

# **Precision for your success**



## **Technical perfection**

- Use of high quality quenched, tempered and case-hardened steels
- High precision fabrication via SPC (statistical process control)
- Quality assurance complying with ISO 9001
- Optimisation of quality features via special heat treatment
- Constant monitoring of the chains for dimensional accuracy and articulation
- Surface coatings
- Special lubricants
- Special materials (e.g corrosion-proof)

# **Application fields**

- Printing presses
- Paper manufacturing and processing machines
- Copiers
- Ceramics and glass industry
- Packaging machines
- Medical technology

### Highest possible quality

- Above average length of life
- Excellent wear resistance
- Restricted length tolerances down to 1/6 of the DIN tolerance
- Significantly higher fractureresistance than the norm
- High fatigue strength
- All iwis chains are pretensioned
- Extremely efficient initial lubrication

### **Benefits to the user**

- Longer maintenance intervals
- Maintenance-friendly, easy and quick to dismantle
- Fewer down times
- Benefits of parallel and synchronous running
- Extremely precise positioning
- Extremely quiet running
- Safety reserves at load peaks
- Reduced stretching during running-in

- Textile machines
- Machine tools
- Machines for processing plastics
- General engineering and systems construction
- Woodworking machinery
- Agricultural machinery

- Office equipment
- Building materials industry
- Construction machinery
- Conveyor technology
- Chemical engineering and process technology
- Tube and can industry

# Your perfect engineering partner



## A scientific based company

iwis has the largest chain Research and Development department in Europe, having more than 60 development engineers soley engaged for the engineering of chain drive systems. Besides basic development and designing innovative customer solutions, the main focus of iwis Research and Development division ranges from calculations, design and testing to wear elongation and fatigue strength analysis.

- Special knowledge of noise emission analysis and vibration engineering
- Our laboratory has the capabilities to carry out many different testing possibilities including microscopy, metallography, evaluation of mechanical properties, chemical composition and qualified analysis of data
- Dynamic simulation/analysis of chain drive systems with regard to chain load, torsional vibrations and friction losses
- FEM analysis of individual chain drive parts static and dynamic stress and strength investigations
- Evaluation of iwis and customer readings at test facilites for verification of simulation models
- Identification of thermal characterstics of chain drives while testing in the climate-testing laboratory.



Evaluation of chain breaking strength and elongation up to 1000kN



More than 15 pulser are available for testing dynamic fatigue strength according to different testing methods



Testing of chain wear elongation behaviour on more than 20 testig rigs

Each customer problem is a challenge for us. Either you need a special conveyor chain or perhaps an own chain configuration, integrating chain wheels and guides in existing modules:

1 3 th

# Troubleshooting

As a system manufacturer our specialists offer you individual solutions, which go far beyond the chain focus on the entire application and answer your problem as a whole. Our research and development department stands for creativity and innovation, as well as for a cooperation hand in hand with our customers. Do not hesitate to contact us in case you have a special problem.

# **Extreme flexibility**

Offering solutions for individual customer problems as well, is our speciality and part of our company's philosophy. By conducting feasibility studies hand in hand with our customers, producing components and executing deformation and stress tests we are able to adjust existing products to individual customer requirements or to develop new chain drives. By means of vibration and stress tests of the components the physical properties of the chain are examined. We try the prototypes on test stands which expose the chain drives to extreme conditions and pressure to ensure its durability and life time. Our customers can and have to be sure that they receive a high quality product – that is our requirement.

# **Special conveyor** chains

iwis offers an extensive program of special chains for various industrial applications and requirements. While the plate chain is being used wherever smooth and reliable conveying through very narrow bends is necessary, the transfer chains are utilized wherever gentle transportation is required. iwis grip chains are applied wherever plate and sheet type materials are drawn in or off, transported or positioned. Additional iwis special conveyor chains: tube and can transport chains, pallet transporting chains, side bow chains, leaf chains anti back bend chains and hollow pin chains.





## Transfer chains according to ISO 606 المعتدية Transfer chains according to ISO 606

Conveying, transporting, stop-start conveying of single parts, pallets...

### CHAIN WHEELS

• For TF-chains standard sprockets

according to ISO 606 can be used

• By using chain wheels with number of

teeth z > 18, the chain is completly

protected in the deflection zone.

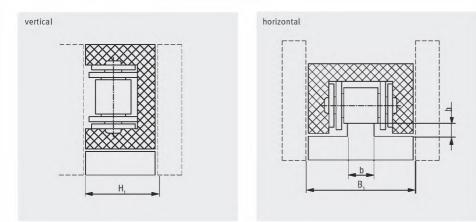
#### SPECIAL DESIGN OF BASIC CHAIN

- Nickel-plated chains
  - MEGAlife maintenance free chains
  - CR-corrosion resistant chains only L 85 TF + M 106 TF

### **CONNECTING LINK**

The ends of the chain are connected with a pin block ① which has a separate plug-in plate ② pushed on to it. The two supporting brackets ③ can be clipped on over the chain rivets by pushing down the chain in the right way. No locking spring is required. The relevant 2 supporting brackets are black in colour to make it easy to find the connecting link.

#### VERSIONS INSTALLED





Connecting link: Same dimensions as chain

### **CHAIN GUIDANCE**

Ref. no. iwis	25"	/ 0	4	"
L 85 TF	20	7,5	3,1	15,4
M 106 TF	25	9,5	3,1	17,7
M 127 TF	30	11,3	2,9	20,0