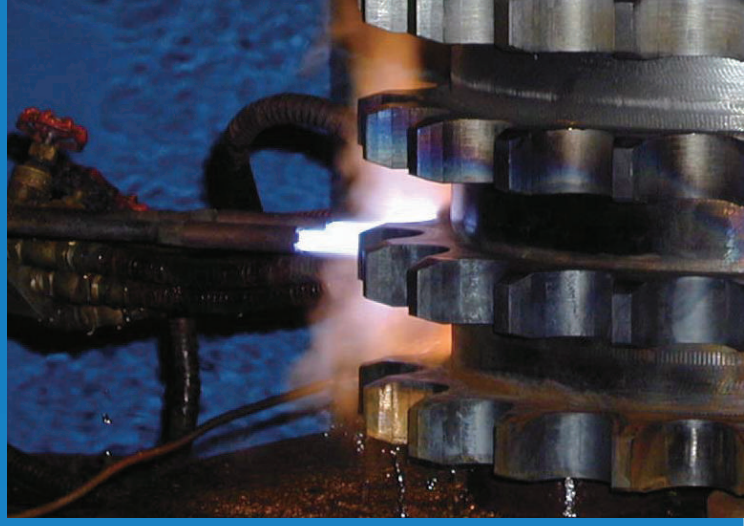


STATEWIDE BEARINGS

To allow for reliability in the harsh environments of the mining industry, chains and sprockets must consistently work together smoothly, so buying them from the same source makes sense.

Our sprockets are built from top-grade carbon steel to offer long wear life, resist abrasion, and withstand heavy shock loads. Alloy and stainless steel sprockets are also available for extra corrosion resistance and food-grade applications.

Sprockets

You get long service life and reliable performance, turn after turn, time after time, even in the harshest of environments. And it's all part of the Tsubaki Advantage: reliable premium products that don't just perform, they outperform the competition. All the while saving you money.

Sprocket Options

Tsubaki can manufacture sprockets to meet your specific needs. The results are sprockets designed to maximize the life of your chain. Chains and sprockets must work together, so buying them from the same source makes sense. When chains and sprockets articulate correctly, the life of the chain is extended. That means long term savings and real value for your application. Tsubaki sprockets can be made in a variety of grades of carbon, stainless, and alloy steels, as well as other metals. Since chain loadings are distributed over all engaged sprocket teeth, tooth breakage or distortion is not normally a problem. It is seldom necessary to use special high strength material. Diameter, pitch, and the number of strands of the sprocket determine the specific grade of carbon steel used. Many of our wide range of carbon steel sprockets are heat treated as a standard. For other sprockets, heat-treating can be specified as an option. Heat-treated carbon steel provides long wear life and resists abrasion.

The hardening process of small diameter, small pitch sprockets is usually a one step procedure using electrical induction heat-treating. Large diameter, large pitch sprockets are usually heat treated using direct flame hardening. These methods are used to provide high hardness at the wear areas of each tooth and maintain a ductile tooth core that is tough and resilient. The hubs and bore remain soft to permit reworking.

Tsubaki's Custom Bore Sprocket

Split Construction

Split sprockets allow for easy maintenance of sprockets and machinery because the sprocket can be removed from the shaft without having to disassemble everything around the sprocket. Most Tsubaki sprockets can be supplied as A, B or C Style (hub combinations) split sprockets. Split A Style sprockets (without hubs) can be supplied with bolt holes or mounting brackets to attach to shafts or drums. B and C Styles (with one or two hubs) are supplied with Tsubaki's standard Type I or Type II split hubs, or custom made-to-order hubs.

Split sprockets that cannot be welded are made with oversized hubs to allow for the bolts that hold the sprocket together. Welded split sprockets are manufactured with Tsubaki's standard or custom split hubs.

Adjustable Segmental Rim Sprockets

Segmental Rim

Segmental rim sprockets and traction wheels are split rings (two or more pieces) that generally fasten by bolting to a standard hub body. Segmental rims are usually applied when ease of replacement is desired because the chain, shaft, and bearings do not have to be disturbed during sprocket replacement. When downtime is critical in an operation, consider segmental rim sprockets and traction wheels. Adjustable rim sprockets are also available from Tsubaki. The adjustability of these sprockets allows for precise alignment of multiple sprockets along a shaft. Segmental rims are made of special steel plate material and may be heat treated (optional) to high hardness levels to achieve long service life. Hardened teeth resist abrasive wear common in operation. Consult Tsubaki Technical Support when material being conveyed is cement, ash, or other high hardness material. Special sprocket tooth hardness is necessary to resist wear from abrasive material.

Quad Sprocket with Lightening Holes

Lightening Holes

Available on request for a wide variety of sprockets. Please contact your local Tsubaki representative for more details.

Mud Relief

In applications where material build up may be a problem, the bottom of the tooth pocket can be beveled on the side to allow the material to "squeeze" out. This reduction of contact area is not critical because the pressure on the bottom of the pocket is very light in horizontal conveyors. Other relief styles may be necessary for vertical conveyors.

Sprockets

Engineering Class Sprockets

Our Capabilities

- Made-to-order capabilities:
  Specializing in high quality Roller Chain and Engineering Class sprockets.
- Short lead times.
- Over 30 years of manufacturing experience.
- ISO 9001:2008 registered.
- Heat treating: Induction, flame, carburizing/case hardening, etc.
  *Effective hardness depth maintained in sprockets
- CNC machining for special machined tooth profiles.
- Robotic and submerged arc welding.
- Flame and laser cutting.
- Finishes include paint, powder coat, and black oxide.
  Stress relieving sprockets
  Balancing sprockets
  Certificates (material/welding) available upon request
- Max Dia. Size: Solid = 2286mm (90″)
  Segments = 3200mm (126″)

Feeder Sprocket Bore Key

Engineering Options

- Split Sprockets
- Segmental Hub & Rims
- Lightening Holes
- Mud Relief
- Installation & operation manuals available.
- Reverse engineering and improvements

Engineering Class Sprocket
with Flat Sided Teeth

Custom Products

- Solid, welded, and custom machined sprockets.
- Mounting, lightening, adjustment, and safety lockout holes.
- Split and Segmental Rim Sprockets
- Mounting methods including straight bores, taper bush styles, drum mountings, splines, Power-Locks and other keyless devices, and much more.

