



Conveying Success

MACK MINING PRODUCTS



Mackchain Manufacturing

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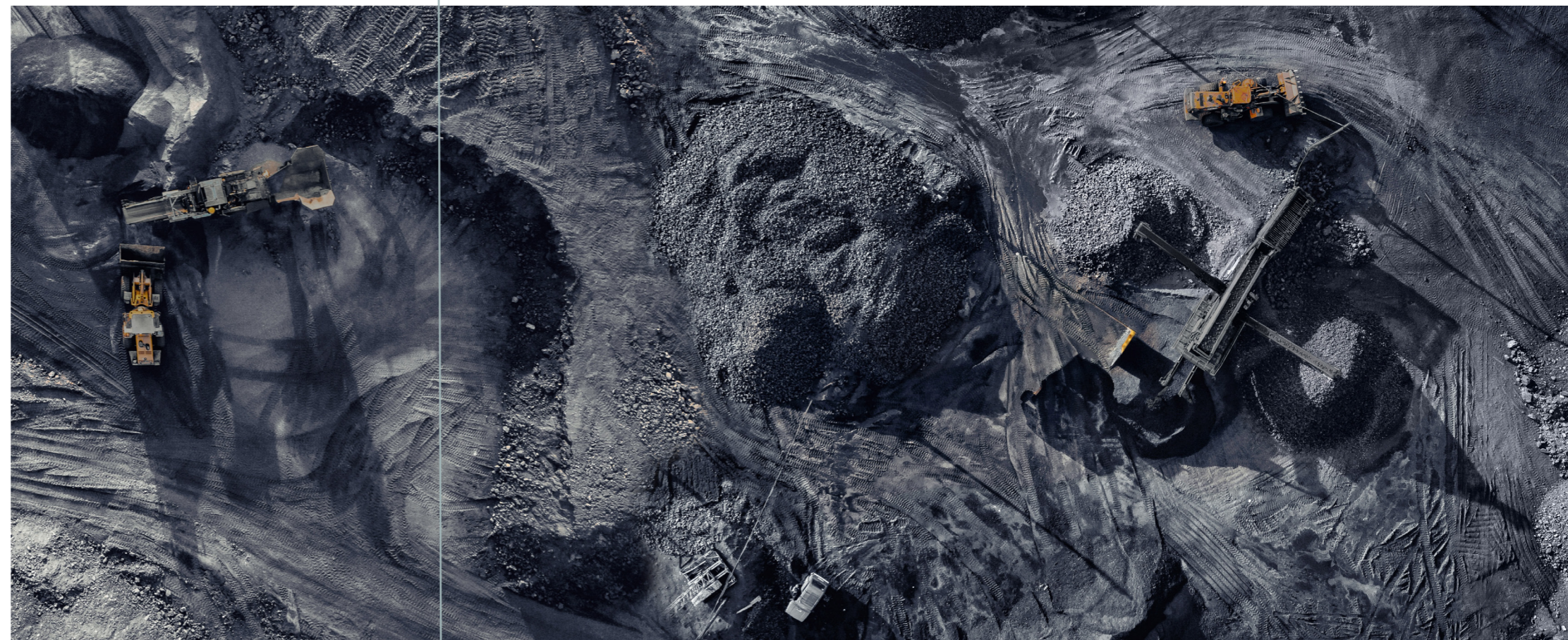
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Conveying Success

Forging the Future,
Link by Link: Powering Your Mining Operations!



MACKCHAIN IS A LEADING HEAVY DUTY MINING CHAIN MANUFACTURER dedicated to deliver innovative solutions for surface and underground applications. With decades of experience and a commitment to excellence, we focus on producing top-tier mining chains and sprockets customized to fulfill the diverse requirements of our global clientele.



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DA SERIES SINGLE STRAND CONVEYOR CHAIN

MACKCHAIN'S DA SERIES play a crucial role in modern underground mining operations by improving efficiency, safety, precision, versatility, and cost-effectiveness. Mackchain supplies to the world class original equipment manufacturers. Our DA series is known its durability and reliability in demanding underground mining environments. DA series is designed to withstand the high stresses and abrasion encountered during continuous mining operations, resulting in longer service life and reduced downtime for maintenance.

