

Weissenfels

GRADE 50 STAINLESS STEEL CHAIN

Weissenfels offers two types of stainless steel chain: Type 304L and 316L, used wherever resistance to a corrosive environment or heat is required. This chain is suitable for overhead lifting.

MATERIAL: •Type 304L: – low carbon version of basic “18-8 (18% Cr - 8% Ni)”

- alloy frequently used for relatively mild corrosion resistance
- provides good atmospheric corrosion resistance

- Type 316L: – low carbon, molybdenum-enhanced alloy specifically formulated to resist the pitting tendency in phosphoric and acetic acids of most 18-8 stainless steels
- can withstand corrosive attack by sodium and calcium brines, hypochlorite solutions, phosphoric acid; and sulfite liquors and sulfurous acids used in the paper pulp industry.

CHARACTERISTICS: Highly resistant to salt water and most acids. Due to the particular metallurgical structure of the base material, Weissenfels stainless steel chain resists high temperature.

Refer to charts I and 11 for comparison of 304 and 316 features.

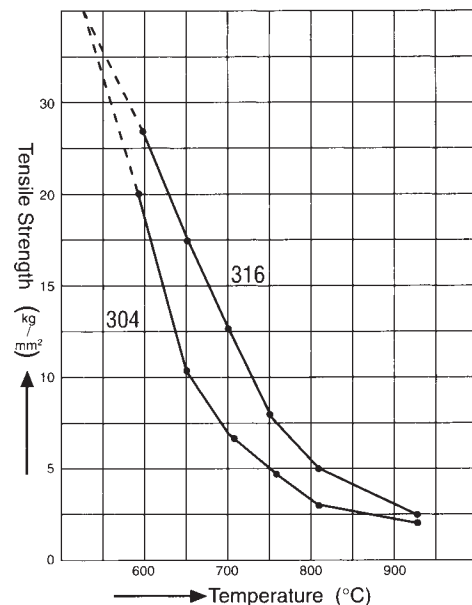
MATERIAL		DIAMETER		LINK DIMENSIONS INSIDE		WLL* AT AMBIENT TEMPERATURE LBS.	STOCK NO. AISI 316L	STOCK NO. AISI 304L	LINKS PER FT.	WEIGHT PER 100 FT. LBS.
NOMINAL IN.	ACTUAL IN.	MM.	LENGTH IN.	WIDTH IN.						
1/8	.158	4	.88	.280	625	316L-040-SS	304L-040-SS	13.6	17	
3/16	.209	5.3	.95	.401	1,100	316L-055-SS	304L-055-SS	12.5	34	
1/4	.276	7	1.00	.500	2,200	316L-070-SS	304L-070-SS	10.1	71	
5/16	.327	8.3	1.10	.500	2,750	316L-085-SS	304L-085-SS	9.7	91	
3/8	.394	10	1.23	.620	4,400	316L-103-SS	304L-103-SS	9.0	138	
1/2	.512	13	1.50	.810	7,100	316L-135-SS	304L-135-SS	6.9	243	
5/8	.630	16	1.87	1.00	11,000	316L-166-SS		5.7	371	
3/4	.787	20	2.12	1.12	16,450	316L-200-SS		4.3	580	
1	.985	25	3.58	1.37	23,400	316L-250-SS		3.3	853	

*NEVER EXCEED WORKING LOAD LIMIT

I Comparative Corrosion Resistance of Selected Metals

Corrosive Medium	Stainless Steel, 304	AISI Type 316L	Corrosive Medium	Stainless Steel, 304	AISI Type 316L
Acetate acid (crude)	B	A	Potassium hydroxide	A	A
Acetate acid (pure)	B	A	Potassium sulfate	A	A
Acetic anhydride	B	A	Propane	A	A
Aluminum sulfate	C	B	Sodium bicarbonate	A	A
Ammonium sulfate	A	A	Sodium bisulfate	D	A
Boric Acid	B	A	Sodium chloride	B	A
Calcium bisulfite	B	A	Sodium hydroxide	A	A
Calcium hypochlorite	C	B	Sodium hypochlorite	C	A
Carbon dioxide (moist)	A	A	Sodium nitrate	A	A
Carbon disulfide	A	A	Sodium peroxide	A	A
Carbon tetrachloride	A	A	Sodium phosphate (alkaline)	A	A
Chlorine (wet)	D	C	Sodium phosphate (neutral)	A	A
Citric acid	B	A	Sodium silicate	A	A
Copper sulfate	A	A	Sodium sulfate	A	A
Ethylene glycol	A	A	Sodium sulfide	A	A
Ferric chloride	D	D	Sodium thiosulfate	A	A
Ferric sulfate	A	A	Stearic acid	B	A
Formaldehyde	A	A	Sulfur	A	A
Formic acid	B	A	Sulfur dioxide (wet)	B	A
Furfural	A	A	Sulfuric acid	D-B	D-B
Hydrochloric acid	D	D	Sulfurous acid	C	B
Hydrofluoric acid	D	D	Tartaric acid	B	A
Hydrogen peroxide	A	A	Trichloroethylene	A	A
Hydrogen sulfide (moist)	B	A	Turpentine	A	A
Magnesium chloride	B	A	Vinegar	B	A
Magnesium sulfate	A	A	Water (fresh)	A	A
Oleic acid	B	A	Water (salt)	B	B
Oxalic acid	B	A	Zinc chloride	D	B
Oxygen	B	A	Zinc sulfate	B	A
Palmitic acid	A	A			
Phosphoric acid	D	A			
Potassium chloride	B	A			

II



Key A = Generally recommended. Material is suitable under most conditions. B = Generally satisfactory. Material has good corrosion resistance and should be considered. C = Fair corrosion resistance. Material should be selected only when other conditions dictate. D = Not recommended.

This chart has been compiled from the following sources: W. Stuart Lyman and Arthur Cohen, "Engineering with Copper Alloy - II," *Chemical Engineering*, 10 April 1978. "Advanced Materials and Processes," Metal's Progress Data Sheet, American Society of Metals, Metal Park, Ohio. Corrosion Data Survey (Part II), Hamner, N.E. National Association of Corrosion Engineers (NACE), Houston, Texas; 1974.