

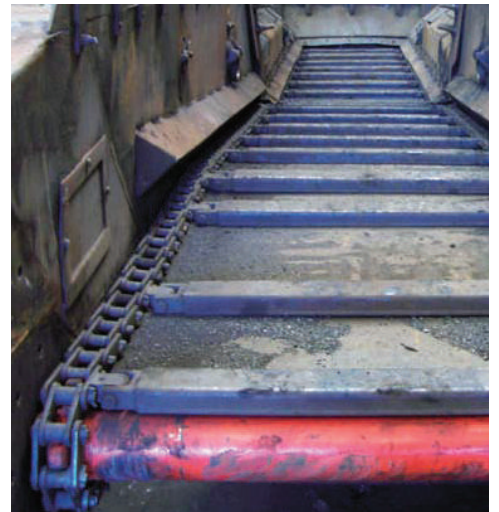
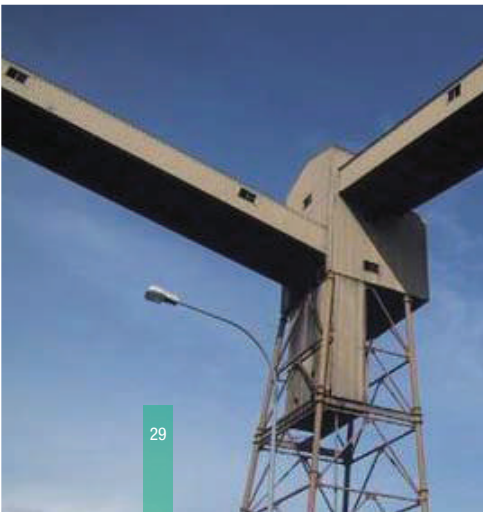
When desired material deposits are located at levels too deep or too expensive for surface mining techniques, the job must go underground. The desired material is extracted either via blasting or specially designed machines such as long wall miners and continuous miners. The material is then transported to the surface for further processing via various means including conveyors. Prior to being transported to the surface the material can be handled via shuttle cars and bridge conveyors, and sized via feeder breakers.

In this extreme environment shock loads are high and chain and/or sprocket failures can take hours to fix. Thus, efficient and reliable extraction can make the difference between profits and losses. You need to get in and out as quickly as possible, which means maximum performance from every piece of equipment on your site.

For these harsh applications Tsubaki offers their specially designed shuttle car chains, heavy duty chains, and chains for continuous miners.



Underground Mining





SHUTTLE CARS (Pg.33) / **FACE & ROOF DRILLERS** (Pg.35)

CONTINUOUS MINERS,
BRIDGE CONVEYORS (JIFFY CONVEYORS) (Pg.35)

PUMPING STATIONS, DRIFT CONVEYORS (Pg.51)



Underground Mining

1 SHUTTLE CAR

Shuttle Car Chain (Pg.34), Sprockets (Pg.41)
ANSI Drive Chain (Pg.20)

2 FACE/ROOF DRILLER

Heavy Duty Drive Chain (Pg.18),
Sheaves, Kabelschlepp Products (Pg.61)

3 CONTINUOUS MINER

Continuous Miner Chain (Pg.36),
Sprockets (Pg.41)

4 BRIDGE CONVEYOR

Bridge Conveyor Chain (Pg.36), Sprockets (Pg.41)

