

The superior performance of TSUBAKI Heavy Duty chains is the result of a comprehensive quality control network that begins with selection of the world's finest steel materials. It continues with inspection and analysis of quality and performance in 20 different work areas. At TSUBAKI quality control is not just a one time check; it is a total dedication. It is your assurance of long lasting and dependable performance.

TSUBAKI offers Heavy Duty chains for applications that exceed the capabilities of TSUBAKI ANSI G8 standard roller chain. Heavy Duty chain should be considered in the following situations:

1. Harsh environments where the chain will be subjected to heavy impact.
2. Compact drives for equipment or machines that must work in tight spaces.
3. When higher transmission power, allowable load or tensile strength is required.
4. When a lower rate of elastic elongation is required.

H Series

H Series chain differs only from the ANSI G8 Series chain in the thickness of the link plates. The link plates have the same thickness as the link plates of the next larger pitch size in ANSI G8 Series. The increased thickness of the link plates provides a 10% greater capacity for fatigue strength. In addition, the solid bushes provide twice the wear life on average compared to the previous generation. In short, H Series chains are especially suitable for situations where the load is heavy and operating speed is low (up to 50 m/min) or where operating conditions are severe.

HT Series

HT Series chain provides a (10% to 20%) higher Tensile Strength than ANSI G8 Series chain by using through-hardened pins and link plates of the next larger pitch size in ANSI G8 series. The solid bushes provide twice the wear life on average compared to the previous generation. HT Series chain also provides a higher fatigue strength and is best suited for low operating speeds - up to 50 m/min. Dimensions of the chain are identical to the H Series chain.

SUPER Series

The dimensions of these series are identical to those of ANSI G8 Series chain. The special design of the SUPER Series link plate delivers exceptional performance. The pin holes are critically formed and ball drifted and the pins are through-hardened for greater fatigue strength (40%). SUPER Series chains offer 10% higher tensile strength than the equivalent size ANSI G8 Series chain. SUPER Series chains can be used to replace the next larger pitch size of ANSI G8 Series, making them ideal for applications where chain space is limited. Best suited for low speed operating conditions - up to 50 m/min.

SUPER-H Series

The thickness of the SUPER-H Series link plates is the same as the next larger pitch size of SUPER Series chain. The pins are also through-hardened which provides a higher tensile strength (12%*). Higher fatigue strength (15%*) is achieved by Ring Coining on the inner plates. The pin holes are critically formed and ball drifted. SUPER-H Series chains can be used to replace the next larger size of ANSI standard chain, making them ideal for applications where space is limited. Best suited for low speed operating conditions - up to 50 m/min.

* Average increase in comparison with the SUPER Series.

ULTRA SUPER Series

ULTRA SUPER Series offer longer wear life, greater fatigue strength (>60%) and higher tensile strength (>45%) than any other TSUBAKI roller chain. The pins are through-hardened and the pin holes are critically formed and ball drifted. This chain is well suited for applications where there are space limitations. The heavy duty construction of the ULTRA SUPER Series chain allows it to replace chains up to two pitch sizes larger ANSI G8 Series chain. It is best suited for low speed operating conditions up to 50 m/min.

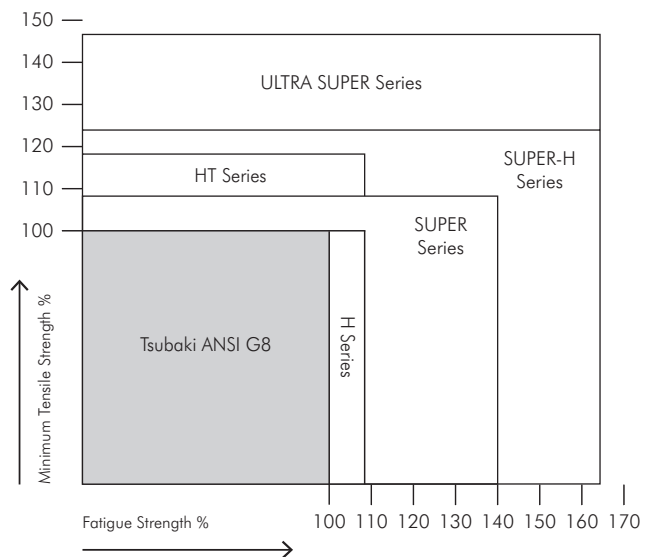
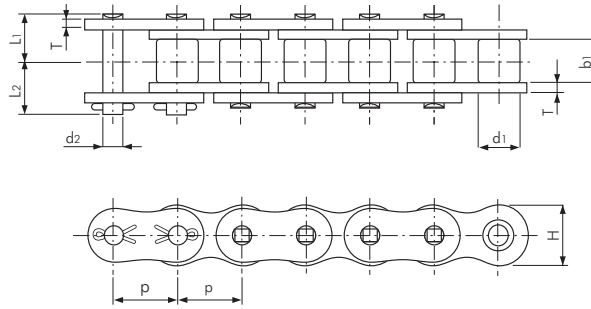


Fig. 16 Comparison of Tensile Strength / Fatigue Strength

ANSI HEAVY DUTY ROLLER CHAIN



HT Series

Dimensions in mm

TSUBAKI Chain No.	Pitch p	Roller Diameter d1	Inner Width b1	Pin			Link Plate		Min. Tensile Strength acc. to Tsubaki kN	Av. Tensile Strength acc. to Tsubaki kN	Approx. Mass kg/m
				Diameter d2	Length L1	Length L2	Thickness T	Height H (max)			
RS60-HT-1	19.05 (3/4")	11.91	12.70	5.96	14.80	17.00	3.20	18.10	48.1	55.9	1.80
RS80-HT-1	25.40 (1")	15.88	15.88	7.94	18.30	20.90	4.00	24.10	81.4	93.2	3.11
RS100-HT-1	31.75 (1 1/4")	19.05	19.05	9.54	21.80	24.50	4.80	30.10	124.0	142.0	4.58
RS120-HT-1	38.10 (1 1/2")	22.23	25.40	11.11	26.95	30.55	5.60	36.20	167.0	191.0	6.53
RS140-HT-1	44.45 (1 3/4")	25.40	25.40	12.71	28.90	33.10	6.40	42.20	218.0	250.0	8.27
RS160-HT-1	50.80 (2")	28.58	31.75	14.29	33.95	38.45	7.15	48.20	278.0	319.0	10.97
RS200-HT-1	63.50 (2 1/2")	39.68	38.10	19.85	42.90	48.10	9.50	60.30	486.0	559.0	18.41
RS240-HT-1	76.20 (3")	47.63	47.63	23.81	54.80	62.30	12.70	72.40	768.0	883.0	29.13

Note:

1. Semi press-fit type connecting links are supplied.
2. Standard ANSI sprockets can be used for single strand chain.
3. Sprockets with a low teeth number must have hardened teeth.
4. Steel grade of sprockets must be C45 or higher.
5. Multi strand chains are available on request.
6. Pins are quad riveted.
7. RS240-HT uses a spring pin for the connecting link.