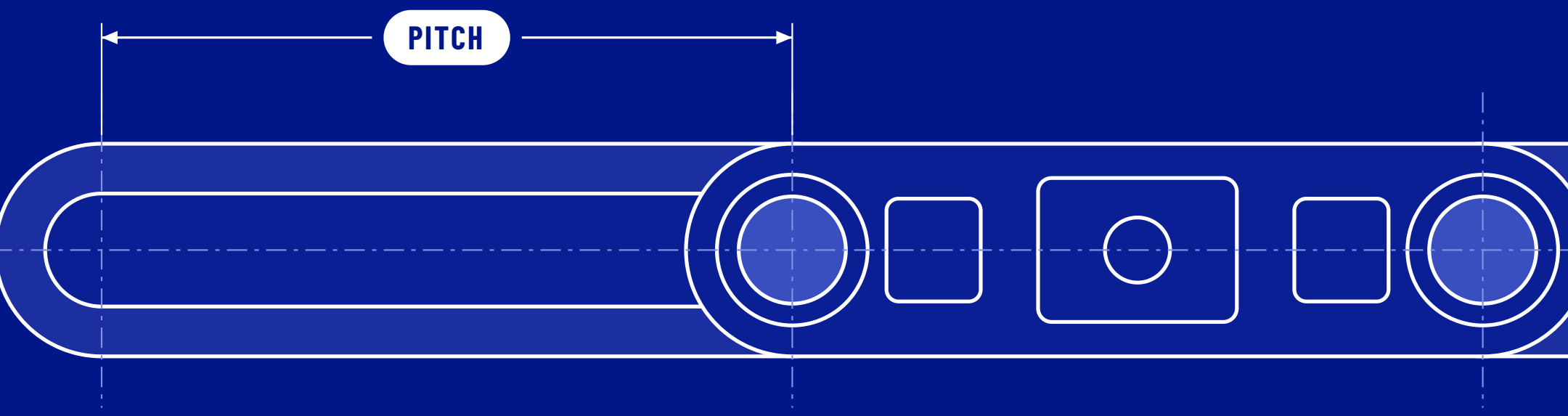
MEASURING GUIDE

How to measure your conveyor chain.

One measurement tells you which X-type chain you have.

YOU'LL NEED **TAPE MEASURE**

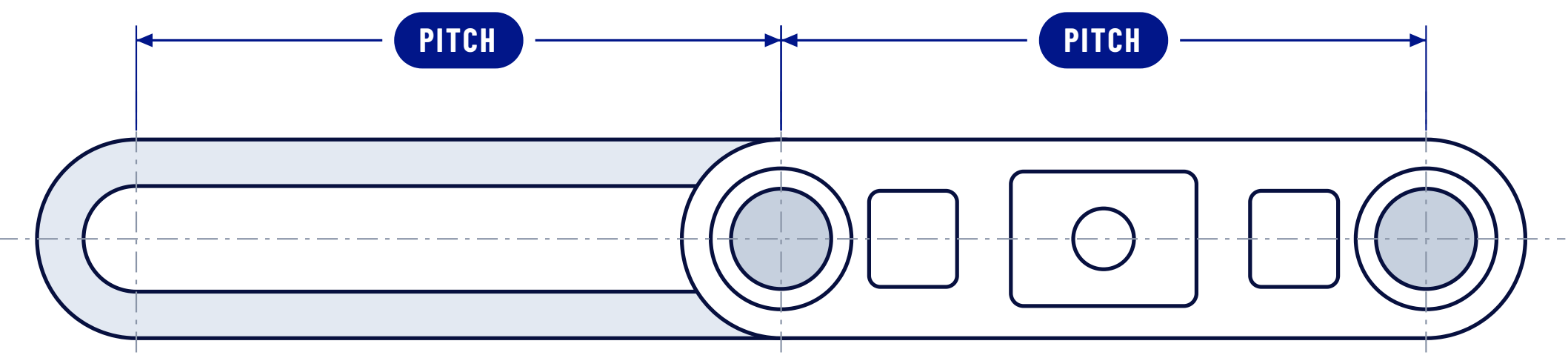
LOCK OUT AND TAG OUT THE CONVEYOR BEFORE YOU MEASURE.



THE ONLY MEASUREMENT YOU NEED

Measure the pitch.

Pitch is the distance from the **center of one pin** to the **center of the next pin**. It tells you the size of your chain.



PRO TIP

Measure across several pins, then divide. Center of pin 1 to center of pin 5 is four pitches.