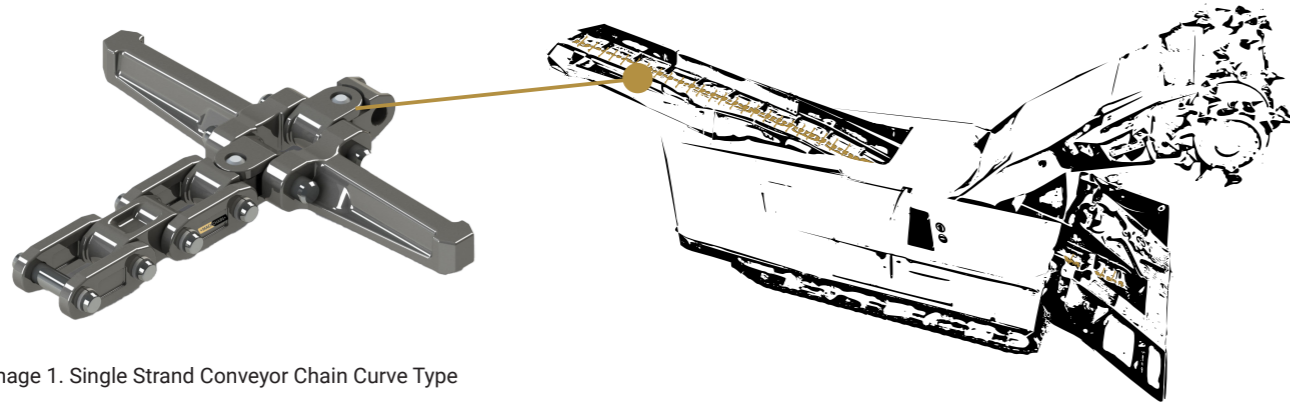


Image 1. Single Strand Conveyor Chain Curve Type



Image 2. Single Strand Conveyor Chain Straight Type

DA Series Key Benefits

- Consistent chain lifespan
- Less complexity of maintenance
- Seamless chain operation
- Special heat treated pins
- Low operating noise
- Easy to install and disassemble
- Made by selected premium qualified steels

Common use conveyor sizes for Mackchain's DA series

Conveyor capacity Max.t/min	Conveyor speed Max.t/min	Conveyor width mm	Conveyor Length m
15	20	600	9.5
30	23	960	10.9
30	23	960	11
40	21	960	12
45	21	960	12



Mack's DA1 chain products are suitable for continuous miners, borer miners, road headers (mining/tunnelling). DA1 chains pitch range is from 2 5/8 inches to 3 1/4 inches, product data sheet other than those listed are available upon request.

K SERIES LADDER CONVEYOR CHAIN

MACK'S K SERIES is highly efficient scrap conveyor chain with double strand that can extract large amounts of material quickly and continuously. This paired design K chains help to increase productivity and reduce the time and cost involved in underground mining operations.

MackChain offers customization options to suit the specific requirements of different underground mining machines, including various chain configurations, sizes, and scraper bar heads. This flexibility ensures K chain series meet the unique needs of each mining operation.

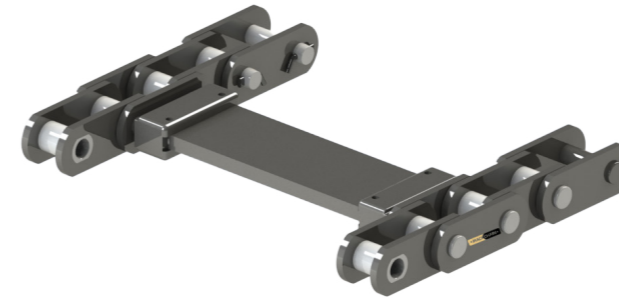


Image 3. K series feeder breaker chain



Image 4. K series feeder breaker chain pitch: 3.5inch



Image 5. Reclaim Feeder



Image 6. Feed Breaker

K Series Key Features / Benefits

- Consistent chain lifespan
- Maximum productivity
- Easily adjusted scraper bar spacing
- Anti-twisting bushings
- Special heat treated pins
- Forged scraper bar heads (optional)



Mack's K series chain products are suitable for shuttle cars, underground feeder breaker chain conveyors. K series chains are suited for washing coal applications. K series chain's pitch range is from 3 1/4 inches to 4.1 inches, product data sheets other than those listed are available upon request.

