

Stainless Steel Chain



Power Transmission Solutions

Cross+Morse SSS - Super Stainless Steel chain has been designed with a higher allowable load than other makes of stainless steel chain and is suitable for use in the most demanding applications. Where WATER, ACIDS, ALKALIS, CHEMICALS, HIGH HUMIDITY AND EXTREMES OF TEMPERATURE are encountered - conditions potentially destructive to ordinary transmission chain, SSS chain provides the answer.

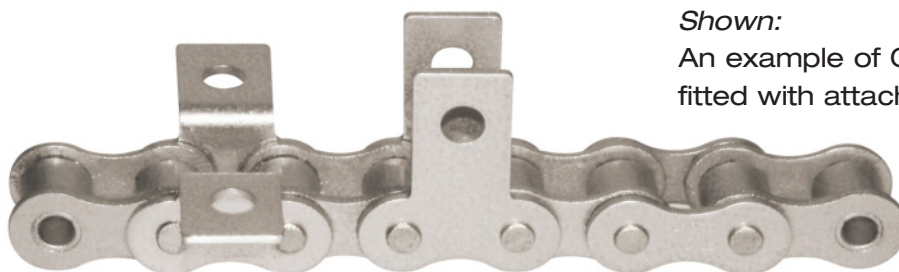
SSS chain completely overcomes corrosion and wear problems normally encountered with standard chain used in such harsh conditions.

Remaining impervious to even the most severe chemicals required for cleaning and hygiene maintenance within food and pharmaceutical processing, SSS chain offers proven high-performance and maintenance-free life time performance.



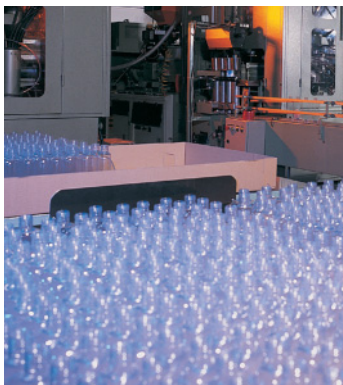
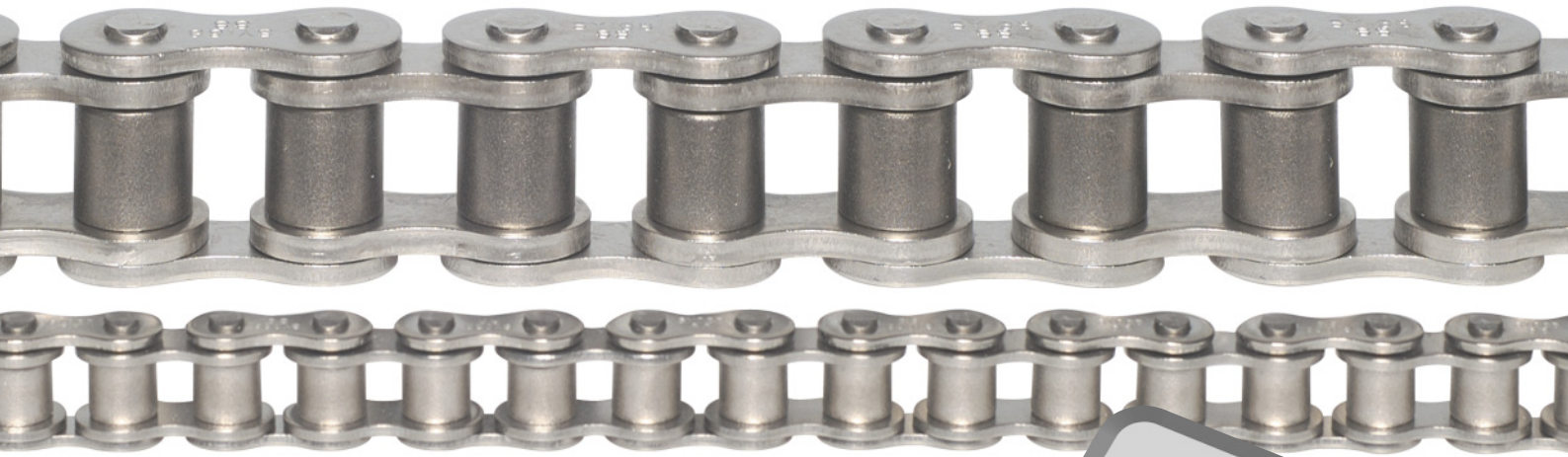
- **impervious to the most severe operational media**
- **Corrosion resistant**
- **Retains hygiene compliance in food / pharma applications**
- **Conforms to BS228, ISO606 and ASME 29 standards**

- **Allowable bearing pressure up to 14.7 Mpa**
- **Special surface treatment offers maximum wear resistance**
- **Rounded parts all specially treated providing extreme long life**
- **Highest-quality appearance**



Shown:
An example of Cross+Morse SSS Chain fitted with attachments

Cross+Morse offer an extensive range of standard attachments supported by a design and production service for custom attachments to suit specific transmission applications.



Cross+Morse SSS high-performance stainless steel chain is designed for power transmission applications throughout the processing industries. When hygiene compliance, chemical resistance, strength and maintenance-free operation is a requirement, SSS chain provides the solution.

Other protective coatings:

Where stainless steel is unsuitable for the application but protection from hazardous chemicals and water, is required, Cross+Morse offer alternative surface treatments (see below).

