator designs and operating requirements. Typical specifications are shown in the tables.

EXAMPLES OF CHAINS FOR BUCKET ELEVATORS (NON-AUMUND SYSTEMS)

Pitch in mm	Breaking load in kN
101.6	200 - 350
152.4	200 - 1,500
177.8	250 - 1,800
228.6	400 - 2,000
Pitch in mm	Breaking load in kN
150	100 - 150
200	200 - 1,000
250	250 - 1,500
300	400 - 1,800
350	750 - 2,500
400	750 - 3,500



BUCKET ELEVATOR CHAIN

- Flexible attachment geometries enable reliable and application-specific bucket mounting
- Fine-grained steels or wear-resistant steels for optimal strength, wear resistance and durability in line with operational demands
- Targeted design optimization of chain geometry and dimensions improves load distribution and extends service life
- Optimized heat treatment enhances wear resistance and fatigue strength via controlled hardening depth
- Optional coatings and surface treatments provide additional protection against abrasive or corrosive environments



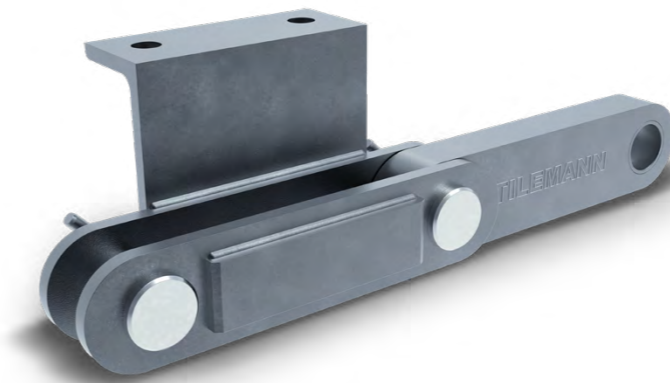
RELIABLE CHAINS FOR RECLAIMING APPLICATIONS

FOR STORAGE SYSTEMS AND BLENDING BEDS

TILEMANN reclaimer chains are designed for continuous operation in storage systems and blending beds under demanding conditions. They are used in the cement, fertilizer and power industries as well as in ports and terminals, where reliable material flow and precise guidance are essential.

Engineered for high loads and long service life, TILEMANN reclaimer chains support efficient and low-maintenance operation in reclaiming and blending applications.

Pitch in mm	Breaking load in kN
160 - 250	100 - 500
250 - 315	200 - 1,500
315 - 400	250 - 2,000
400 - 500	500 - 3,000
500	1,000 - 4,000



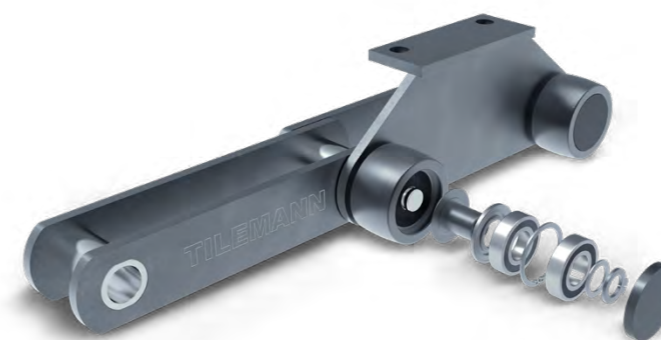
BLOCK CONVEYOR CHAIN

- Universally applicable, for example in bucket wheel excavators
- Long service life combined with high structural rigidity
- Resistant to shock loads and abrasive materials
- Optimized for low-speed, high-torque conveying systems
- Link geometry and attachments can be customized to specific application requirements



BUSH CONVEYOR CHAIN WITH INNER ROLLERS

- Compatible with a wide range of scraper and reclaimer systems
- Plain bearing rollers ensure high wear resistance and durability
- Available with various attachment options for different applications
- Central chain guidance is ensured by highly wear-resistant plates on the outer links
- Inner rollers reduce friction and extend chain service life



