MEASURING LEAF CHAIN LENGTH

TECHNICAL SHEET

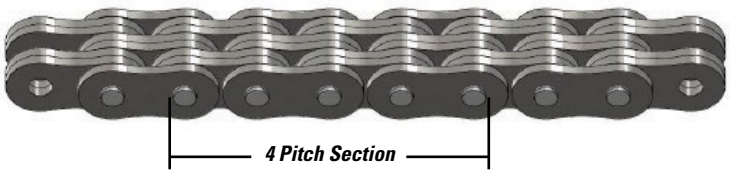


Figure 1: Measure 4 Pitch Section with a Caliper or Tape Measure

Figure 2: Leaf Chain EZ Wear Gauge

INSTRUCTIONS

1. The measurement should contain equal number of inner links and outer links.
2. Measuring longer sections will give more realistic estimations.
3. Chain on equipment should be measured on the tension side.
4. Measurement is outside of pin to outside of pin.
5. Chain not on equipment requires the specified minimum measuring load.

Note: In applications, the tape measure is the most common tool used to measure chain length. However, a caliper will be more accurate and should be used when possible.

TABLE 1.
MEASUREMENT SPECS NEEDED PER CHAIN SIZE

Chain Size	P = Pitch	PD = Pin Diameter	Minimum Measuring Load
	in.	in.	lb.
BL12	1.500	0.500	400
BL14	1.750	0.562	530
BL16	2.000	0.687	800
BL20	2.500	0.937	1,200

LEAF CHAIN % ELONGATION FORMULA

$$\% \text{ Elongation} = \frac{(AML - NL)}{NL} * 100$$

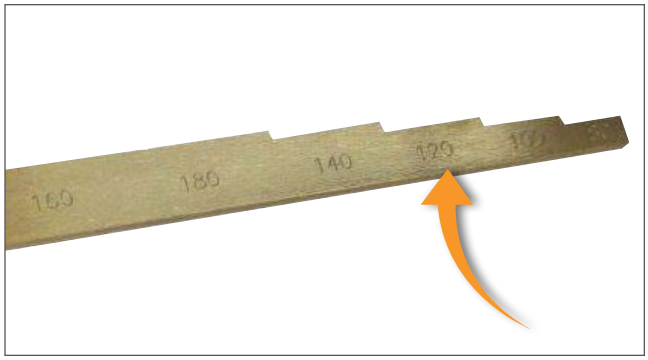
P	Pitch [inches]	Table 1
NP	Number of Pitches	# of Measured Pitches
NL	Nominal Length [inches]	NL = P * NP
PD	Pin Diameter [inches]	Table 1
ML	Measured Length [inches]	From Tape Measure or Caliper
AML	Adjusted Measured Length [inches]	AML = ML - PD

EZ CHAIN WEAR GAUGE®

Check the life of your chain

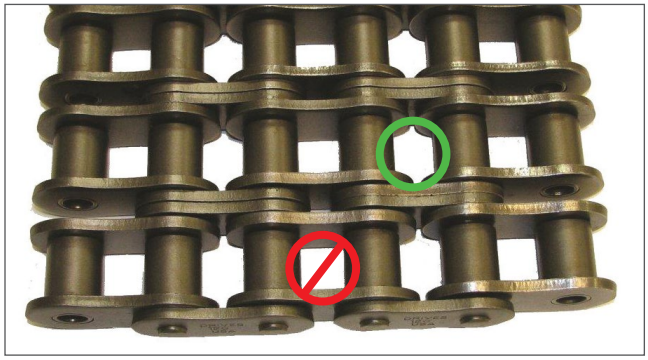
STEP 1

Indentify chain pitch size.



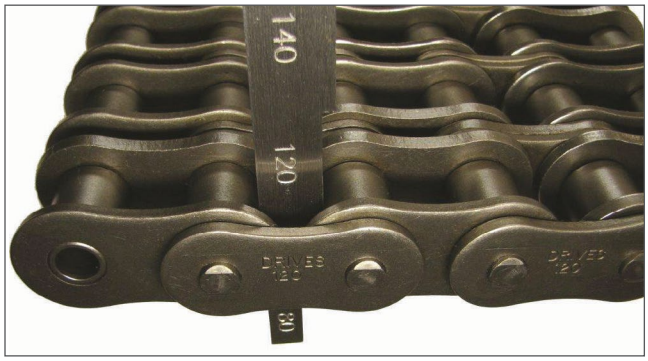
STEP 2

Locate the corresponding step on the gauge.



STEP 3

Check gauge for fit between any two roller links.
(Perform with chain in tension.)



STEP 4

If the gauge step fits through the check-point, the chain is worn out and needs to be replaced.

Note: Gauge should be in line, directly below any outside link plate.

DIAMOND DRIVES BY TIMKEN

Drives® chains are part of The Timken Company's growing portfolio of engineered bearings and industrial motion products.

www.diamonddrives.com