5 FEEDER BREAKER

Feeder Breaker Chain (Pg.20), Sprockets (Pg.41),
Undercarriage Track Chain

6 MINE VENTILATION

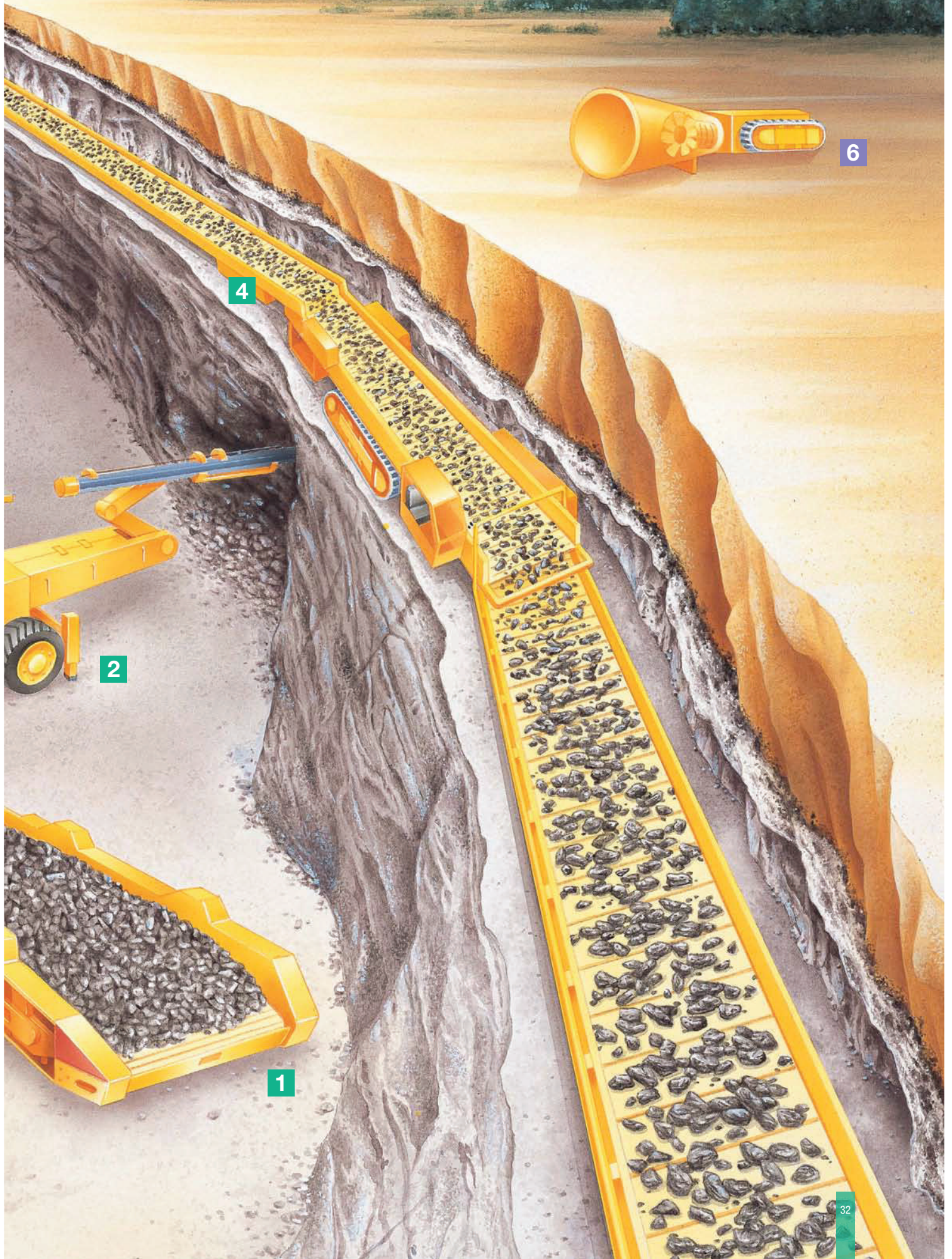
Cam Clutches (Pg.47)
One-Touch Inspection Door (Pg.55)


7 DRIFT/INCLINE CONVEYORS

Back Stops (Pg.47), Power Locks (Pg.39), Power Cylinders (Pg.51)

8 DE-WATER AND SLURRY PUMPS


Back Stops (Pg.47), Power Locks (Pg.39)





Shuttle cars are the workhorses of the underground mining system, transferring coal from the development face to the transport conveyors.

Shuttle Car



These machines load and unload hundreds of tons of coal per shift and operate around the clock in the harshest of environments. Critical to the output of the mining operations, operators demand the most of the equipment and components, and Tsubaki has been a proven partner for decades and continues to lead the way in product materials and service.

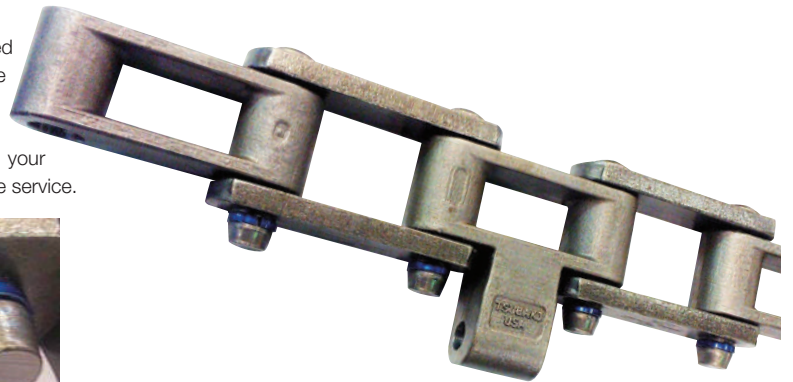
Tsubaki Shuttle Car Chain

Increase Your Shuttle Car's Dependability with Tsubaki's Rugged Shuttle Car Chain

As the world's leading manufacturer of rugged chains designed exclusively for the mining industry, Tsubaki manufactures the traditional 3.075" pitch and the latest and most common 4.100" pitch Shuttle Car Chain for use on new or existing shuttle cars. Tsubaki Shuttle Car Chain will provide two major benefits to your mining operations: Reduced maintenance costs and safer machine service.