TC SERIES CRAWLER CHAIN

MACK'S TC SERIES crawler chains offer long service life, reducing the frequency of replacements and lowering overall operating costs for underground mining machines. Our selected high-quality raw materials and precision manufacturing contribute to extended durability. MackChain products are designed to withstand the harsh conditions of underground mining, including abrasion, impact, and heavy loads. We also provide technical support and expertise to assist mining company with chain selection, installation, and maintenance. Our knowledgeable team can offer guidance on optimizing crawler chain performance and maximizing uptime.

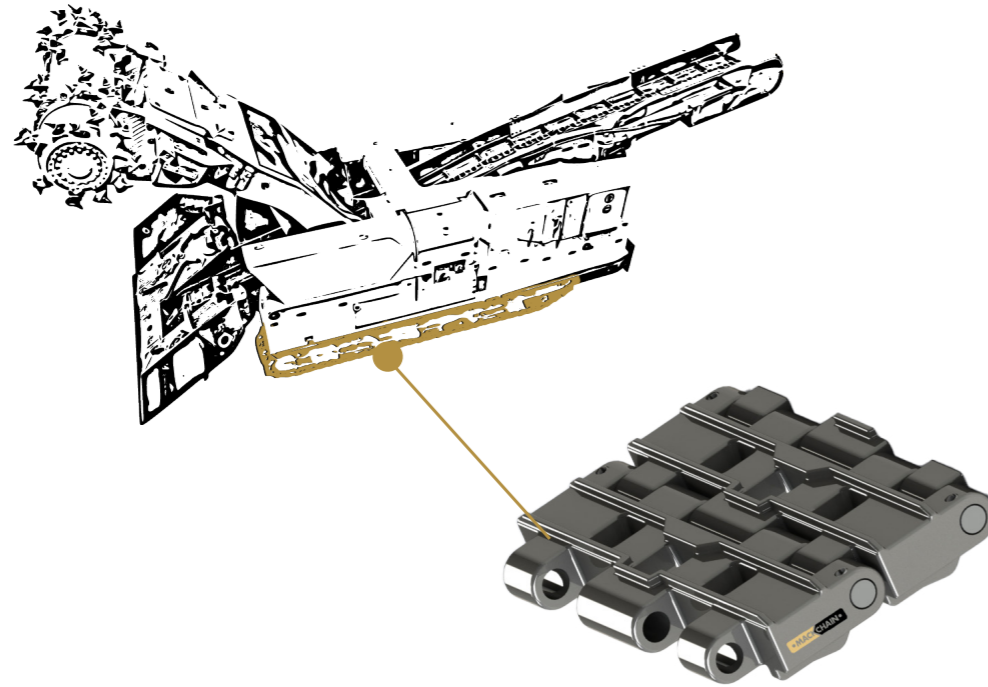


Image 7. TC Series Crawler Chain



Image 8. Crawler Chain Forged Link Sample

TC Series Key Features / Benefits

- Smooth turning
- Great compatibility
- Special heat treated pins
- Made by selected premium qualified steels
- Super wear and tear ability
- Longer lifespan

Note: Product data sheets are available on request.

AF SERIES APRON FEEDER CHAIN

APRON FEEDERS are known for their robust construction, high capacity, and ability to handle heavy, abrasive, or large-sized materials effectively. They are commonly used in applications where a controlled and steady flow of material is essential for optimal operation. Mackchain produces a diverse range of Apron feeder chains, all designed as direct replacements for OEM equipment.