BUSH CONVEYOR CHAIN WITH OUTER ROLLERS

- Outer rollers equipped with ball bearings for smooth and efficient motion
- Multi-barrier sealing concept protects bearings from dust and contaminants
- The weight-optimized link plate design reduces chain mass, while the low-friction rollers minimize drag, collectively enhancing overall energy efficiency
- Integrated side scraper continuously cleans the running surface during operation

CHAINS FOR CONVEYING EQUIPMENT AND DRIVE MACHINES

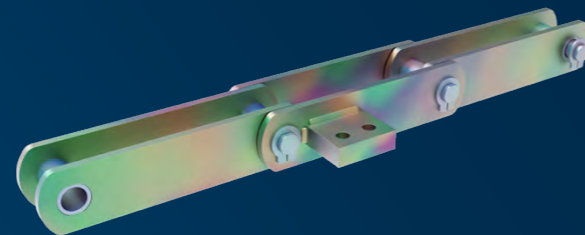
CONTROL OF VERY FINE PARTICLES

TILEMANN supplies conveyor chains for a wide range of conveying equipment and drive machines used in the cement, steel, metal working, food and timber industries. Designed for reliable operation under demanding conditions, these chains ensure efficient and safe material transport across diverse industrial applications.

Full Service Support: Assembly and commissioning carried out on site by trained partners.

GALVANISED CHAIN DESIGN

Galvanised chain designs provide enhanced corrosion protection for applications exposed to aggressive environments. They are particularly suitable for conveying systems handling chemically aggressive bulk materials or for special installations such as amusement parks.



HEAVY DUTY PAN CONVEYOR CHAIN

- Raised attachment link designed to support track plate conveyors or similar systems
- Suitable for large conveyor systems operating under demanding industrial conditions
- Designed for high-temperature environments
- Commonly used in the metallurgical industry, e.g. for sinter handling
- Robust construction for reliable operation with hot and abrasive bulk materials



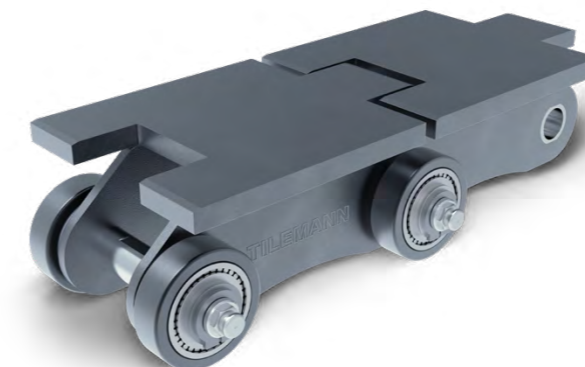
DEEP BUCKET ELEVATOR CHAIN

- Designed for inclined conveying in mining and cement industry applications
- Continuous axle system ensures secure and stable bucket movement
- Flanged rollers provide precise chain guidance within the equipment
- Optimized roller design reduces maintenance requirements
- Suitable for handling abrasive bulk materials at high throughput rates



MULTI-ROLLER CHAIN

- Staggered accumulation rollers enable smooth buffering and controlled product flow
- External support rollers ensure low-friction and quiet transport
- Suitable for packaging, intralogistics, assembly lines, and warehouse automation
- Compatible with pallet, carton, and tray handling systems
- Proven in automated material flow systems and buffer zones



ROLLER CONVEYOR CHAIN

- Designed for transporting heavy rolls and unit loads
- Available with flat or V-shaped top plates depending on application
- Ensures stable support and precise guidance of transported materials
- Suitable for paper rolls, steel coils, or workpiece carriers
- Typical industries include paper & pulp, steel processing, and automotive manufacturing



FROM PRODUCT DEVELOPMENT TO MANUFACTURE

TILEMANN develops its chains in-house, ensuring continuous improvement of design, materials and performance. Innovations such as the CSL (Click-on, Sealed, Lifetime-lubricant) system for scraper chain rollers are developed in close cooperation with customers and research institutes. The CSL sealing concept provides enhanced protection against moisture as well as chemically aggressive and abrasive materials, ensuring reliable operation even under extremely demanding conditions.

In parallel with product development, TILEMANN continuously invests in the modernisation of its manufacturing facilities. State-of-the-art production technology improves fabrication processes and significantly increases production capacity.

