

SN Treatment Chain (SN)



Stainless steel chain with wear resistance performance as high as Carbon steel chain

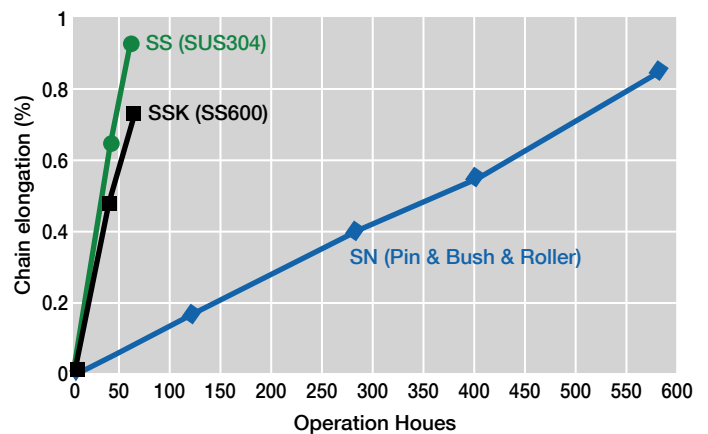
Features

- SN chain has the same strength as that of regular carbon steel chain thanks to the heat treatment over 13Cr stainless steel (SUS400 series).
- SN also provides unique surface treatment, which can be expected to have the same corrosion resistant performance as SUS600.
- SN treatment forms hardening layer, resulting in better wear resistance.

Recommended uses

- All applications where stainless steel chains are currently used.
- All applications where having corrosion issues with carbon steel and coating chains.
- Better allowable load & wear resistance are required compared to common stainless steel (SUS304) chain.

Wear resistance performance



SN Roller Chain Line-up

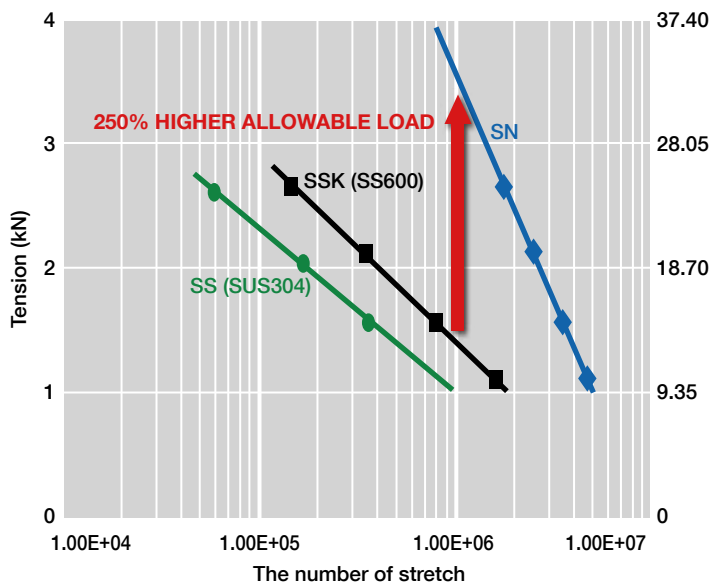
	Pin	Bushing	Roller	Plate
DID 40	○	○	○	SUS304
DID 50	○	○	○	SUS304
DID 60	○	○	○	SUS304
DID 80	○	○	○	SUS304

- SN Chain comes with plates in 18Cr SUS304 Stainless Steel as standard. (No SN treatment available for plate right now)
- Can be combined with other coating such as Hi-Guard
- Consult with factory for other sizes and attachment

Avg. tensile strength, Max. allowable load and Max. allowable Temp.

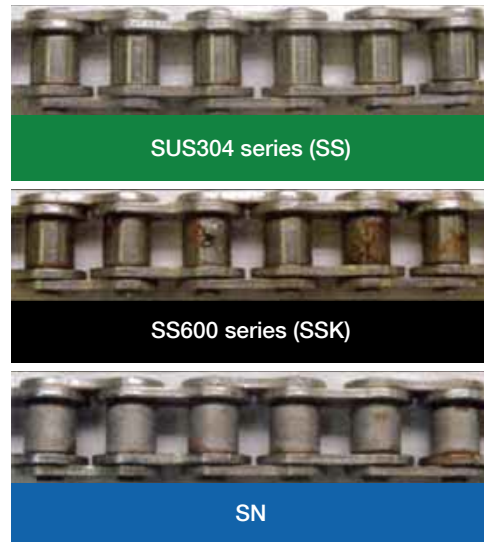
Chain No.	Average tensile strength		Max allowable load		Max allowable Temp.
	kN	kgf	kN	kgf	
DID 40 SN	13.3	1,350	1.1	110	400°C (752°F)
DID 50 SN	20.9	2,120	1.73	170	
DID 60 SN	30	3,050	2.58	260	
DID 80 SN	53.4	5,420	4.43	450	

Performance comparison to other stainless Steel Chain

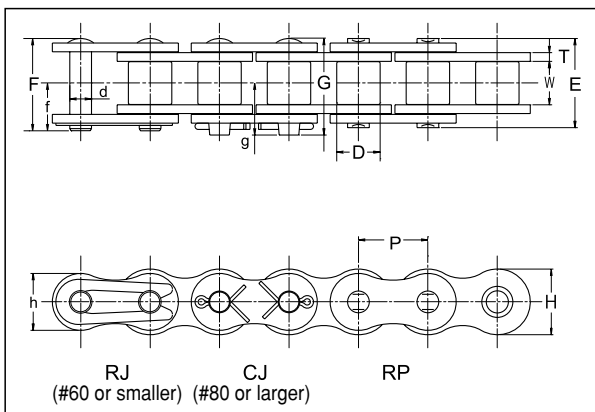


	SUS304 series (SS)	SUS600 series (SSK)	SN
Material	18Cr Stainless Steel	17Cr Stainless Steel	13Cr Stainless Steel
	No Heat Treatment	Heat Treatment	Special Heat Treatment
Tensile strength	100%	100%	100%
Max. allowable Load	100%	150%	250% (Est.)
Corrosion resistance	◎	○	○
Wear resistance	△	○	◎
Cost	◎	○	○

CASS Testing Results (after 168 hours)
 SN treatment was provided over pin, bushing and roller.
 All plates were 18Cr SUS304.



Dimensional Drawing



Dimensions

Chain No.	Pitch P	Roller link width W	Bush Dia. D	Pin							Plate			Approx. weight (kg/m)
				d	E	F	G	L	f	g	T	H	h	
DID 40 SN	12.70	7.95	7.92	3.97	16.5	17.6	18.1	19.1	9.5	10.1	1.50	11.7	10.1	0.63
DID 50 SN	15.875	9.53	10.16	5.09	20.3	21.9	22.1	23.2	11.6	12.1	2.00	14.6	12.6	1.06
DID 60 SN	19.05	12.70	11.91	5.96	25.4	26.9	27.9	29.8	14.3	15.1	2.40	17.5	15.0	1.53
DID 80 SN	25.40	15.88	15.88	7.94	32.6	—	35.4	37.1	—	19.0	3.20	23.0	19.7	2.55

Roller Chains for Power Transmission

Environment Resistant Chain Series