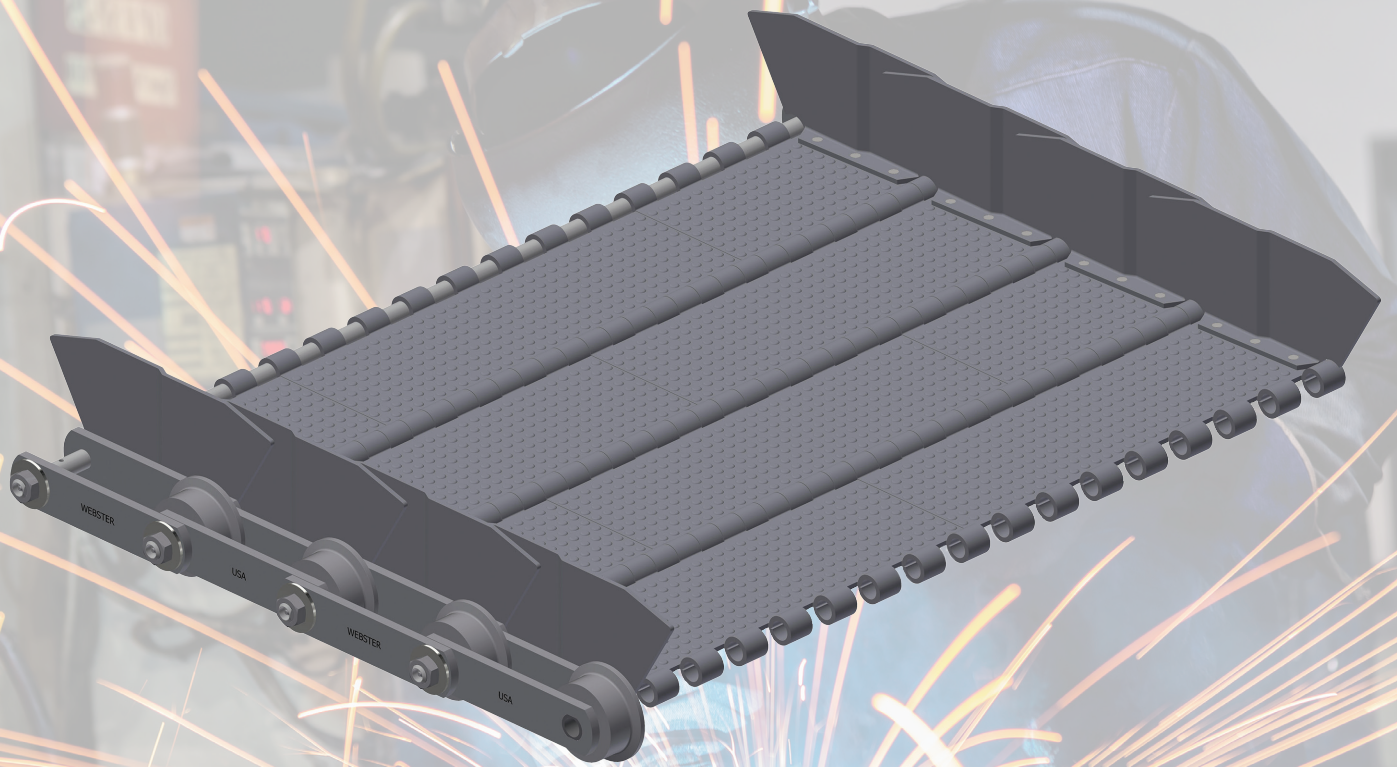




ENDURO-FLITE®



ENGINEERED TO EXCEL

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MANUFACTURED TO EXCEED

## ABOUT US

Webster Industries, Inc., headquartered in Tiffin, Ohio, is an innovative leader in the engineered class chain, sprocket and vibratory equipment markets. Since its start in 1876, Webster has evolved into a vertically integrated chain manufacturer that serves a variety of industries. The company now employs around 300 people nationwide and has facilities in Ohio, Mississippi and Oregon. Throughout its 140 years in business, Webster's focus has consistently been on American materials, American labor and American pride. A strong concentration on customer service, based on seamless vertical integration ensures that Webster's clients receive the highest quality products and service in the industry.