Tsubaki Shuttle Hawk 4.100"

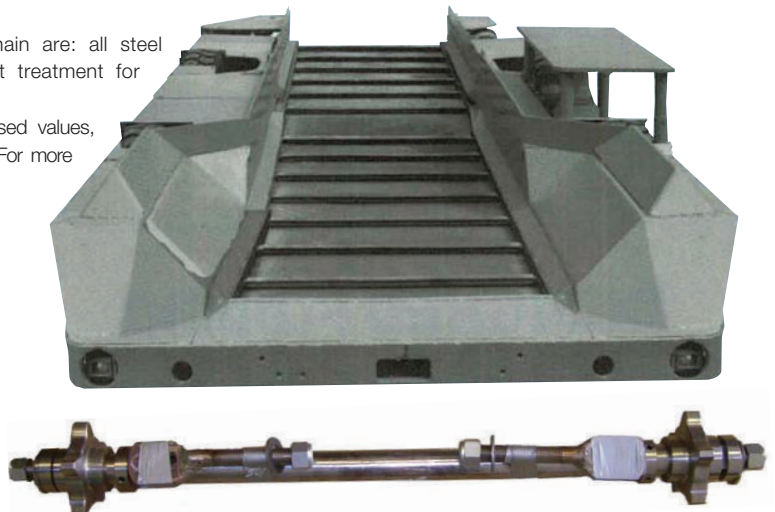
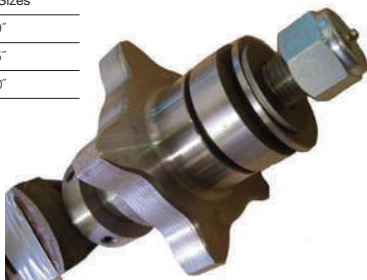


Designed for Optimum Wear Life

The two key design features of the Shuttle Car Chain are: all steel construction of specially selected materials and heat treatment for optimum wear life.

This specially designed product provides you with increased values, savings, and performance for your Shuttle Car applications. For more details please contact your local Tsubaki representative.

Available Sizes
2.609"
3.075"
4.100"



SHUTTLE CAR

Tsubaki of Canada

Tsubaki can supply complete shafts and sprocket take-up assemblies either in complete kits or component format.

We can reverse engineer all components and adopt in additional manufacturing upgrades to material properties and sprocket design features at our manufacturing plant in Canada.

Face & Roof Drilling



Continuous Miner Product Transfer Systems (Mobile Bridge Conveyor – Jiffy Conveyor)



Face and Roof Drilling

Face and roof drillers are the first machines into newly opened areas to shore up the roof and walls and make it safe, and having Tsubaki as a partner to get this job done makes it all that much easier. Whether you are drilling for the next blast or setting in roof bolts, our products work underground with you.

For this application, Tsubaki chains are specified by major OEMs and replacement parts specialists for performance and reliability, which makes your choice even easier.

With special Heavy Duty Drive Chains (Pg.18) and surface coating (Pgs.15,20) to prevent corrosion and failure, the Tsubaki chain line up is second to none.

There chains are available in cotter pin specification for easy breaking and assembly in underground operations.

With special Heavy Duty Drive Chains (pg.18), Japanese-made Leaf Chain, and surface treatment combinations to prevent corrosion and failure, the Tsubaki chain line-up is second to none.

Surface coating treatments for chain available upon request:

- Molybond™ coating
- NEP coating



Continuous Miner

Continuous miners are large machines that work directly in the coal face, scraping material from the wall/ceiling with their giant teeth set on rotating steel drums. Being able to mine well over 30 tons of coal per minute, these machines are the heart of modern underground mining.

Tsubaki manufactures tried and tested products at our US facility based in Sandusky, Ohio. For decades, the market has relied on Tsubaki products – used by OEMs, asked for by customers, and demanded when reliability and reduced downtime are your objectives.

Track Pad Sizes: 11" Chain Pitch Size: 4.760"
15"



Bridge Conveyor

These units are the transfer systems of the continuous miners and operate at high speeds and discharge rates, so the chains used on these machines must be equal to the operation's demands. That's why mine sites around the world specify Tsubaki as their partner, as our name is synonymous with performance under pressure.

Available types of Bridge Chain.

- Standard Bridge Chain
- Heavy Duty Bridge Chain
- Extended Pin Bridge Chain

Please contact your local Tsubaki representative for more details.

