

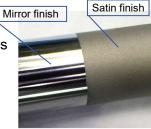
Technical Information

Vol. 74

Surface Treatment/polishing Determining Product's Quality

1. Surface treatment/polishing determines product's quality

An optimal surface treatment process has to be selected to achieve the required surface condition. This issue demonstrates the differences in surface conditions of SUS304 flat plates subjected to a major surface treatment or polishing. Even the surfaces having the same roughness (Ra) show the different appearances depending on the polishing or grinding methods. This explains why the optimal polishing method suitable for the part shape and the location must be applied.



Blast polished surface

2. Major physical surface treatments/polishings

SUS304 (10 x 20 x t 2 mm)	Blank plate (before treatment)	Samples processed with major <i>physical</i> surface treatments		
		Buffing	Blast (mirror finish)	Blast (satin finish)
Ra (µm)	0.21	0.04	0.07	0.44
Visual images of the samples				
SEM images (x 500)	.50 μ m	50 μ m	- 50 <u>μ</u> m	50 μ m

3. Major chemical surface treatments/polishings

SUS304 (10 x 20 x t2 mm)	Samples processed with major <i>chemical</i> surface treatments				
	Chemical polishing	Buffing + electropolishing	Electropolishing	Strong acid cleaning	
Ra (µm)	0.10	0.20	0.21	0.32	
Visual images of the samples					
SEM images (x 500)	50μ m	50μ m	50μ m	$50\mu\mathrm{m}$	

FUTA-Q Co., Ltd.

URL https://futaku.co.jp

[Headquarters] 33-3 Karahashi-keiden-cho, Minami-ku, Kyoto City, Kyoto Pref. 601-8454

Tel: +81-75-661-2931

E-mail futaku-info@futaku.co.jp [Tokyo Office] Mitaka-myojo-palace 3F, 1-1-3,Kamirenjaku Mitaka-shi, Tokyo 181-0012,Japan Tel: +81-422-27-7629