Image 9. AF-D6 Apron Feeder Chain



Image 10. AF-P315 Apron Feeder Chain



Image 11-1. Apron Feeder



Image 11-2. Apron Feeder

Common use pan and conveyor sizes for Mackchain's AF series

Pan width	Speed	Conveyor capacity	Conveyor Length
mm	Max.m/s	Max. m ³ /h	Max.m
800	0.25	15	15
1000	0.25	20	20
1200	0.2	20	20
1400	0.2	20	20
1600	0.15	20	20
1800	0.15	20	20
2000	0.15	20	20
2400	0.15	20	20
2800	0.15	20	20

K Series Key Features / Benefits

- High impact loading
- Heavy duty ribbed pans (manganese / cast steel)
- Self-lubricated
- Sealed design
- Drop forged link
- Made by selected premium qualified steels
- Longer lifespan

Note: Product data sheets are available on request.

DP SERIES DEEP PAN CONVEYOR CHAIN



Image 12. Deep Pan Conveyor Chain

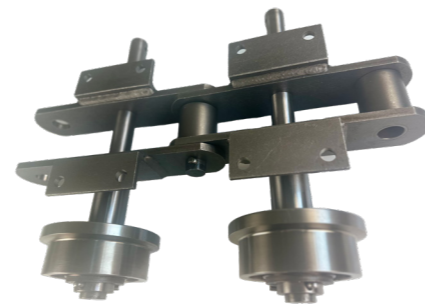


Image 13. DP series product image

Deep pan conveyor is a type of conveyor system used for transporting bulk materials horizontally or at a slight incline. conveyor consists of a series of overlapping pans or troughs that form a continuous conveying surface. These pans are typically deeper than those used in standard trough conveyors, hence the name "deep pan." The depth of the pans helps contain the bulk material.

Mack's DP chain series have its functions of low running resistance, wear resistance, dust proof, moisture proof, anti-watering. Our chain product has been extensively utilized within the mining industry and has garnered high satisfaction among our customers.

DP Series Key Features / Benefits

- Robust durability
- Easy maintenance
- Efficient material handling
- Smooth and reliable transport of materials
- Large conveying capacity
- Long-distance transportation



Image 14. Deep Pan Conveyor (Horizontal)



Image 15. Deep Pan Conveyor (Return)



Image 16. Deep Pan Conveyor (Incline)

Note: Product data sheets are available on request.

O SERIES ROUND LINK CHAIN

Mack's O series round link chain for underground mining is a specific type of chain used in mining operations, particularly in underground coal mines. It is designed to withstand the harsh conditions and demands of underground coal mining environments.

Our chain typically consists of interconnected round links made from high-strength steel. The round links are designed to provide durability and resistance to abrasion, corrosion, and fatigue, which are common challenges in underground mining operations. They commonly used for various applications in underground mining, including:

- **Chain Conveyor Systems:** They are used in conveyor systems to transport material from the mining face to the surface or to processing facilities underground.
- **Shuttle Cars:** These chains are often used in shuttle cars, which are specialized vehicles used to transport material from the continuous mining machine to the conveyor belt or other transfer points.
- **Continuous Miners:** Chains are also used in continuous miners, which are machines used to extract material from the seam in a continuous operation.



Image 17. Round Link Chain



Image 18. O Series Coal Handling Chain

O Series Key Features / Benefits

- Sizes available range from 14x50 to 48x152.
- The enhanced version improves fatigue life by approximately 300%.
- The Cor-O version offers approximately 350% greater resistance to stress corrosion.
- The ultra-flat link chain series ensures extended wear and lifespan.



Image 19. O Series Ash Handling Chain

Note: Product data sheets are available on request.

G SERIES BUCKET ELEVATOR CHAIN



Image 20. G series Fast bucket elevator chain



Image 21. G series Forged Link Sample

A bucket elevator is a type of vertical conveyor system used to transport bulk materials vertically. It consists of a series of buckets attached to a chain that moves in a continuous loop, carrying materials from one elevation to another. Mack's G series bucket elevator chains are known for its reliability and consistent performance. The chains are made from high-strength heat treated alloy steel and undergo rigorous testing to ensure durability and longevity. Mackchain offers customized qualified material, bucket designs and chain attachments to suit various types of bulk materials and operating conditions.

