

# NEXT GENERATION TSUBAKI LEAF CHAINS

## LARGE PITCH LEAF CHAINS (BL10 AND LARGER)

Tsubaki's new and improved Large Pitch Leaf Chains now last even longer. Through extensive research and development, Tsubaki has significantly extended the life of its Large Pitch Leaf Chains allowing them to withstand the heavy demands encountered in lifting applications. The new, heavy duty designs incorporate a combination of select quality alloy steel, heat treatment, precise manufacturing tolerances, special plate and pin treatments, and pitch compensation to achieve superior performance well above ASME/ANSI minimums and provide significantly improved wear-life.

**Standard Large Pitch Leaf Chain** - Designed with Tsubaki's proven technology and manufacturing expertise, this chain achieves long life even under heavy loads.



*Standard Leaf Chain*

**Extended Life Large Pitch Leaf Chain** - By utilizing special treatment of critical components, Extended Life Leaf Chain can achieve up to twice the life of the Standard Large Pitch Leaf Chain. Plates are coated with black oxide providing lubricity and a moderate level of corrosion protection in outdoor applications.



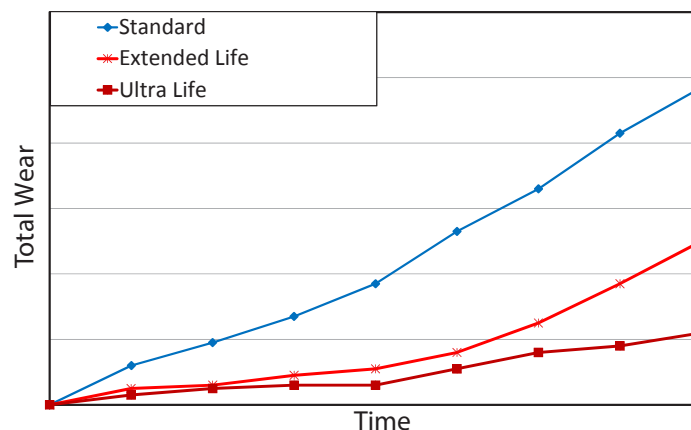
*Extended Life Leaf Chain*

**Ultra Life Large Pitch Leaf Chain** - The ULTIMATE in wear performance. Ultra Life Leaf Chains incorporate advanced technologies and manufacturing processes to achieve up to four times the life of Standard Leaf Chains. In addition, the plates have a more advanced coating, offering greater corrosion resistance and longer life.



*Ultra Life Leaf Chain*

## Wear Test Results



# TSUBAKI PREMIUM LEAF CHAIN FEATURES

## Pin Technology

- **Alloy Steel** - All Leaf Chain pins are manufactured from case hardened chrome-moly alloy steel. The high hardness of the surface provides maximum resistance to wear, abrasion and galling in the high pressures encountered when chains experience heavy loads. The pin alloy steel utilized by Tsubaki provides higher core hardness than other case hardenable steels, which directly translates to maximizing tensile and fatigue strength.
- **Precision Grinding** - After heat treatment, all pins are accurately ground to precise diameter specifications to allow optimum chain assembly while also providing free articulation and chain length control. The smooth finish adds additional resistance to wear and galling.

## Link Plates

All plates are precision stamped through hardened alloy steel and shot peened for high tensile strength, maximum fatigue and shock resistance.

- **Inside Plates** - Pitch compensation is standard for all large pitch Tsubaki Leaf Chains, ensuring equal load distribution on all center plates which enhances tensile and fatigue resistance.
- **Outside Plates** - All press fit outer plates are also designed to maximize tensile strength and fatigue resistance. The interference between the pin diameter and the pitch hole diameter is optimized so compressive forces hold the pins tight and resist repetitive loading in the application.

## Pre-Lubrication

Tsubaki Leaf Chains are lubricated in a unique blend of lubrication, applied by immersing the chain in a hot soak tank to ensure adequate penetration deep into the critical pin-plate contact bearing areas. Subsequent lubrication is required as part of a total maintenance plan.

