

CAST CONVEYOR CHAIN SPECIFICATIONS

Technical specifications for cast conveyor chains used in fiber processing and heavy industrial applications.

1. Chain Types

TYPE	PITCH	MATERIAL	APPLICATION
Standard Cast	4" – 12"	Cast iron, ductile iron	General drag conveyor, bulk material
Fiber Processing	6" – 10"	Cast steel, hardened	Pulp mill, paper, fiber lines
Heavy Duty Cast	8" – 14"	Alloy cast steel	Heavy drag, severe duty
Long Link Cast	12" – 18"	Cast steel	Long span, heavy material

2. Mechanical Properties

GRADE	TENSILE (PSI)	HARDNESS (BHN)	MAX TEMP
Cast Iron (Class 30)	30,000	180 – 220	400°F
Ductile Iron (65-45-12)	65,000	160 – 210	500°F
Cast Steel (4140)	90,000	250 – 320	800°F
Hardened Cast Steel	120,000	350 – 420	900°F
Heat-Resistant Alloy	100,000	200 – 280	1500°F

3. Wear Resistance

GRADE	RELATIVE WEAR LIFE	BEST FOR
Cast Iron	1.0 (baseline)	Low abrasion, moderate load
Ductile Iron	1.5×	Moderate abrasion, higher load
Cast Steel	2.5×	High abrasion, heavy load
Hardened Cast Steel	4.0×	Severe abrasion, maximum load
Heat-Resistant	2.0×	High temp + moderate abrasion

4. Fiber Processing Application Data

PARAMETER	SPECIFICATION
Chain pitch	6" – 10" (typical)
Attachment style	Welded or cast-on clevis/shackle
Working load	Per grade – consult engineering

Operating temp	Up to 800°F (standard), 1500°F (heat-resistant)
Chain speed	5 – 50 ft/min typical
Conveyor length	Up to 500 ft (consult for longer)

5. Inspection & Maintenance

FREQUENCY	TASK
Weekly	Visual inspection, check for cracks or broken links
Monthly	Measure elongation, inspect attachment points
Quarterly	Inspect sprockets, check chain tension, lubricate (if applicable)
Annually	Complete chain inspection, hardness test (if available)

IMPORTANT

Cast chains do not stretch gradually like steel chains. They fail suddenly when cast links crack. Regular crack inspection is critical — measure elongation AND inspect for hairline cracks.

CAST CHAIN SUPPLY

Uniking Canada supplies cast chains in all grades and sizes.
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