

# **Irvon Standard Tolerances**

At Irvon we take pride in being able to offer the highest standards of accuracy in our products. Through modern production techniques, a high standard of experienced workmanship and exhaustive quality control procedures, we will typically offer the tolerances below.

## Shearing

Squareness Tolerance (mm)

	Dimensions				
Thk	<1000	1000+	5000+	12000+	
<2	2	2	4	6	
2+	2	4	4	6	
5+	2	4	4	6	
8+	4	4	6	8	
10+	4	6	6	8	
12+	6	6	6	8	

#### Dimensional Tolerance (mm)

	Dimensions			
Thk	<1000	1000+	5000+	12000+
<2	± 1	± 1	± 1	± 2
2+	± 1	± 1	± 2	± 2
5+	± 1	± 1	± 2	± 2
8+	± 1	±1	± 2	± 2
10+	± 1	± 1	± 2	± 3
12+	± 1	± 1	± 2	± 3

### High Definition & Bevel Cutting Plasma

	Dimensions			
Thk	<1000	1000+	3000+	6000+
<5	± 1	± 1	± 1	± 2
5+	±1	± 1	± 1	± 2
10+	± 1	± 1	± 1	± 2
15+	± 1	± 2	± 2	± 2
20+	± 1	± 2	± 2	± 2
25+	± 2	± 2	± 2	± 2

Tolerances on plasma cutting are measured on the top edge only.

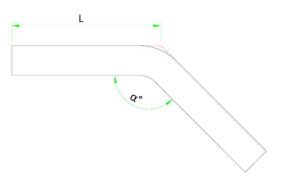
We can offer  $\pm 2^{\circ}$  on all bevel cuts. All lengths measured from bevelled edges will have an additional **1mm** added onto the tolerances above.

## Press-Brake

	Leg Lengths (L) <sup>1</sup>			
Thk	<1000	1000+	3000+	
<2	± 1	± 1	± 2	
2+	± 1	± 2	± 2	
3+	± 1	± 2	± 2	
6+	± 1	± 2	± 2	
8+	± 2	± 2	± 2	
10+	± 2	± 2	± 3	
15+	± 2	± 2	± 3	
20+	± 2	± 2	± 3	
25+	± 2	± 2	± 3	
30+ <sup>2</sup>	± 3	± 3	± 4	
40+ <sup>2</sup>	± 3	± 3	± 4	

<sup>1</sup> All tolerances for pressed legs apply to dimensions dependent upon, at most, 2 pressed angles. Dimensions in the above table imply a guideline of  $\pm 1^{\circ}$  on angles ( $\alpha^{\circ}$ ).

<sup>2</sup> Jobs with a number of folds should be checked with our technical staff to confirm that important or specific tolerances can be adhered to.



### **Plate Rolling**

	Diameter				
Thickness	<1000	1000+	2000+	3000+	4000+
<10	±3	±5	±6*	±8*	±10*
10+	±3	±5	±6	±8*	±10*
50+	±5	±5	±6	±8	±10*
100+	±5	±6	±6	±8	±10
150+	-	-	±6	±8	±10

These tolerances apply to full cylinders; tolerances for segments are comparable but are not measured or quoted as "diametric".

\*Parts that are thin relative to their diameter are flexible during handling and transit.

#### Welding

In cases where NDT is requested and the details of NDT on welded joints are not specified, we offer our standard NDT service and acceptance criteria. The standard testing shall be 10% Ultrasonic, Magnetic Particle Inspection or Dye Penetrant Testing, as applicable, with acceptance to PD5500 or ISO 5817 level C.

This document is intended as an indication of our typical production standards; however the tolerances stated can vary and are dependent upon factors specific to certain jobs. Any tolerance requirements should be confirmed when placing an order.