Since 2023, an energy-efficient horizontal precision machining centre has been at the core of manufacturing, capable of machining workpieces exceeding one metre in diameter and weighing up to 1,200 kg.

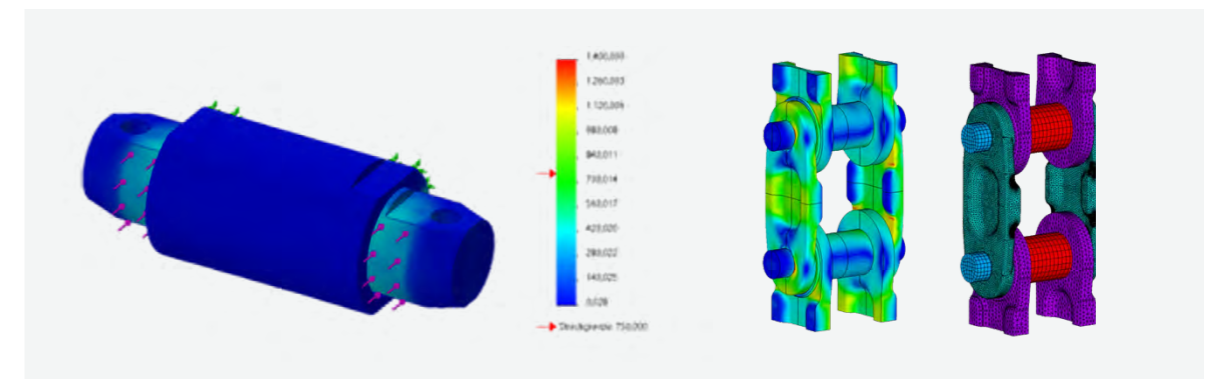
Parallel machining operations and multiple integrated tools ensure high flexibility and precision in component production. Advanced process monitoring and digital documentation guarantee consistent quality standards and full traceability throughout the manufacturing process.

AFTER-SALES SERVICES TO KEEP PERFORMANCE UP

ENGINEERING ANALYSIS

Finite element analysis (FEM) is used during product development to analyse stresses and load distribution in chain components. These simulations help engineers optimise component geometry, material usage and load capacity while ensuring reliable performance under demanding operating conditions.

Combined with extensive application experience, these engineering analyses enable TILEMANN to continuously improve chain designs and maximise durability, efficiency and operational safety.



Engineering simulation used during chain development (Finite Element Analysis – FEM).

TYPICAL SPARE PARTS

Typical spare parts supplied by TILEMANN include outer running rollers, centre guide rollers, sprocket segments, plastic guide elements and complete chain strands for replacement. These components

are engineered for precise interaction with the chain system and ensure reliable operation, reduced wear and long service life.

SUPPORT & COMPONENTS

In addition to complete chain systems, TILEMANN supplies a comprehensive range of components and support solutions. Support and guide rollers, chain wheels and sprockets are available for almost any chain type and application.

Beyond product supply, TILEMANN advises customers on the selection of the most suitable chain system based on operating conditions, wear behaviour and service life requirements. This application-oriented approach ensures technically

and economically optimised solutions for both new installations and modernisation projects. To ensure optimal availability, TILEMANN operates dedicated covered storage areas for finished chains and components, enabling efficient warehousing and fast delivery. Backed by more than one hundred years of experience, TILEMANN combines in-depth manufacturing expertise with application-oriented support – providing complete chain and component solutions from a single-source supplier.



At TILEMANN, we develop and manufacture our chains in-house. This gives us full control over quality, materials and processes. It allows us to respond precisely to customer requirements and deliver reliable solutions across a wide range of industries.



AUMUND GROUP SPANNING THE GLOBE

GLOBAL PRESENCE

The AUMUND Group delivers reliable and efficient solutions for conveying, storage and handling of bulk materials worldwide. With a strong international presence, local expertise and proven technologies, we support industrial customers across the entire lifecycle of their plants.

LIFECYCLE SUPPORT

The AUMUND Group operates service centres and warehouses in strategic industrial regions worldwide. Dedicated service teams support inspections, maintenance, upgrades and modernisation – including PREMAs® predictive maintenance and on-site consulting.



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WE CONVEY QUALITY