G Series Key Features / Benefits

- Suited for fast elevating speed
- Resistance to fatigue fracture
- Customisable (e.g. forged link plates)
- High lifting capacity
- Robust durability
- Strong toughness



Image 22. G4 Style Bucket Elevator Chain Sample

Common G Series Bucket Elevator Chains

Chain Pitch (mm)	140	152.4	177.8	177.8	177.8	177.8	200
Breaking Load (kn)	400	540	800	1200	1500	1800	2450

Note: G Series chains are suitable for bucket sizes ranging from 400mm to 1200mm in width, lifting heights to 90m and elevating capacities exceeding 1100m³/h.

Note: Product data sheets are available on request.

DF SERIES DROP FORGED CHAIN

Drop forging is a manufacturing process that involves shaping heated metal by hammering it into dies. This process produces chains with superior strength and durability compared to chains made using other methods. In mining environments where chains are subjected to high loads, abrasion, and harsh conditions, drop forged scraper chains offer excellent resistance to wear and damage. Mackchain ensures that every link of our DF drop forged series chains is meticulously made using professional manufacturing techniques and subjected to rigorous quality control measures. This dedication guarantees the reliability and consistent performance of the chains in demanding mining environments.



Image 23. DF Series Scraper Chain (Center)

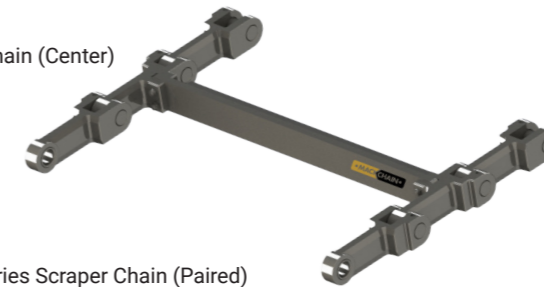


Image 24. DF Series Scraper Chain (Paired)



Image 25. DF Series Scraper Chain

DF Series Key Features / Benefits

- Average 30% more in tensile strength
- Resistance to fatigue fracture
- Wider selections of chain types and scraper bars
- Greater resistant to wear and tear
- Selected premium forging material
- More chain link locking options

Common use pan and conveyor sizes for Mackchain's DF series

Chain Code	Pitch	Inner width	Overall width	Chain Height
DF348	76.68	20.57	44.45	28.7
DF458	102.39	26.92	52.32	35.05
DF468	102.39	42.93	74.68	50.8
DF678	153.19	36.58	76.2	50.8
DF698	153.19	41.4	82.55	63.5
DF998	229.39	42.93	82.55	63.5

Note: Product data sheets are available on request.

SD Sprocket SERIES \ SEGMENTAL SPROCKET



SEGMENTAL SPROCKETS, also known as split sprockets, are specialized sprockets commonly used in mining applications. These sprockets are designed to be assembled in segments, allowing for easier installation and maintenance. The Mack's SD series sprocket normally consist of two/three/four teeth segments that are bolted to form a complete sprocket. All sprockets' teeth are induction hardened that allows for precise control over the hardness depth and distribution on the sprocket teeth. This ensures uniform hardness across the entire tooth surface, providing consistent performance and durability.

Image 26. Segmental Sprocket

SD Series Key Features / Benefits

- Ease of installation
- Accessibility for maintenance
- Customisable to suit different shaft diameters
- Robust Durability
- Reduce the maintenance time
- Reduce the repairing costs



Image 27. 12T segmental sprocket sample (coated)



Image 28. Segmental Sprocket (4 pcs)

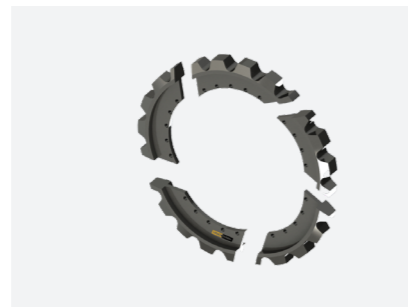


Image 29. Segmental Sprocket Ring (5 pcs)



Image 30. Segmental Sprocket (2 pcs)



Custom-made options include hubs, sprocket tooth segments, shaft hole sizes, and raw materials. Product data sheets are available on request.