USED CHAIN

Chain stretches as it wears, so expect a reading a little over the nominal size.

YOUR PITCH IS YOUR CHAIN SIZE

2 in	3 in	4 in	6 in
X-248	X-348	X-458	X-678

PART NUMBERS · 2 IN PITCH

X-248 chain

2 in
PITCH

SMOOTH LINK®

0552480	Black
0572480	Zinc coated
0592480	YZD coated
0562490	YZD coated, stainless steel pin
0542480	Olive drab

STAINLESS STEEL

0624800	Stainless steel chain

YZD: yellow zinc dichromate.

BUSCHMAN SYSTEM? Frost converts Buschman systems to X-248. Find the conversion brochure at frostinc.com/resources.

PART NUMBERS · 3 IN PITCH

X-348 chain

3 in
PITCH

SMOOTH LINK®

0543480	1045/4140 steel
0570348	Zinc coated
0590348	YZD coated

FORGED

8642348	8642 alloy, plain
8647348	8642 alloy, zinc coated
8649348	8642 alloy, YZD coated

BOLTED

0538900	SL348 bolted, YZD coated

STAINLESS STEEL

0634800	Stainless steel chain

YZD: yellow zinc dichromate.

PART NUMBERS · 4 IN PITCH

X-458 chain

4 in
PITCH

SMOOTH LINK®

0510458	1552/8640 steel
0517458	1542/8640 steel, zinc coated
0519458	1542/8640 steel, YZD coated
0584580	8640 high alloy
0584580M	8640 high alloy, Magnaflux inspected

FORGED

8642458	8642 alloy, plain
8647458	8642 alloy, zinc coated
8649458	8642 alloy, YZD coated

STAINLESS STEEL

0645800	Stainless steel chain

YZD: yellow zinc dichromate. Magnaflux: magnetic particle inspected.

PART NUMBERS · 6 IN PITCH

X-678 chain

6 in
PITCH

SMOOTH LINK®

0546780	1045/8640 steel
0570678	1045/8640 steel, zinc coated
0590678	1045/8640 steel, YZD coated
0586780	8640 high alloy
0586780M	8640 high alloy, Magnaflux inspected

FORGED

8642678	8642 alloy

STAINLESS STEEL

0667800	Stainless steel chain

EXTENDED PIN PARTS

0586785	Extended chain pin, 2.2 in long, 5/8-11, 8640
0046200	Extended chain pin nut, 5/8-11, top lock

YZD: yellow zinc dichromate. Magnaflux: magnetic particle inspected.

SPECIFICATION

Smooth Link® X-chain.

Flash-free pins reduce wear and variation in strand length.

MEETS OR EXCEEDS ANSI B29.22M AND CEMA 601

EVERY STRAND PROOF LOADED

FINE-GRAIN STEEL

CHAIN	PART NO.	ULTIMATE STRENGTH	PROOF LOAD	MAX DRIVE CHAIN PULL
CARBON STEEL				
X-348	0543480	**22,000 lb**	10,000 lb	1,500 lb
X-458	0510458	**54,000 lb**	20,000 lb	3,900 lb
X-678	0546780	**85,000 lb**	30,000 lb	5,500 lb
HIGH ALLOY				
X-458	0584580	**68,000 lb**	20,000 lb	4,500 lb
X-678	0586780	**125,000 lb**	30,000 lb	8,000 lb

Source: Frost engineering specification, X-Type Smooth Link Chain. All parts heat treated and tempered in a certified, controlled process.

SPECIFICATION

Forged X-chain.

Forged from 8642 alloy steel. X-348 and X-458 come plain, zinc or YZD coated.

MEETS OR EXCEEDS ANSI B29.22 AND CEMA 601

EVERY STRAND PROOF LOADED

HARDNESS 40 TO 45 RC

CHAIN	PART NO.	ULTIMATE STRENGTH	PROOF LOAD	MAX CHAIN TENSION
X-348	8642348	29,800 lb	10,000 lb	1,900 lb
X-458	8642458	63,000 lb	20,000 lb	4,100 lb
X-678	8642678	125,000 lb	30,000 lb	8,000 lb

Source: Frost engineering specification, X-Type Forged Chain (2024). All parts heat treated and tempered in a certified, controlled process.

STILL NOT SURE?

Send us your pitch. We'll match the chain.

WHAT TO SEND

- Your pitch measurement
- Part number, if you have it
- Chain type and finish
- A photo of the chain

SCAN TO REQUEST A QUOTE

616.453.7781
frost.sales@frostinc.com

Email photos and measurements straight to our sales team.