



YU 304Q3

● YU 304Q3 (深衝使用鋼種)



YU 304Q <沃斯田鐵係不銹鋼> YU 304Q <Austenitic stainless steel>

一、產品特性

- 1.代表成分:18Cr/8.5Ni/1.5Mn/0.6Cu。
- 2.優良的冷加工性質。
- 3.加工後低磁性特徵。
- 4.等同一般304的耐蝕性。

二、應用

家電製品、餐廚鍋具、建築裝飾。

三、性質比較。

III. Property comparison.

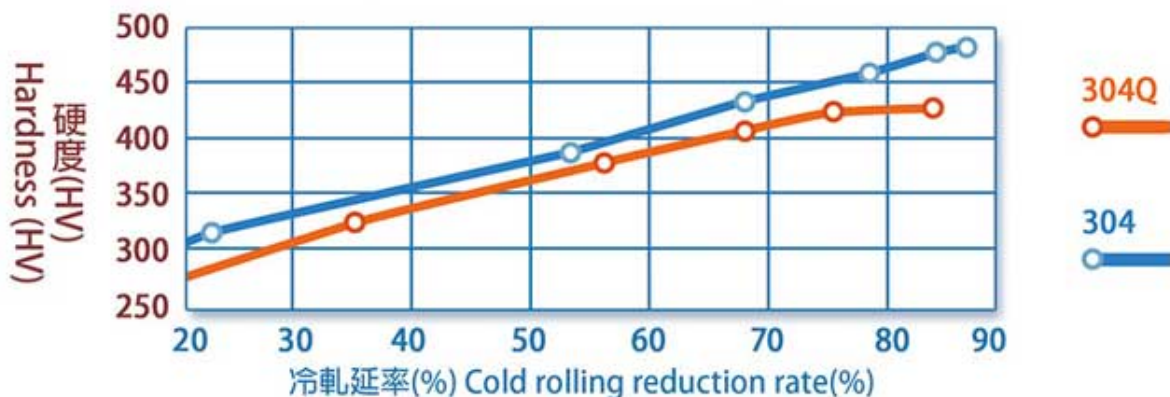
加工後磁性 Magnetism after forming	304 > YU 304Q
耐時效破裂性 Resistance of Aging crack	304 < YU 304Q
銲接性 Weldability	304 = YU 304Q
耐蝕性 Corrosion resistance	304 = YU 304Q
深衝成形性 Deep drawing formability	304 < YU 304Q
張出成形性 Bulging formability	304 > YU 304Q

四、加工硬化曲線，加工誘發的麻田散鐵量

IV. Work hardening curve, Martensite induced by processing

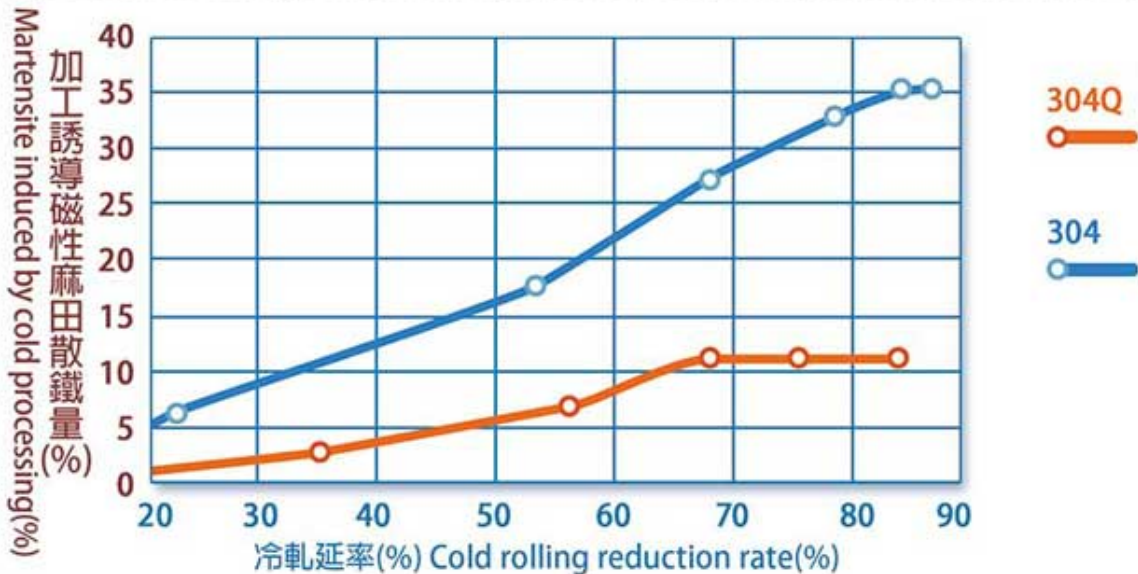
1.冷加工硬化曲線:304Q加工硬化低於304。

Cold work hardening curve: the work hardening of 304Q is lower than 304.



2.冷加工誘導磁性麻田散鐵:304Q誘發量低於304。

Martensite induced by cold processing: the induced amount of 304Q is lower than 304.



304Q較304冷加工硬化低與誘導磁性低等特性，採用304Q取代304可檢討縮減成型道次與省去中間退火製程，可降低加工成本。

304Q has lower cold work hardening and induced magnetic properties than 304. Using 304Q instead of 304 can reduce the forming passes and eliminate the intermediate annealing process, which can reduce processing costs.

五、耐蝕性

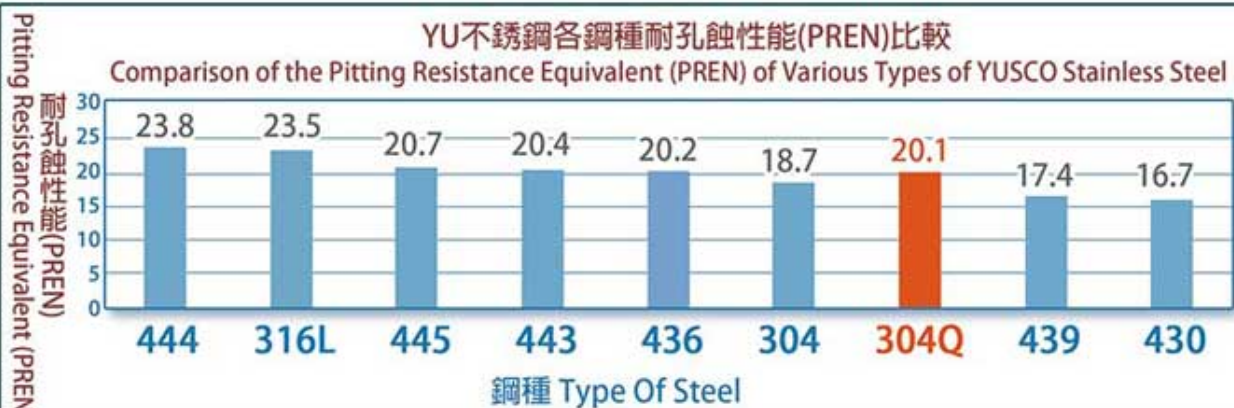
V. Corrosion Resistance

耐孔蝕當量(Pitting Resistance Equivalent, PREN)，該計算值越高其耐孔蝕性越佳。

Pitting Resistance Equivalent (PREN); higher PREN value represents better pitting resistance.

$PREN = Cr + 3.3Mo + 16N$ 300系不銹鋼(300 series stainless steel)

$PREN = Cr + 3.3Mo$ 400系不銹鋼(400 series stainless steel)



在一般的大氣及多數介質環境下，燁聯304Q與304一樣具優秀的耐蝕性。

In the general atmosphere and most medium environments, YU 304Q has the same excellent corrosion resistance as 304.

六、化學成份

VI. Chemical compositions

鋼種 Grade	化學成份 Chemical Composition (wt%)			
	Ni	Cr	Mn	Cu
JIS SUS304	8.00~10.50	18.00~20.00	≤2.00	≤0.08
YU 304	8.00~8.30	18.00~18.30	0.50~1.00	≤0.70
YU 304Q	8.50~9.00	18.30~19.00	1.40~2.00	0.50~0.80

七、機械性質與晶粒號數

VII. Mechanical properties and Grain size

鋼種 Grade	降伏強度 Yield Strength (MPa)	抗拉強度 Tensile Strength (MPa)	伸長率 Elongation (%)	硬度 Hardness (HRB)
JIS SUS304	≥205	≥520	≥40	≤90
YU 304	297	671	54	84
YU 304Q	289	635	60	80

八、成型性指標

VIII. Index of formability

鋼種 Grade	張出成形 n 值 Bulging forming n value	深衝成形 r 值 Deep drawing forming r value
YU 304	0.55	1.1~1.2
YU 304Q	0.45	1.2~1.3

304Q有較優越的深衝性質。

304Q has better deep drawing formability than 304 stainless steel.

九、物理性質

IX. Physical Properties

鋼種 Grade	密度 Density (g/cm ³)	熱膨脹係數 Thermal Expansion Coefficient (10 ⁻⁶ /°C)	熱導率 Heat Conductivity (W/m · °C)
		0~600°C	20°C
YU 304Q	7.9	18.7	15.0

十、可接單尺寸及表面品級

請與燁聯業務人員接洽。

X. Available dimensions and surface finish

Please contact the sales representative of Yieh United Steel Corp.



高雄市岡山區嘉興里興隆街600號
No.600, Xinglong St., JiaXing Village, Gangshan Dist.,
Kaohsiung City 82057, Taiwan (R.O.C.)
TEL:+866-7-623-2255 FAX:+886-7-623-3148
<http://www.yusco.com.tw>

營業部門
TEL:+866-7-623-2061 FAX:+886-7-622-8675
SALES & MARKETING DIVISION
TEL:+866-7-623-2062 FAX:+886-7-622-6455
E-mail: s12@mail.yusco.com.tw