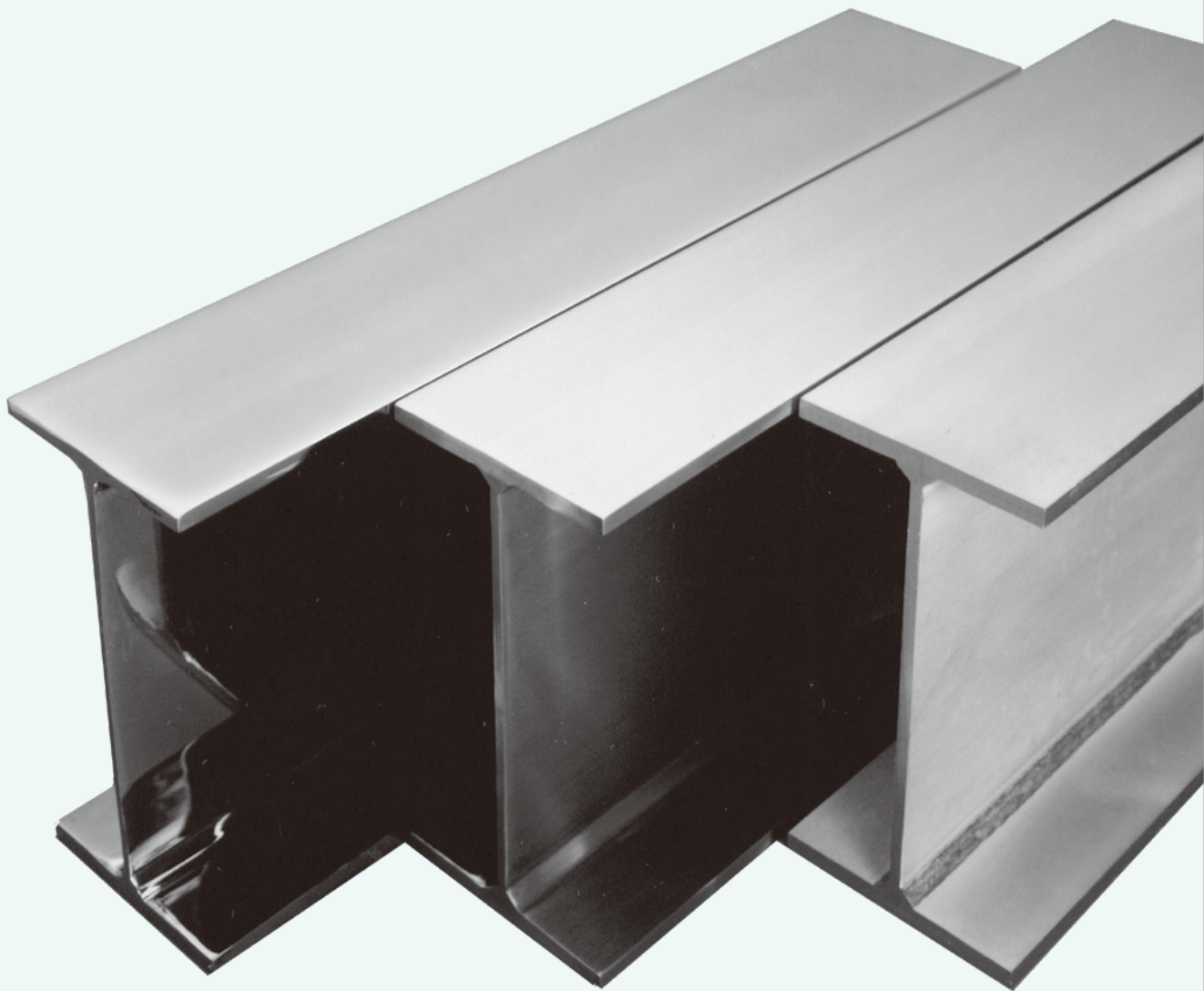


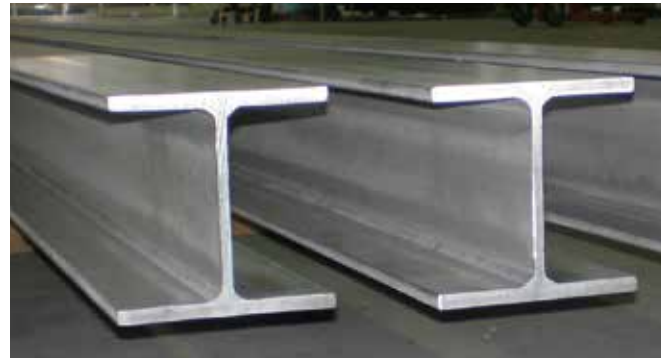
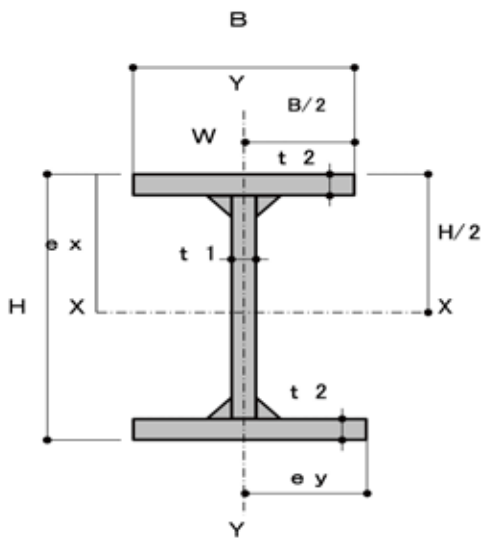
Producer of Stainless Steel  
Construction Materials