## VERTICAL INTEGRATION

While many companies rely increasingly on outsourcing for production needs, Webster Industries has invested in building, maintaining and growing a vertically integrated manufacturing system. With full services under one roof at our Tiffin, Ohio, headquarters, Webster offers superior product design, consistent product quality and the best delivery time in the industry. Our 350,000 square foot manufacturing facility includes the following departments:

- Punching & Stamping
- Heat Treat
- Machining & Sprocket Fabrication
- Metal Fabrication
- Chain Assembly & Welding

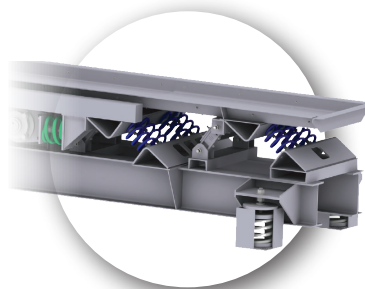
## OUR PRODUCTS



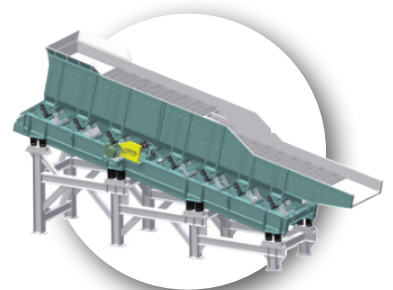
**ENGINEERED  
CLASS CHAINS**



**SPROCKETS**



**VIBRATING  
CONVEYORS**

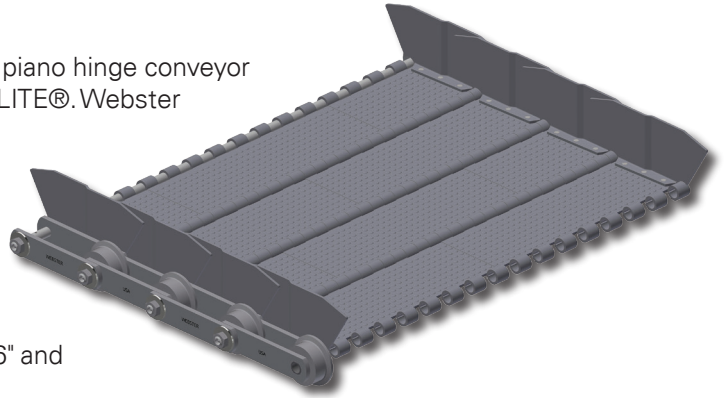


**ACTION PROCESS  
EQUIPMENT**



## PIANO HINGE CONVEYOR BELTING

For light to medium-duty applications, Webster offers our piano hinge conveyor belting which carries the registered trademark ENDURO-FLITE®. Webster is the only chain manufacturer producing the piano hinge conveyor design. Due to our extensive background in chain design we understand the importance of controlling pitch tolerance and hole quality. ENDURO-FLITE® components share both load and wear factors evenly, providing trouble free service to your material handling operation. ENDURO-FLITE® is available with formed hinges in both 6" and 9" pitch and with welded hinges in 12" pitch.



### MATERIAL

Pans and wings are mild steel. Sidebars are medium carbon steel. Thru rods are alloy steel. Bushings are furnished in case hardened steel to provide maximum wear resistance and chain life. Rollers are white iron and available in machined steel.

### ASSEMBLY

ENDURO-FLITE® conveyors are cotteder construction. Thru rods are also available threaded with locknuts as well as drilled for lubrication.

### INTERCHANGEABILITY

ENDURO-FLITE® chain components, pans and wings are fully interchangeable with other standard makes of corresponding sizes and numbers.

### APPLICATION

ENDURO-FLITE® conveyors are used in stamping plants, recycling facilities, die casting and other industries where a lightweight, yet rugged, conveyor is required. Pans can be furnished dimpled, perforated or both for applications where a nonstick surface or drainage is needed.

