

## THIELE – The Company



Established for over 70 years, THIELE is one of the world's leading industrial chain manufacturers. The company's reputation is based on many years of experience in chain development and manufacturing. THIELE's highly skilled workforce and modern, high performance production facilities ensures product of the highest quality.

### Manufacture

Fully integrated manufacturing processes, which include various welding methods, heavy plate forming, precision laser cutting and milling on modern multi-axis CNC machines as well as sophisticated heat treatment processes, enable us to manufacture:

- Round link chains
- Plate link chains
- Forged link chains
- Sprockets
- Flight attachments and scrapers
- Chain connectors
- Numerous chain accessories

### Quality

Reliable manufacturing methods, which includes monitoring and laboratory testing at various stages during production ensures THIELE products are of the highest quality.

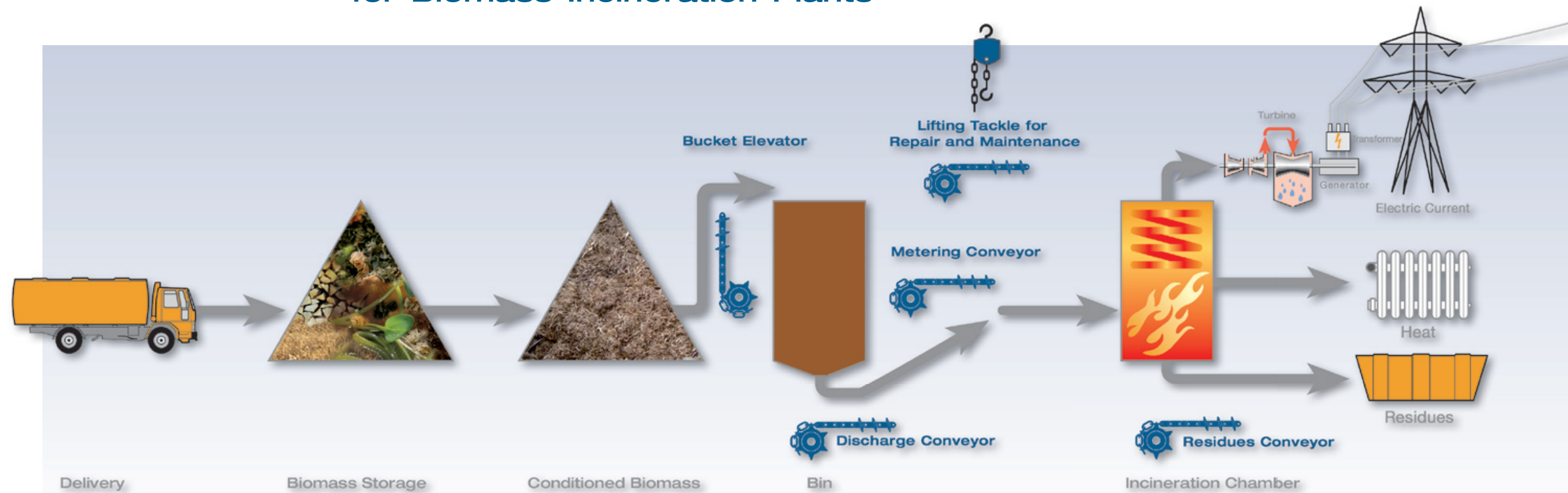
### Consulting and Product Development

THIELE engineers provide on-site consulting and analysis in conjunction with the customer for any particular conveying problem/s at hand, thus helping customers find an optimally engineered mobile chain system for the particular application. Subsequently, the customer/site-specific technical solution is developed in detail by THIELE engineering staff.



Example: Patented T-Alpha cut-outs

## THIELE – Your Partner for Biomass Incineration Plants



### Round link chains

- Case hardened
- Hot dipped galvanized
- Through hardened
- Diameters from 4 - 60mm
- Tensile strength up to 4500 kN



### Forged link chains

- Drop forged, to provide high resistance against wear
- Dog bone profile
- Chain pitch from 102 to 260mm
- Tensile strength up to 2,100 kN
- Hot dipped galvanized, to provide high resistance against corrosion
- Annealed, to provide higher tensile strength
- Surface-welding, to reduce the strain on the chain
- Available with bushes made of various special materials



### Plate link chains

- Precision laser cutting for optimized contours
- Patented T-Alpha cut-outs provide 20% higher tensile strength
- Sealing arrangements available to prolong service life
- Chain pitch from 80 to 500mm
- Hot dipped galvanized, to provide high resistance against corrosion
- Annealed, to provide higher tensile strength



### Sprockets

- For various chain types
- Replaceable tooth segments
- Hardened tooth faces
- Special geometry for optimum interaction between chain and accessories
- Compatible with existing drive systems

Depending on the characteristics of the biomass, the transfer rate and the design of the conveyor, the chain type is individually selected to meet the specific needs.

Chain service life is significantly extended by selecting optimum chain components and materials, such as bushed clevis plates and stainless steel grades.

The use of hot dipped galvanized chains has led to a substantial reduction in operating costs. A decisive factor for trouble-free operation is an optimum technical solution for the interfaces on existing conveyors.

Here, special attention must be paid to the chain/sprocket interaction.

THIELE's know-how is your guarantee of success.





Chain slings and suspension/lifting gear can be electromagnetically inspected for cracks on site by our team of service engineers, who are certified by the Deutsche Gesellschaft für zerstörungsfreie Prüfung e.V. (DGZfP; German Society for Non-Destructive Testing) and can issue the required test certificates.

To service your needs even after taking delivery of your THIELE conveying system we also offer extensive inspection services for horizontal and vertical chain conveyors as well as project management/supervision services for chain system installation and commissioning.

**Scope of services:**

- Electromagnetic crack detection
- Visual inspection and dimensional checks
- Measurement of wear
- Repair
- Training and consulting
- Installation and commissioning project management/ supervision

THIELE supplies equipment for repair and service jobs, including grade 8 hoists and SUPERIOR XL (grade 10) suspension/lifting gear. For two-strand chain assemblies; the latter provides a 30% weight saving over the grade 8 version.

## Conveyor Chains for Biomass Incineration Plants

### THIELE GmbH & Co. KG

Werkstr. 3  
58640 Iserlohn - Kalthof  
Germany

Phone +49 (0) 23 71 9 47 - 0  
Fax +49 (0) 23 71 9 47 - 295  
Internet [www.thiele-powerstations.com](http://www.thiele-powerstations.com)  
e-mail [bulkmaterial@thiele.de](mailto:bulkmaterial@thiele.de)

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