**ALLOY**  
ALLOY CORPORATION

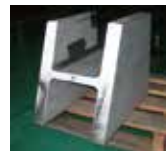
# Alloy Stainless Steel Welded Shapes



## Alloy Stainless Steel Welded Shapes



▲Standard cross section



▲Manufacturing of special shapes

## Manufacturable Range

	Width		Thickness	
	Height (H)	75-1100	web(t1)	5-25
Sides (B)	50-400	flange(t2)	5-30	

\*When flange sheet thickness (t2) is 12mm or greater, from height (H) 200 and Side (B) 175 and greater can be manufactured.

\*As steel sheets are manufactured after being cut, Sides (B) and Height (H) can be freely manufactured in 1-mm increments.

\*Sizes outside the manufacturable range and product fabrication can also be considered. Please inquire with a sales representative.

(Example)

Manufacturing of  $H < B$  cross section

Manufacturing of welded channel steel, welded T-beam steel, and manufacturing of other welded shaped steel with special cross sections

Handling of groove fabrication, perforation, scrap processing and other processes

## List of Standard Sizes and Cross-Sectional Performance

Material Quality: SUS304 ( JIS G4304 )

Standard Cross-sectional Dimensions (mm)				mass per meter (kg/m)	Item with standard length (6m) Weight (kg)	Area of section (cm <sup>2</sup> )	Moment of Inertia of area (cm <sup>4</sup> )		Radius of gyration (cm)		section modulus (cm <sup>3</sup> )	
Height H	Width B	W-thickness t1	F-thickness t2				a	Ix	Iy	ix	iy	Zx
75	X 75	X 5	/ 8	11.9	71.1	14.950	143.9	56.3	3.10	1.94	38.36	15.02
100	X 100	X 6	/ 8	16.7	100.1	21.040	369.0	133.5	4.19	2.52	73.81	26.70
125	X 125	X 7	/ 9	23.8	142.7	29.990	829.9	293.3	5.26	3.13	132.78	46.92
148	X 100	X 6	/ 9	20.5	122.8	25.800	980.5	150.2	6.16	2.41	132.50	30.05
150	X 150	X 8	/ 10	32.0	192.8	40.400	1,619.0	563.1	6.33	3.73	215.86	75.07
200	X 100	X 6	/ 8	21.4	128.7	27.040	1,786.9	133.7	8.13	2.22	178.69	26.73
200	X 200	X 8	/ 12	49.2	295.4	62.080	4,610.5	1,600.8	8.62	5.08	461.05	160.08
250	X 125	X 6	/ 9	28.9	173.3	36.420	3,892.9	293.4	10.34	2.84	311.43	46.94
250	X 250	X 9	/ 14	71.4	428.1	89.980	10,578.8	3,647.2	10.84	6.37	846.30	291.77
300	X 300	X 10	/ 16	97.4	584.3	122.800	20,982.0	7,202.2	13.07	7.66	1398.80	480.15

## Manufactured Steel Types

\*Please inquire about steel types other than SUS304, SUS316 and SUS316 L.

Austenitic Stainless Steel : JIS G4304 / SUS304 · SUS316 · SUS316L · SUS309S · SUS310S

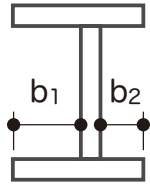
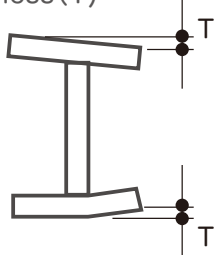
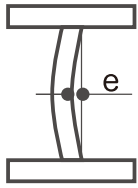
Duplex Stainless Steel : JIS G4304 / SUS329J3L · SUS329J4L · SUS821L1 · SUS323L

