



XtraLife® Dragline Chain

For surface mining

Rev. 3/07

PA 209

Longer life than other chain. Guaranteed for proper fit, performance and customer satisfaction.

A proven endurance winner over the long haul.

After studying wear patterns in the field we noticed that most chain wear takes place at the link contact areas. The solution: Columbia Steel's integrally cast XtraLife® chain with extra bearing area for extra long life.

In tests in a major Western coal mine, our XtraLife chain moved 11.8 million cubic yards of overburden, compared to 7.5 MMCY for the previous chain. Other locations are having similar results with Columbia XtraLife chain.

Greater contact area.

Some conventional oval section chain links start with a virtual point contact area, which immediately begins to wear at this point of contact.

XtraLife chain's additional ridge of metal is far greater than that of oval chains. Wearing stresses are distributed rather than concentrated. The result is longer link life and fewer premature stress failures.

High strength and abrasion resistance.

XtraLife chain has good resistance to both abrasion and impact. For greater resistance to abrasive wear, our Xtend Process® high carbide overlay can be bonded to high wear areas, resulting in even longer life.

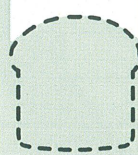
Exclusive Columbia casting system.

Columbia Steel has developed a special molding line which ensures superior link integrity throughout the chain strand. The resulting integrally cast chain has become known as the world's leading dragline chain.

See complete specifications on the reverse side.

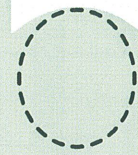
Columbia XtraLife Chain:

Extra link contact area is much greater than conventional chains. This exclusive ridge of metal and near perfect mating add up to an extra long wear life.



Conventional chain:

Some oval links lack a high degree of contact with adjoining links, concentrating forces and wear. This small contact area grows rapidly as links "wear in."



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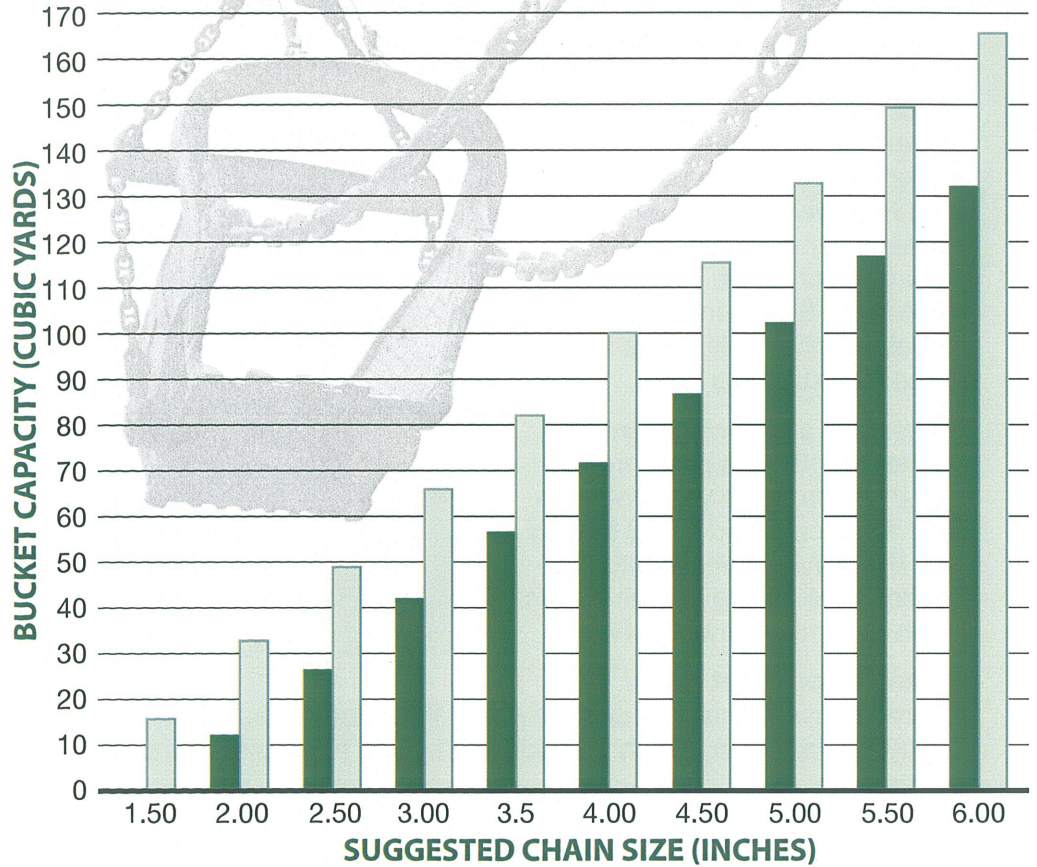
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Bucket Capacity vs. Suggested Chain Size

■ Drag
■ Hoist

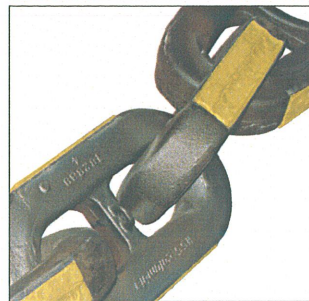
Proven.
XtraLife Hoist and Drag Chain is the standard of the mining industry today. It has been proven superior in surface mines around the world.



CHAIN SIZE		PITCH		ALLOY
inches	mm	inches	mm	
1.50	38	6.00	150	H39 418 - 477 BHN $\sigma_T = 210,000$ psi $\sigma_Y = 170,000$ psi
1.75	44	7.00	178	
2.00	51	8.00	203	
2.25	57	9.00	229	
2.50	64	10.00	254	
3.00	76	11.00	279	
3.50	89	14.00	356	H55 286 - 340 BHN $\sigma_T = 150,000$ psi $\sigma_Y = 120,000$ psi
4.00	102	16.00	406	
4.50	114	18.00	457	
5.00	127	20.00	508	
5.50	140	22.00	559	
6.00	153	24.00	610	



Cross-sectional area of link at bite point:
Contact area is much greater than conventional chains.



Xtend Process:
High carbide bi-metallic overlays (shown in yellow) in high wear areas can increase chain life.

σ_T = Tensile Strength σ_Y = Yield Strength