SSS Chain is available in simplex and duplex format ie: (06B-1 06B-2) (08B-1 08B-2) etc

SPECIALS and ADAPTED SSS Chain available in boxed lengths and also 'cut to length' in matched pairs and with standard attachments (shown- left) such as K1 / K2 and M1 / M2, custom made attachments, or with extended pins, as required

DIMENSIONS - see over

Nickel Plated

Electroless nickel plating is applied to standard carbon steel chain, offering protection to surfaces where mild corrosion is likely. The plated chain retains all the inherent properties of the base chain.

Aqua Proof

A special coating applied to chain components which offers excellent corrosion resistance without the hydrogen embrittlement problems associated with plating. The strength and working load values of the base chain are fully retained.



Can be used in outdoor environments, seawater applications etc.

BS EN ISO 9002 : 1994



Certificate Number 924416



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Recent controlled tests were carried out to determine the corrosion resistance of various transmission chain with different surface treatments.

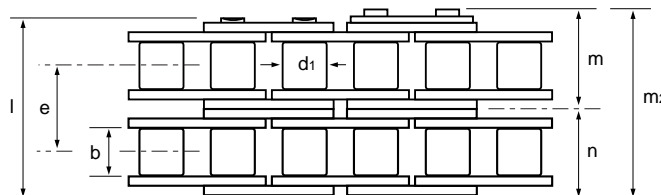
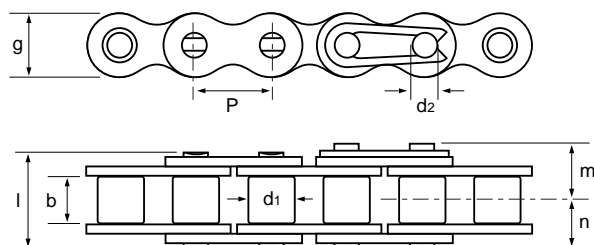
The results are shown (in summary) below.

We suggest you discuss detailed results, together with final specification of chain for your specific application with a Cross+Morse technician.

CONTROLLED TEST : CHAIN TYPES / CORROSION RESISTANCE

CONDITIONS	SPRAYED WATER			5% SALT WATER			1% AMMONIA WATER		
	3	9	15	3	9	15	3	9	15
STANDARD	△	▲	×	×	×	×	×	×	×
NICKEL PLATED	○	○	△	○	△	△	○	▲	×
C&Z COATING / PAINTED	●	●	●	●	●	●	●	○	○
C&Z COATING	●	●	●	●	●	●	●	△	▲
DACROTIZED / AQUA-PROOF	●	●	●	●	●	●	●	●	●
SUS 304 (SSS)	●	●	●	●	●	●	●	●	●

× 100% Rust Development ▲ 70 - 90% Rust Development △ 20 - 30% Rust Development
 ○ 5 - 10% Rust Development ● Zero Rust Development



SSS ANSI STANDARD SSS BS STANDARD

Series	Dimensions - mm										Average Ultimate Strength	Maximum Allowable Load	Average Chain Weight
	Pitch	Roller		Pin				Plate	Transverse				
		Width	Dia.	Dia.	Length			Height	Pitch				
BS Series	P	b	d ₁	d ₂	l max	m ₂	n	m	g	e	kN	kN	kg/m
06B-1SSS	9.525	5.72	6.35	3.28	12.6	13.4	6.3	7.1	8.2		6.2	0.40	0.43
08B-1SSS	12.700	7.75	8.51	4.45	16.7	17.8	8.4	9.4	11.8		10.3	0.78	0.61
10B-1SSS	15.875	9.65	10.16	5.08	19.0	20.6	9.5	11.1	14.7		15.7	1.02	0.89
12B-1SSS	19.050	11.68	12.07	5.72	22.0	23.6	11.0	12.6	16.1		18.1	1.32	1.14
16B-1SSS	25.400	17.02	15.88	8.26	35.1	38.2	17.6	20.6	20.3		42.2	3.09	2.59
06B-2SSS	9.525	5.72	6.35	3.28	22.9	23.7	11.4	12.3	8.2	10.40	11.8	0.80	0.78
08B-2SSS	12.700	7.75	8.51	4.45	30.7	31.8	15.4	16.4	11.8	13.92	20.5	1.56	1.40
10B-2SSS	15.875	9.65	10.16	5.08	35.6	37.2	17.8	19.4	14.7	16.59	31.0	2.04	1.80
12B-2SSS	25.400	17.02	15.88	8.26	67.0	70.1	33.5	36.6	20.3	31.88	84.0	6.15	2.44
16B-2SSS	25.400	17.02	15.88	8.26	67.0	70.1	33.5	36.6	20.3	31.88	84.0	6.15	5.30
ANSI Series	P	b	d ₁	d ₂	l max	m ₂	n	m	g	e	kN	kN	kg/m
35SSS	9.525	4.78	5.08	3.58	12.0	12.9	6.0	6.9	9.0		5.7	0.39	0.34
40SSS	12.700	7.95	7.94	3.96	16.5	17.9	8.3	9.6	11.7		11.1	0.66	0.60
50SSS	15.875	9.03	10.16	5.08	20.4	22.0	10.2	11.8	14.6		17.6	1.02	0.98
60SSS	19.050	12.70	11.91	5.95	25.5	26.9	12.8	14.1	17.5		24.5	1.54	1.46
80SSS	25.400	15.88	15.88	7.93	32.8	35.5	16.4	19.1	23.4		42.3	2.65	2.52
100SSS	31.750	19.05	19.05	9.53	39.4	43.0	19.7	23.3	29.3		51.0	3.82	3.91



Cross+Morse power transmission product data can be viewed on CD-ROM or as download on our website.



www.crossmorse.com

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