: S32304 · S31803 · S32750

Aluminum : JIS H4000 / A5083

Titanium : JIS H4600 / TP340H

## Product Specifications

Dimensional Allowances		(mm)
Category	Allowance	
Height(H) $H \leq 300$ $300 < H \leq 600$ $600 < H$	$\pm 2.0$ $\pm 3.0$ $\pm 4.0$	
Sides(B)	$\pm 2.0$	
Center Deviation(C) 	$\pm 2.0$ $C = \frac{(b_1 - b_2)}{2}$	
Squareness(T) 	1.2% of sides (B) or less However, minimum allowance is 2.0	
Length	-0, +40	
Bending	0.2% of length or less	
Web Bending(e) 	H/150 or less However, minimum allowance is 5.0	
Not applied for $t \leq 6$		
Thickness( $t_1, t_2$ )	JIS allowance for steel sheets (JISG4304)	

## Tensile Testing

Test Specimen: SUS304 ( JIS G4304 ) BH100x100x6/8

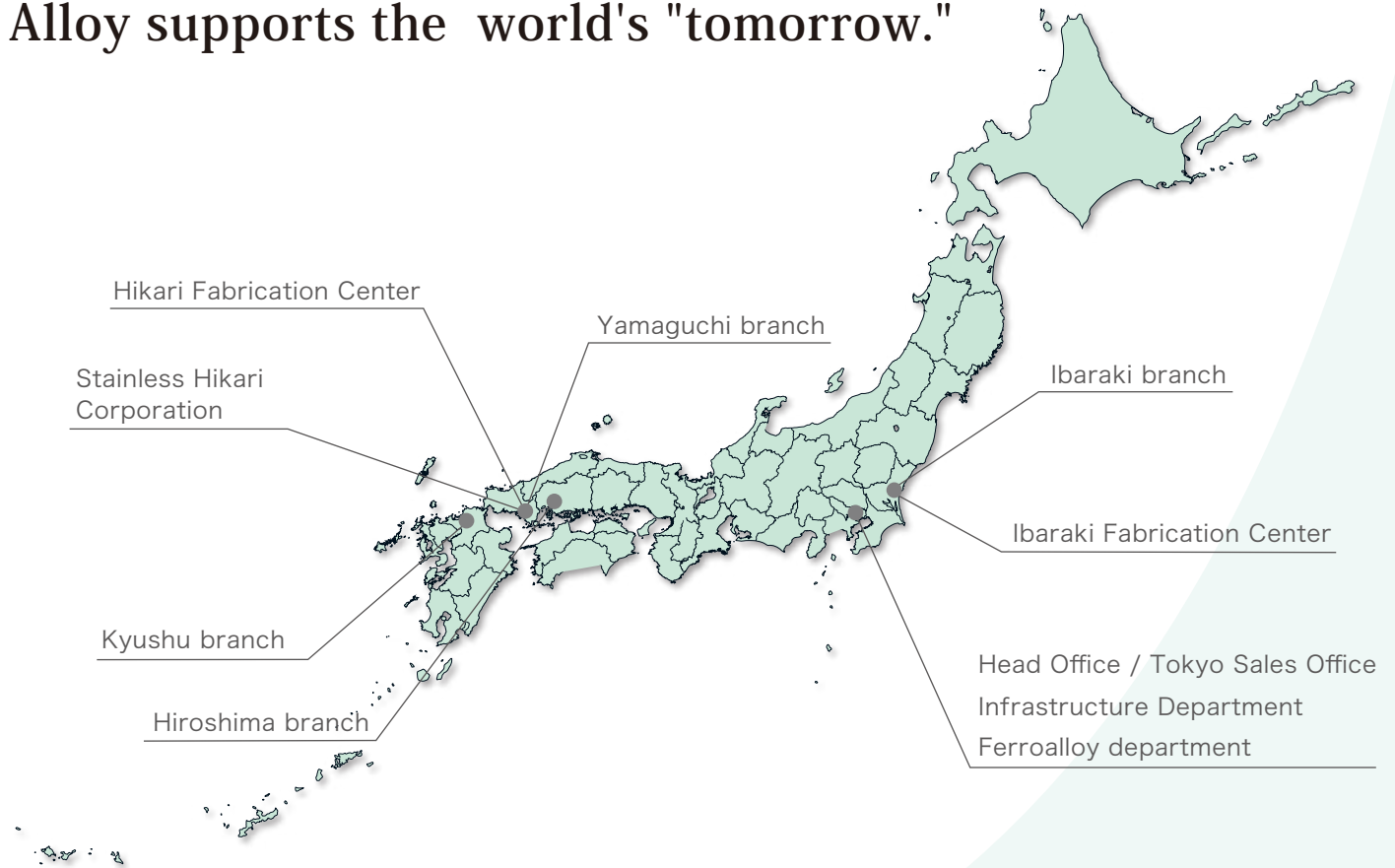


▲ Welded spot penetration state



▲ After tensile testing  
 (\*fracture of base material part)

Through the manufacturing of welded structures made from stainless steel, aluminum, titanium and other materials, Alloy supports the world's "tomorrow."



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