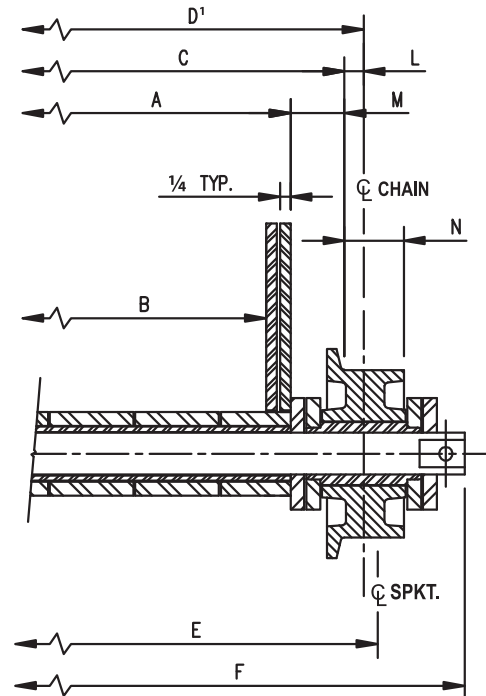
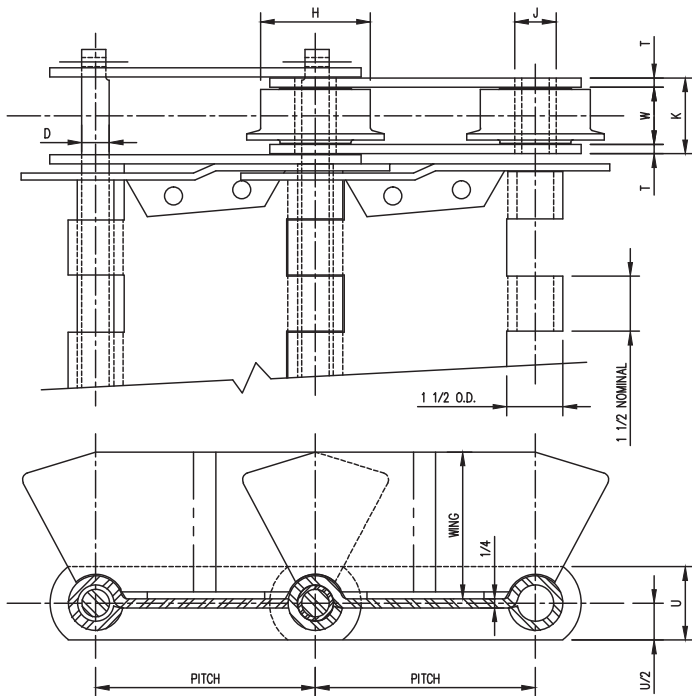
### OPERATION

ENDURO-FLITE® conveyors are best suited for slow or moderate speed applications. Maximum chain speed depends upon size of sprockets. For Conveyor Speed see Table 2, Section A, in 400 Master Catalog.

### BELT NUMBERING

	9	250	T	-	A	-	4	-	924F	-	3
PITCH	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
PAN THK.	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
TUBE TYPE	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
NOM. WIDTH	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
WING HT.	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
CHAIN NO.	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
THRU ROD STYLE	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____

# 6" PITCH CONVEYOR DIMENSIONS



## 6" PITCH CHAIN DIMENSIONS

CHAIN NO.	AVERAGE PITCH INCHES	AVERAGE ULTIMATE STRENGTH IN LBS. PER STRAND	RATED WORKING LOAD IN LBS.★ PER STRAND	FRICTION FACTOR (f <sub>r</sub> )		GENERAL DIMENSIONS				PINS	SIDEBARS		ROLLERS		
						INSIDE SIDEBARS	BUSHING OUTSIDE DIA.	BUSHING LENGTH	ROLLER GA.	DIA.	THK.	HEIGHT	TREAD DIA.	TREAD WIDTH	⌚ CHAIN TO WHEEL GA.
				DRY	LUBED										
				614P	6.000	32,000	4,600	0.23	0.16	1¼	1⅝	1¾	□□□	¾	¼
624F	6.000	32,000	5,400	0.19	0.13	1⅙	1⅝	2⅙	⅜	¾	¼	2	3	1⅙	⅙
625F	6.000	32,000	5,400	□□	0.05	1⅙	1⅝	2⅙	⅜	¾	¼	2	3	1⅙	⅙
634F	6.000	50,000	7,200	0.14	0.10	2	1⅝	2¾	1⅙	¾	⅝	2	4	1⅙	⅙
635F	6.000	50,000	7,200	□□	0.05	2	1⅝	2¾	1⅙	¾	⅝	2	4	1⅙	⅙

★ Subject to Service Factor Table 9 and Speed Factor Table 11, Section A, 400 Master Catalog.

□□ Antifriction bearing in roller.

□□□ Plain face roller.

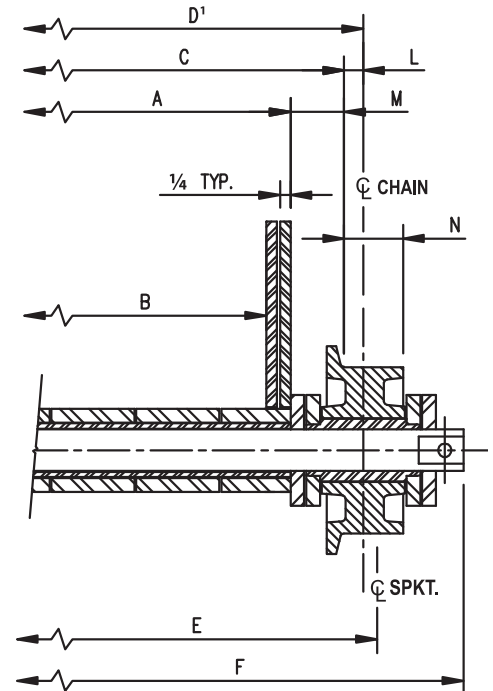
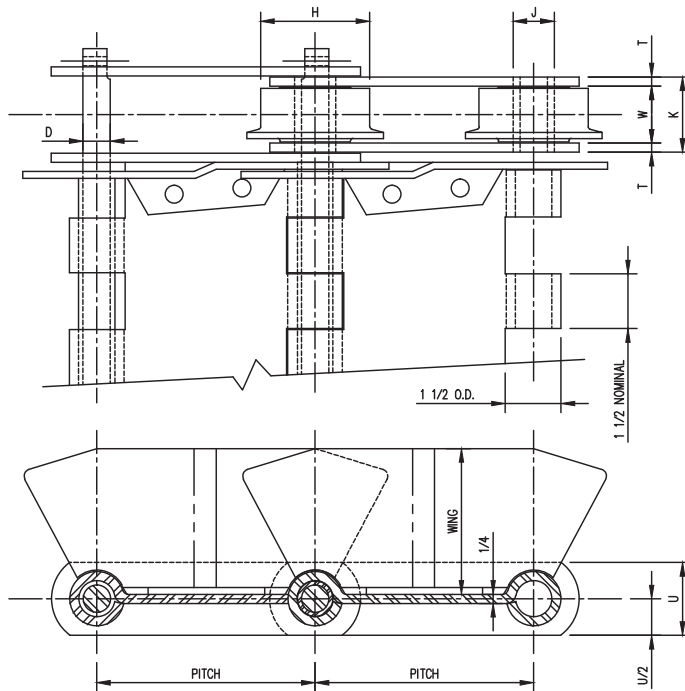
## 6" PITCH BELT DATA FOR 1/4" THICK PAN

CHAIN NO.	614P	624F	625F	634F	635F
A - PAN WIDTH	12" to 96" Wide				
B - INSIDE WINGS (1/4" THICK)	A - 1 1/16	A - 1 1/16	A - 1 1/16	A - 1 1/16	A - 1 1/16
C - ROLLER GAGE	N/A	A + 1 5/16	A + 1 5/16	A + 2 11/16	A + 2 11/16
D <sup>1</sup> - CHAIN CENTERS	A + 2 5/16	A + 2 5/8	A + 2 5/8	A + 3 9/16	A + 3 9/16
E - SPROCKET CENTERS	A + 2 5/16	A + 3	A + 3	A + 4	A + 4
F - OVERALL WIDTH (STYLE 3)	A + 5 3/8	A + 6 1/4	A + 6 1/4	A + 8 1/8	A + 8 1/8
WEIGHT (LBS./FT.) 4" WINGS (1/4" THICK)	27 + (A x 1.35)	30 + (A x 1.35)	30 + (A x 1.35)	49 + (A x 1.35)	49 + (A x 1.35)
INNER TUBE	.970 O.D. x .780 I.D.				
MIN. REFLEX RADIUS 4" WINGS	36"				

NOTE: F Dimension (Overall Width) - Add 1/4" for Style 5 thru rod and 3/8" for Style 5G thru rod.



# 9" PITCH CONVEYOR DIMENSIONS



## 9" PITCH CHAIN DIMENSIONS

CHAIN NO.	AVERAGE PITCH INCHES	AVERAGE ULTIMATE STRENGTH IN LBS. PER STRAND	RATED WORKING LOAD IN LBS.★ PER STRAND	FRICTION FACTOR (f <sub>r</sub> )		GENERAL DIMENSIONS				PINS		SIDEBARS		ROLLERS		
						INSIDE SIDEBARS	BUSHING OUTSIDE DIA.	BUSHING LENGTH	ROLLER GA.	DIA.	THK.	HEIGHT	TREAD DIA.	TREAD WIDTH	⌀ CHAIN TO WHEEL GA.	
				DRY	LUBED											W
				914P	9.000	32,000	4,600	0.23	0.16	1¼	1⅝	1¾	□□□	¾	¼	2
924F	9.000	32,000	5,400	0.19	0.13	1⅝	1⅝	2⅙	⅜	¾	¼	2	3	1⅙	⅙	
925F	9.000	32,000	5,400	□□	0.05	1⅝	1⅝	2⅙	⅜	¾	¼	2	3	1⅙	⅙	
934F	9.000	50,000	7,200	0.14	0.10	2	1⅝	2¾	1⅙	¾	⅝	2	4	1⅙	⅙	
935F	9.000	50,000	7,200	□□	0.05	2	1⅝	2¾	1⅙	¾	⅝	2	4	1⅙	⅙	

★ Subject to Service Factor Table 9 and Speed Factor Table 11, Section A, 400 Master Catalog.

□□ Antifriction bearing in roller.

□□□ Plain face roller.

## 9" PITCH BELT DATA FOR 1/4" THICK PAN

CHAIN NO.	914P	924F	925F	934F	935F
A - PAN WIDTH	12" to 96" Wide				
B - INSIDE WINGS (1/4" THICK)	A - 1 1/16	A - 1 1/16	A - 1 1/16	A - 1 1/16	A - 1 1/16
C - ROLLER GAGE	N/A	A + 1 15/16	A + 1 15/16	A + 2 11/16	A + 2 11/16
D <sup>1</sup> - CHAIN CENTERS	A + 2 5/16	A + 2 5/8	A + 2 5/8	A + 3 3/16	A + 3 3/16
E - SPROCKET CENTERS	A + 2 5/16	A + 3	A + 3	A + 4	A + 4
F - OVERALL WIDTH (STYLE 3)	A + 5 3/8	A + 6 1/4	A + 6 1/4	A + 8 1/8	A + 8 1/8
WEIGHT (LBS./FT.) 4" WINGS (1/4" THICK)	23 + (A x 1.35)	25 + (A x 1.35)	25 + (A x 1.35)	38 + (A x 1.35)	38 + (A x 1.35)
WEIGHT (LBS./FT.) 6" WINGS (1/4" THICK)	29 + (A x 1.35)	31 + (A x 1.35)	31 + (A x 1.35)	44 + (A x 1.35)	44 + (A x 1.35)
INNER TUBE	.970 O.D. x .780 I.D.				
MIN. REFLEX RADIUS 4" WINGS	30"				
MIN. REFLEX RADIUS 6" WINGS	42"				

F Dimension (Overall Width) - Add 1/4" for Style 5 thru rod and 3/8" for Style 5G thru rod.



# ENDURO-FLITE® SPECIFICATIONS



All Webster Enduro-Flite® chain components are fully interchangeable with current major piano hinge manufacturers. Enduro-Flite rollers, bushings and thru rods can also be equipped for lubrication and/or needle bearings for reduced chain pull and horsepower requirements.

## CHAIN WINGS

Chain wings are stamped, formed and jig welded for correct positioning and controlled offset for improved chain articulation.

## SMOOTH PANS

Smooth pans have precision formed hinges for greater accuracy and interchangeability.

## CHAIN THRU RODS

Chain thru rods are made of superior quality, cold finished, steel bar, in accordance with ASTM Specification A311, Class B, for maximum rated working load and wear life.

## PERFORATED PANS

Perforated pans allow liquid to drain through the pan in quench applications.

## DIMPLED PANS

Dimpled pans prevent material stickage in oily applications.

## MITERED ANGLE CLEATS

Mitered angle cleats help move material up steep inclines.

## INNER TUBE

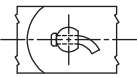
An inner tube design protects the thru rods from abrasive contaminants and virtually eliminates crack shaft wear.

## ROLLERS

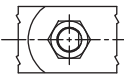
Rollers are single flanged white iron rollers and thru hardened for durability. Machined steel rollers with needle bearings are available for long conveyor runs.

## BUSHINGS

Full round bushing design



COTTERED  
CONSTRUCTION



STYLE 5  
CONSTRUCTION



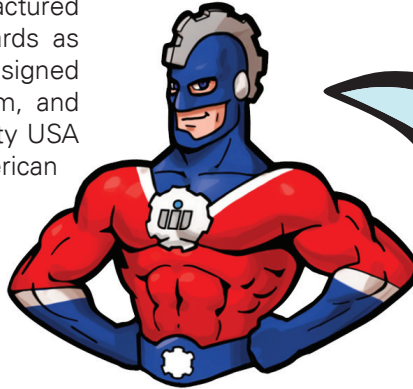
STYLE 5G  
CONSTRUCTION



# WEBSTER SPROCKET DESIGN

Webster Sprockets are designed and manufactured according to the same core quality standards as Webster chain. Each sprocket is carefully designed by Webster's experienced engineering team, and is then manufactured with the highest quality USA made medium carbon steel by skilled American laborers.