H SERIES \ TRANSMISSION CHAIN

MACK'S H SERIES roller chains are utilized in heavy-duty application in mining where they must withstand high loads, shock loads, and abrasive environments. They are made by premium alloy steel with extra coating to enhance the resistance to wear, corrosion and abrasion. Precise automated assembly guarantees that all Mack H series roller chain products adhere to strict tolerance standards and maximise the chain service life.



Image 31. Transmission Chain

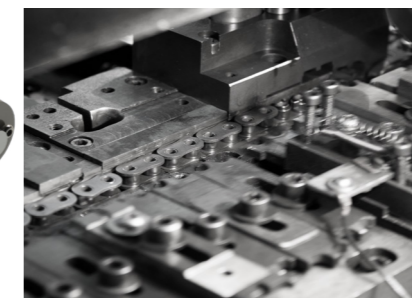


Image 32. Automated Assembly



Image 33. Coal Transfer Application



Image 34. Gearbox Drive Application

H Series Chain Code	Pitch
	mm
H60	19.050
H80	25.400
H100	31.750
H120	38.100
H140	44.450
H160	50.800
H180	57.150
H200	63.500
H240	76.200
H10B	15.875
H12B	19.050
H16B	25.400
H20B	31.750
H24B	38.100
H28B	44.450
H32B	50.800
H40B	63.500
H48B	76.200

H Series Key Features / Benefits

- **Corrosion Resistance:** Available with coatings or made from upgraded alloy steel to resist corrosion in challenging environments.
- **Fatigue Resistance:** Engineered to withstand repetitive stress and avoid fatigue failures, ensuring long-term performance under cyclic loading conditions.
- **Heat Treatment:** Components are all heat-treated to improve hardness and wear resistance.
- **Lubrication Options:** Can include self-lubricating features or be compatible with advanced lubrication systems to reduce maintenance needs.

Note: Product data sheets are available on request.

HD SERIES / HEAVY DUTY DRIVE CHAIN

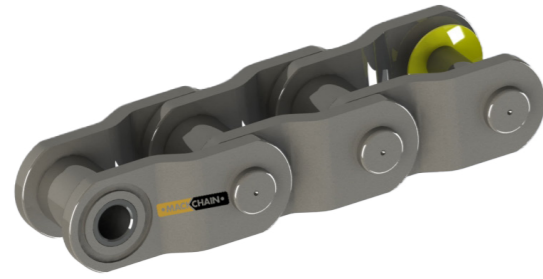


Image 35. HD Series chain (sealed version)



Image 36. HD series chain

MACK'S HD SERIES roller chains feature a pitch size ranging from 3 to 7 inches, commonly employed in power transmission for crushing and drum rotation applications. Such applications frequently encounter heavy shock loads. The design of Mack's HD series crank link chain helps absorb and dissipate shock energy through the chain, reducing stress on pins and plates, and maintain the consistent pitch tolerance ranges, minimizing irregularities caused by chain elongation.s.

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HD Series Key Features / Benefits

- **High Strength and Durability:** Constructed with thicker forged plates and higher-grade materials to withstand greater loads and harsh conditions.
- **Robust Construction:** Designed to handle heavy loads and high shock applications with reinforced links and precise manufacturing tolerances.
- **Enhanced Wear Resistance:** Hardened components such as pins, bushings, plates and rollers to reduce wear and extend service life.



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At Mackchain, customer satisfaction is our top priority. We are committed to building long-term relationships with our clients based on trust, integrity, and mutual success. We strive to exceed customer expectations at every stage of the process, from initial consultation to after-sales support.

Common Type HD Chains

	HD7077	HD6042	HD6066	HD1353	HD3514	HD3075
Pitch (mm)	177.8	152.4	152.4	103.9	88.9	78.1
UTS (kn)	2400	1905	2721	952	635	340

Note: Product data sheets are available on request.

NOTES: