

MAX-ALLOY®



McKinnon Chain

The complete range of Max-Alloy® chain, including sizes 7mm - 32mm diameters is manufactured in South Africa in both Grade 8 and Grade 10, while sizes 36mm - 50mm are available in grade 8. The steel is supplied by a local steel manufacturer in accordance with national and international standards specified for short link lifting chain. Max-Alloy® is a bespoke heat treated, fine grain steel developed for use in chain slings for lifting applications.



Max-Alloy® is a range of heat treated alloy steel chain specifically developed and manufactured for the use in chain sling lifting applications. Its superior material and mechanical properties makes it suitable for safety critical lifting operations.





Manufacturing, Testing & Inspection

- All Max-Alloy® products are 100% proof tested at 2.5 times the working load limit (WLL) to ensure weld integrity and compliance with national and international standards.
- A stringent quality control plan ensures a fit for purpose product with a factor of safety of 4:1.
- All measuring and testing equipment is maintained and calibrated at required intervals to ensure reliable test results.

All Max-Alloy® products have full traceability from steelmaking to the end product.

Product Type Approvals & Management Systems



Grade 8 short link chains to SANS 189
Grade 8 welded chain slings to SANS 4778 / EN 818-4
Grade 8 mechanical assembled chain slings to SANS/ISO 4778 / SANS 50818-4 / EN 818-4



Grade 8 short link chains to EN 818-2
Grade 8 master links and assemblies to EN 1677-4 / SANS/ISO 16798
Grade 8 chain sling assemblies to EN 818-4



Grade 8 short link chains to EN 818-2



ISO 9001-2015 Quality Management System

GRADE 8 VS GRADE 10: PROS AND CONS

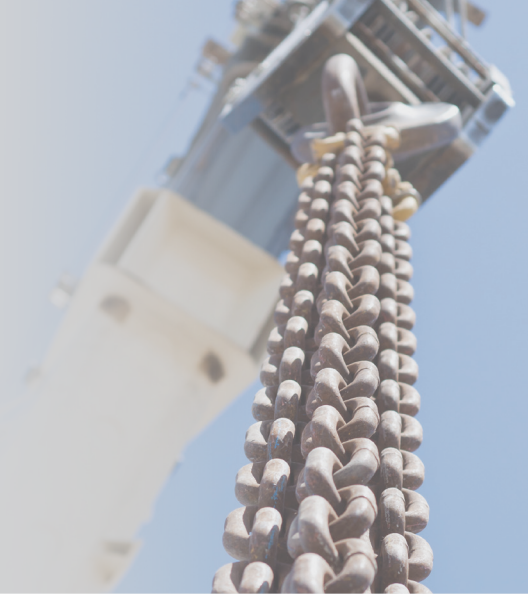
What to consider when choosing between Grade 8 and 10?

*Generally a grade 10 chain of one chain size will be smaller than its grade 8 counterpart and is capable of lifting the same load. Using grade 10 will result in a considerable reduction in sling weight.

**Extreme Heat Conditions

The strength of all chain sling are adversely affected by heat. Care must be exercised when using chain slings at elevated temperatures. Where the temperatures are likely to be higher than 200°C it will be necessary to de-rate the specified WLL in accordance with the WLL reduction guidelines table.

NOTE: Grade 10 chain should not be used in applications > 200°C.



	GRADE 8	GRADE 10
STRENGTH (WLL)	GOOD	20% STRONGER
WEIGHT	GOOD	LIGHTER CHAIN CAN BE USED
MAX TEMP	400°C	200°C
ON-SHORE INDUSTRIAL	EXCELLENT	EXCELLENT
OFF-SHORE MARINE	GOOD - EXCELLENT	NOT ADVISABLE
CORROSIVE*	NOT ADVISABLE	NOT ADVISABLE
SIZE RANGES	8MM- 45MM	8MM - 32MM

	TEMPERATURE OF CHAIN	WLL REDUCTION WHILE HEATED	PERMANANT WLL REDUCTION
GRADE 8	40°C - 200°C	NONE	NONE
	OVER 200°C - 300°C	10%	NONE
	OVER 300°C - 400°C	25%	NONE
GRADE 10	-20°C - 200°C	NONE	NONE
	OVER 200°C	DO NOT USE	DO NOT USE

* 6mm - 7mm, grade 8 and grade 10 are available on enquiry.

HEAT TREATMENT

Max-Alloy® Grade 8 chains and fittings do not require periodic heat treatment and must never be reheated other than by McKinnon Chain.

SURFACE COATING

Max-Alloy® Grade 8 products should not be galvanized or subjected to other plating processes without the approval of McKinnon Chain. Please contact our Max-Alloy® distributor for detailed recommendations.

CORROSIVE CONDITIONS

Max-Alloy® Chain and attachments should not be used in an acidic or any other corrosive environment.



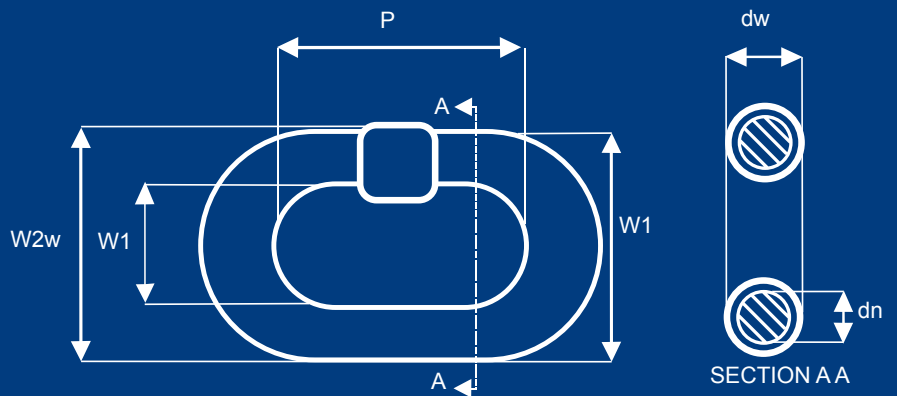


MAX-ALLOY® GRADE 8 SHORT LINK SMOOTH WELD CHAIN

COMMODITY	DIMENSIONS			FORCES	
	DIAMETER	PITCH (P)	W1	BF	WLL
	(DN) NOM	NOM	MIN	KN	TONNE
C8A080SLS	8.00	24.00	10.40	80.50	2.00
C8A100SLS	10.00	30.00	13.00	126.00	3.20
C8A130SLS	13.00	39.00	16.90	213.00	5.40
C8A160SLS	16.00	48.00	20.80	322.00	8.20
C8A200SLS	20.00	60.00	26.00	503.00	12.80
C8A220SLS	22.00	66.00	28.60	609.00	15.50
C8A260SLS	26.00	78.00	33.80	850.00	21.60
C8A320SLS	32.00	96.00	41.60	1290.00	32.80

Markings (Traceability)

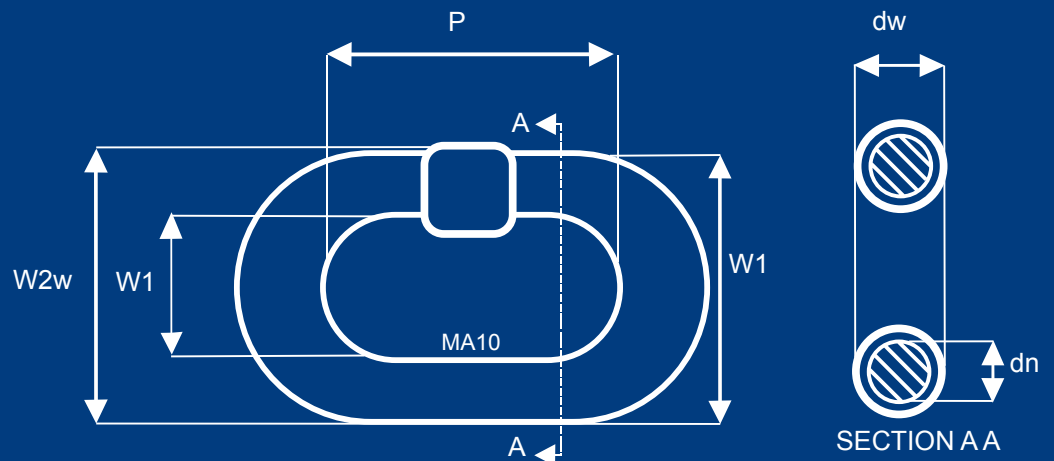
- 17A: Year and month of manufacture
- 34: Chain manufacturing machine number
- 01: Batch sequence number
- H46: DGUV EN818-2 mark number
- MA8: Manufacturer code & Grade (Max-Alloy® Grade 8)





MAX-ALLOY® GRADE 10 SHORT LINK SMOOTH WELD CHAIN

COMMODITY	DIMENSIONS			MECHANICAL PROPERTIES	
	DIAMETER	PITCH (P)	W1	BF	WLL
	(DN) NOM	NOM	MIN	KN	TONNE
C10A080SLS	8.24	24.00	10.40	101.00	2.50
C10A100SLS	10.30	30.00	13.00	157.00	4.00
C10A130SLS	13.40	39.00	16.90	265.00	6.70
C10A160SLS	16.40	48.00	20.80	402.00	10.00
C10A200SLS	21.00	60.00	26.00	628.00	16.00
C10A220SLS	23.00	66.00	28.60	760.00	19.00
C10A260SLS	27.00	78.00	33.80	1062.00	27.00
C10A320SLS	33.50	96.00	41.60	1610.00	41.00



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