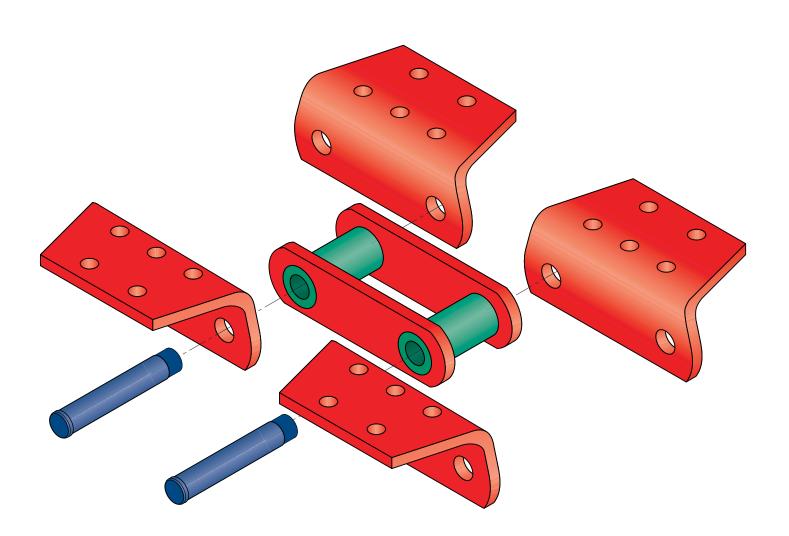


CEMENT MILL ELEVATOR CHAIN

Made Using CNC Lasers & Machining Centers for Accuracy and Customization



BUSHINGS

Bushings are the heart of an elevator chain, wearing on the inside from the chain pin and on the outside from the traction wheel/sprocket.

All Emery bushings are machined from a carburizing grade of alloy steel then deep case carburized to the greatest level in the industry.

A well heat-treated bushing takes time! For example, an ER864 bushing requires over 24 hours in heat treat to achieve Emery's specifications. Chain manufacturers check the carburized parts for a case depth by sawing a cross-section and acid etching. This creates a visible black ring showing the depth to which the carbon has penetrated. This test does not tell how deeply the material has hardened out.

Emery conducts a secondary test to ensure that the case has hardened out to a minimum of 50 Rc 50% into the etched case. This is called the "effective" case depth.

EMERY ELEVATOR CHAIN PIN

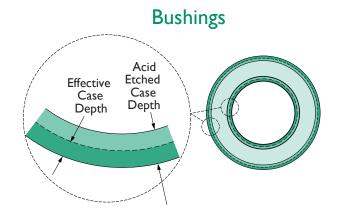
Emery pins are machined from alloy steels (aircraft quality for ER864 and ER984), through hardened, and then induction hardened on computer-controlled machines.

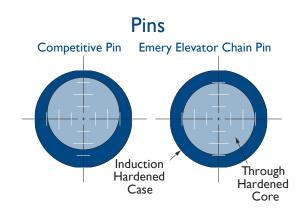
All Emery pins are rotated as they pass through the induction-hardening coil, providing the most concentric cases available.

COMPETITIVE PIN

Most competitive pins are passed through induction coils without rotating. Due to uneven electric fields in these coils, a lop-sided pattern is created. This uneven pattern creates "thin patches" that can be more readily worn through. It also causes uneven stress distributions.

The result is a pin with less wear resistance or pins that fail from fatigue before their time.

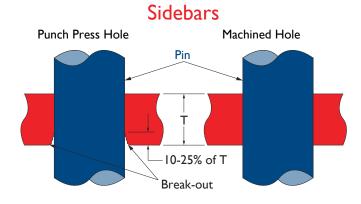




SIDEBARS

Emery chain sidebars are precisely cut by a CNC controlled laser, unique to the chain industry. Other chain manufacturers still use old-fashioned punch presses to blank shapes from bars and punch holes for bushings and pins.

In addition, Emery sidebar holes are machined, giving these chains the smoothest hole finishes and most accurate pitch control.



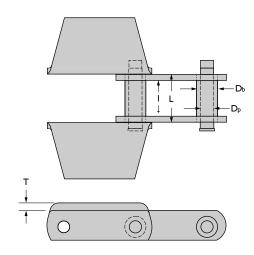
Punch Press Hole

Even the best punch press tooling will create 10% - 20% break-out (average tooling will produce 25% or more). This means that up to 25% of the chain sidebar is not in contact with the pin or bushing!

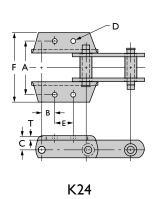
Machined Hole

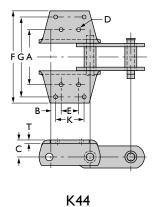
Machining produces the truest, straightest holes possible.

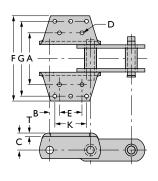
Elevator Chain & Attachments



Chain Number	Pitch	Inside Width I	Bushing Length L	Sidebar Thickness T	Pin Diameter D _P	Bushing Diameter Db	
E R956	6	3.00	4.00	1/2	1.000	1.750	
ER857	6	3.00	4.00	1/2	1.000	1.750	
ER958	6	3.00	4.13	9/ 16	1.125	2.000	
E R859	6	3.75	5.00	⁵ /8	1.250	2.375	
E R864	7	3.75	5.00	⁵ /8	1.250	2.375	
E R984	7	3.75	5.00	⁵ /8	1.375	2.500	







K443

Chain Attachment

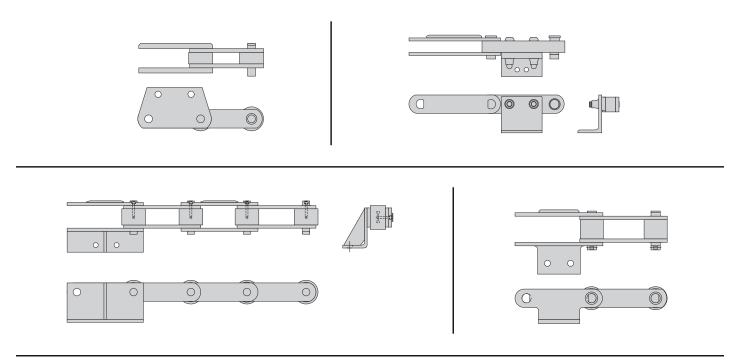
Number	Style	Α	В	С	D	Е	F	G	J	K	Т	$Weight^*$
ER956	K24	7.25	1.75	1.88	0.69	2.50	9.50	_	_	_	1/2	21
ER857	K44	7.00	1.25	2.50	0.56	3.50	14.00	12.00	1.25	3.50	1/2	32
E R958	K44	7.00	1.25	2.50	0.56	3.50	13.68	12.00	1.25	3.50	⁹ /16	31
ER859	K44	9.00	1.62	3.00	0.69	2.75	15.00	13.00	0.75	4.50	⁵ /8	51
ER864	K443	9.00	1.62	3.00	0.69	3.75	14.88	13.00	0.75	5.50	⁵ /8	43
ER984	K443	9.00	1.62	3.00	0.69	3.75	14.88	13.00	0.75	5.50	5/8	45

^{*} Assumes attachments are every second pitch.

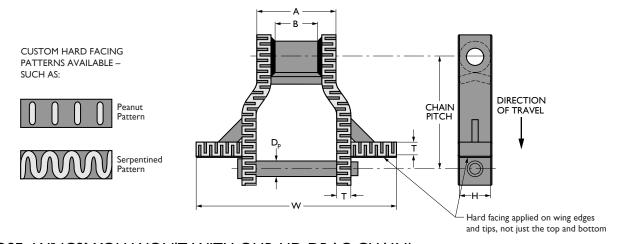
Dimensions are subject to change. Certified drawings are supplied upon request.

4

Stacker - Reclaimer Chains



Heavy Duty Welded Clinker Drag Chain



EVER LOSE WINGS? YOU WON'T WITH OUR HD DRAG CHAIN!

Wings welded on to chain with multiple pass bevel welds – The Strongest!

Chain	Pitch	W	Α	В	Т	Н	D_P	Sprocket	
Number								Number	
WHX6067	9	10 " to 26"	5.50	3.63	3/4	2.50	1.25	6121	
WHX612I	9	10 " to 30"	6.31	3.63	l ¹ /8	2.50	1.25	6121	

Dimensions are subject to change. Certified drawings are supplied upon request.

EMERY Machine & Tool, Inc.

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