Materials and Coatings

- On request, we can manufacture any sprocket from alloy steel (4140, QT-400) materials.
- Coatings for anti-corrosion and anti-wear are available, including nickel, zinc, chrome, and others.

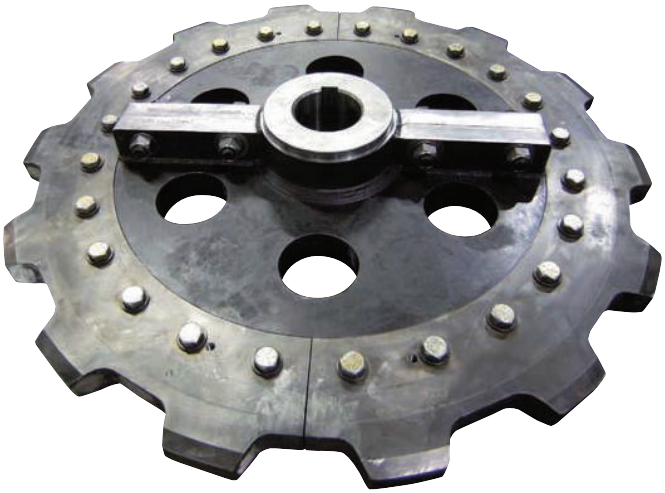
Popular Products

- Coal Reclaimer Sprockets
- Drilling Sprockets
- Shuttle Car Sprockets
- Feeder Breaker Sprockets
- Oil Field Multi-Strand Sprockets

Made-to-Order Split Sprocket

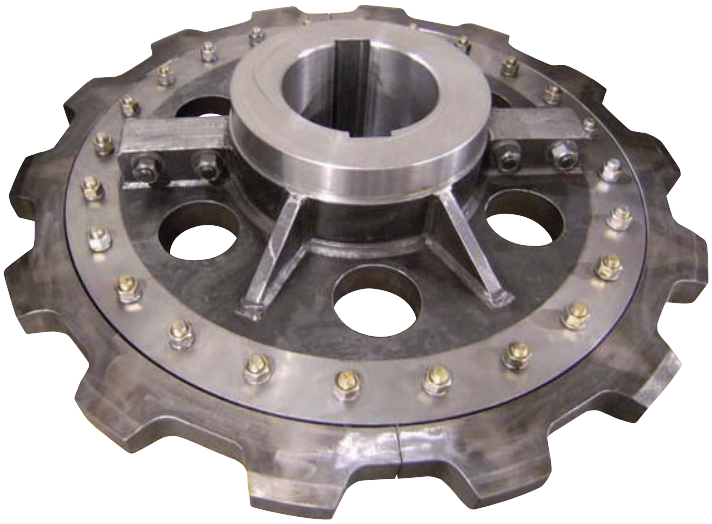
Engineering Class Sprocket Teeth Options

- All Engineering Class sprockets can be provided with “gap tooth” profiles in order to accommodate chain attachments.
- Tsubaki’s standard Engineering Class non-drive style sprockets are manufactured with “Low Profile” teeth. The teeth are not higher than the chain sidebar height to allow for chain attachments. Special flat profile teeth can be designed to clear attachments on long pitch sprockets.
- “High Profile”, or “Long Tooth” sprockets are available on request. The sprocket teeth project out through the top of the chain.



Shipping Methods

- Special shipping methods available, such as custom crates and kits.



- Sprockets are produced by Tsubaki of Canada

STOP THE GUESSWORK

When it really matters, trust Tsubaki

Sproket wear is one of the leading causes of premature chain failure.
When you can't waste valuable machine time inspecting sprockets, trust Tsubaki wear indicators to remove the guesswork.

ISO 9001:2000 REGISTERED

Products to Increase Productivity

Sprocket Wear Indicators

Drive system inspection and maintenance add cost to any production facility. That's why Tsubaki has created an innovative wear indicator to allow a quick and easy replacement decision to be made.
Too often drive components are replaced at the wrong time: Too early (due to historical practices), costing money and increases downtime, or too late, creating forced shutdowns to replace failed drive systems.
With Tsubaki's integrated wear marks incorporated into the sprocket, the task just got a whole lot easier. So much so that just one glance and you'll know. So Tsubaki has "Stopped the Guesswork," allowing you to save time and money to increase your bottom line and eliminate forced shutdowns from drive sprocket failures.

Sprocket Wear Gauges – Large shaft and multi-tooth segment sprockets

With sprockets used in heavy industries having diameters in excess of three meters and section segment tooth assemblies, they require a tooth gauge that allows several areas to inspected.
Tsubaki again has the solution with a reverse tooth profile available at the time of order. Tsubaki provides a specialized gauge to "Stop the Guesswork" and allow cost savings and planned maintenance to be scheduled in a timely and organized manner.

Tsubaki Insert Tooth and Segment Tooth Assemblies

Cost savings are the key to better profitability, and innovative thinking is the way to ensure the very best for our customers. Tsubaki knows the pressures of competition and keeping production moving. Our innovative Insert Tooth Sprockets and Segmental Tooth Assemblies help keep you on track.

- Reduced costs
- Reduced maintenance & replacement time
- Increased production, less downtime
- Increased productivity