

Surface Finishes

—JIS Products and Nippon Steel & Sumikin Stainless Steel's NSSC Series—

Finishes	Finishing method and degree, and application examples
No. 1	Annealed and descaled after hot rolling. It is suitable for industrial applications requiring heat resistance and corrosion resistance, where smoothness of finish is unimportance, such as chemical tanks, aircraft heaters, steam turbine shrouds and piping.
No. 2D	Annealed and pickled after cold rolling. The finished material is soft and its surface possesses a silver-white luster. The No. 2D finish is suitable for deep drawing and the material after fabrication can be subjected to polishing or buffing because it possesses a dense, cold-rolled surface. It is suitable for such applications as aircraft structural members, roof gutters and heat exchangers.
No. 2B	Bright annealing finish obtained by secondary light processing by means of polishing rolls after No. 2D finishing. It is most suitable for deep drawing that is not so severe. Polishing is much easier than No.2D even after fabrication, and therefore the No. 2B finish is recommended for such applications as medical equipment, milk tanks, cooking appliances, tableware and structural members.
No. 3	Comparatively rough polished finish (100 – 120 mesh). It is recommended for applications in which a semi-polished finish of the surface is required, such as jacket exterior of milk equipment and kitchen counter top.
No. 4	General polished finish, obtained by final polishing agents 150 – 180 mesh after No. 2B finishing. It offers uniform, attractive appearance. Commonly the product of the No. 4 finish is used as it is, but further high-grade finish can be added to this finish if required. Because the finish is clean and sanitary, it is suitable for milk and food processing equipment and medical equipment.
Buffing polished	It offers high reflectivity. The finely ground surface is finished further by buffing, but the abrasion lines remain. It is suitable mainly for structural and decorative applications.
HL (Hair-line)	Finish to which continuous abrasion lines are added to No. 4 finish. Repair after welding is easy and accordingly it is suitable for structural and similar applications.
BA (Bright annealed)	Very attractive finish by means of heat treatment in an inert atmosphere furnace and further of light cold processing using polishing rolls after cold rolling. Due to its attractive finish, the BA finish is suitable for various decorative items and applications requiring unimpaired surface attractiveness after light fabrication. For pressed and formed products, simple buff-polishing can provide them with luster.
PB	Finished with polished unique patterns by using special rolls. It is suitable for such applications as structural members, medical equipment and home appliances.
DF	Finished with refined uneven surfaces by using special rolls. It is suitable for applications where mat finish is required to prevent glare and for decorativeness of finished products.
Embossed	Finished with unique patterns embossed using special rolls. It is suitable for applications as building materials, kitchen fixtures and general household implements.

Table of Mass

The table below shows the mass of the products having the standard size of 1,000 mm width × 2,000 mm length.

(kg)				
Thickness (mm)	SUS 430	SUS 304	SUS 316	SUS 410
0.2	3.08	3.17	3.19	3.10
0.3	4.62	4.76	4.79	4.65
0.4	6.16	6.34	6.38	6.20
0.5	7.70	7.93	7.98	7.75
0.6	9.24	9.52	9.58	9.30
0.7	10.8	11.1	11.2	10.8
0.8	12.3	12.7	12.8	12.4
0.9	13.9	14.3	14.4	14.0
1.0	15.4	15.9	16.0	15.5
1.2	18.5	19.0	19.2	18.6
1.5	23.1	23.8	23.9	23.2
2.0	30.8	31.7	31.9	31.0
2.3	35.4	36.5	36.7	35.6
2.5	38.5	39.6	39.9	38.8
3.0	46.2	47.6	47.9	46.5
3.2	49.3	50.8	51.1	49.6
4.0	61.6	63.4	63.8	62.0
5.0	77.0	79.3	79.8	77.5
6.0	92.4	95.2	95.8	93.0
Specific gravity (kg/mm/m ²)	7.70	7.93	7.98	7.75