Pairing Webster Chain and Sprockets on your application, ensures that your conveyor is performing at the highest level of productivity, reliability and service.



## WHY WEBSTER SPROCKETS?

Purchase with Chain  
Double Your Warranty  
Industry Best Delivery  
Easy Customization  
Highest Quality  
Qualifies for Free Freight  
Made In The USA

## WEBSTER'S SPROCKET DESIGN

Webster Sprockets are designed and manufactured per the ASME/ANSI specification. The sprocket selection and design depend on the chain and the customer's application. Webster's standard design utilizes low profile teeth to ensure the sprocket does not interfere with the chain and its attachments. Various material options and numerous teeth profiles, plating options and special features are available upon request. Please consult our engineering department for any special needs.

## WEBSTER SPROCKET FEATURES

### LIFTING HOLE

Are positioned directly above the key and provide easy placement of a lifting strap, rod or other device to make sprocket installation easier and safer. Lifting holes are provided on all sprockets unless restricted by space.

### FLAME HARDENED TEETH

Webster's automated, computer-controlled hardening process increases wear resistance and sprocket longevity. Our hardening process allows us to achieve precise hardness levels. All Webster sprockets have a minimum 40 Rc in all critical wear areas and utilize USA made 1045 steel plate.

### WEAR LINE INDICATORS

Indicate when it is time to replace the sprockets. When the sprocket face is worn to the scribed line the sprocket needs replaced along with the chain. Wear line indicators are an easy visual tool to help guide best practices in chain sprocket and conveyor operations.

### LIGHTENING HOLES

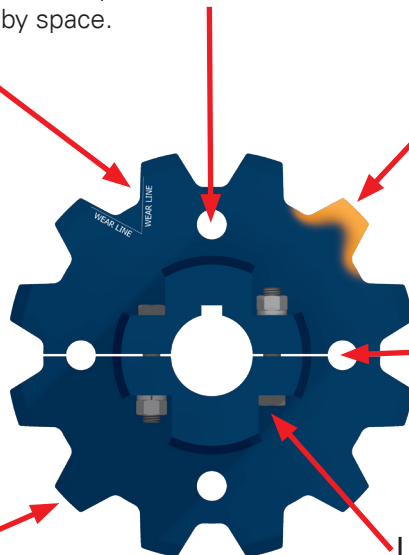
Provided on some sprockets so that weight can be reduced. Lightening holes come standard on most bucket elevator sprockets and upon customer request unless restricted by space.

### MACHINED CHAMFERED TEETH

All teeth are machine chamfered at a 15 degree angle on each side of the tooth to ensure proper chain and sprocket engagement. This reduces the likelihood of sprocket and sidebar scrubbing or improper chain engagement resulting in premature, unexpected failures.

### LOCKING HEAD FEATURE

Split sprockets come with a locking head feature which allow for ease of assembly. The hub holds the head of the bolt against its flat edge. This allows one tool and one person to easily torque the locking nut in place securing the sprocket to the shaft.





## THE WEBSTER VALUE

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For over 145 years, Webster has provided conveying solutions to a diverse range of markets with our extensive variety of products and industry expertise. A key to our success is making a difference through industry, work, self, family and community.



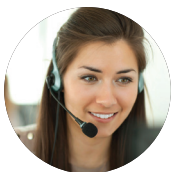
### AMERICAN MATERIALS, AMERICAN LABOR & AMERICAN PRIDE

Webster's reputation for high-quality products originates from the same principles they were founded on in 1876. Our Made in the USA brand is demonstrated through our domestic supply chain partners and our American workforce.



### VERTICALLY INTEGRATED MANUFACTURING FACILITY

While companies are relying increasingly on outsourcing for production needs, Webster has invested in building, maintaining and growing a vertically integrated manufacturing system.



### WORLD CLASS CUSTOMER SUPPORT & DELIVERIES

Providing value to customers is Webster's top priority. Our commitment and responsiveness to customers, industry best deliveries and our engineered solutions are what set us apart from the competition.



### SUPERIOR QUALITY & INNOVATION

Webster's strict manufacturing, ISO quality standards and continuous innovation ensure that we are providing our customers with the highest quality products in the industry.

ESTABLISHED 1876