

## Product Type: Welded Beam - AS/NZS 3679.2:2016

### General Description:









At Innovative Steel Solutions, our products are manufactured to meet strict sustainable protocols. Our products meet Australian standard and is **ACRS** accredited.

Our welded beams come in various standards, grades, and sizes to meet your market applications requirements. Welded beams range from mild steel to high strength steel to suit all your project requirements.

### Custom Welded Sections - Table 2.2

When considering Project requirements, the process generally leads fabricators to tender to specified specifications with a slight deviation. At Innovative Steel Solutions, we offer custom welded beams (CWB) built to suit your project and design needs, which include better manufacturing tolerances than AS/NZ 3679.2:2016

We supply a wide range of CWB's:

Icon	Designation
	Asymmetric CWB'S
	Tapered Welded Beams
	Castellated Welded Beams
	Cellform-CWB Welded Beams
	Welded Box Sections
	Gooseneck CWB'S Sections
	Curved Welded Beams
	Pre-camber Welded Beams

### Welded Beam Grades & Sizes - Table 2.1










Designation	Length (m)						
	9.0	10.5	12.0	13.5	15.0	16.5	18.0
1200 WB	●	●	●	●	●	●	●
1000 WB	●	●	●	●	●	●	●
900 WB	●	●	●	●	●	●	●
800 WB	●	●	●	●	●	●	●
700 WB	●	●	●	●	●	●	●

Option for enquiries for custom lengths available

### Markets & Applications

-  Structural Steel Construction
-  Infrastructure
-  Heavy Equipment
-  Fabrication & Erection
-  Marine & Civil

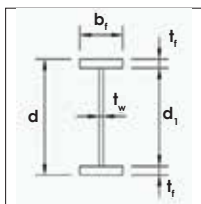
### Manufacturing Specifications

-  AS/NZ 3679.2: 2016 - Welded Beams  
- ACRS CERTIFIED
-  AS/NZ 3678: 2016 - Hot Rolled Plate  
- ACRS CERTIFIED
-  AS/NZ 1554.1 - Semi-Auto SAW Welding
-  ISO 9001, ISO 14001 & ISO 18001
-  WPS & PQR To Suit Australian Standards
-  Member Of WSA (World Steel Association)  
- Climate Action Member
-  EPD (Environmental Product Declaration)
-  No Wastage - Welded Beams  
- Cut To Size
-  ResponsibleSteel™ Member

## Product Details & Specifications: Gr. 700WB, 800WB, 900WB, 1000WB & 1200WB

### A. Standard Dimensions - Table 2.3

Designation	Weight kg/m	Depth Of Section d	Flange		Web Thickness $t_w$	Depth B/W Flanges $d_1$	$d_1$	(bf-tw) $2t_f$	Area of Cross Section $A_g$
			Width $b_f$	Thickness $t_f$					
700 WB	173	716	275	28	10	660	66.0	4.73	22000
	150	710	250	25	10	660	66.0	4.80	19100
	130	700	250	20	10	660	66.0	6.00	16600
	115	692	250	16	10	660	66.0	7.50	14600
800 WB	192	816	300	28	10	760	76.0	5.18	24400
	168	810	275	25	10	760	76.0	5.30	21400
	146	800	275	20	10	760	76.0	6.63	18600
	122	792	250	16	10	760	76.0	7.50	15600
900 WB	282	924	400	32	12	860	71.7	6.06	35900
	257	916	400	28	12	860	71.7	6.93	32700
	218	910	350	25	12	860	71.7	6.76	27800
	175	900	300	20	12	860	71.7	7.20	22300
1000 WB	322	1024	400	32	16	960	60.0	6.00	41000
	296	1016	400	28	16	960	60.0	6.86	37800
	258	1010	350	25	16	960	60.0	6.68	32900
	215	1000	300	20	16	960	60.0	7.10	27400
1200 WB	455	1200	500	40	16	1120	70.0	6.05	57900
	423	1192	500	36	16	1120	70.0	6.72	53900
	392	1184	500	32	16	1120	70.0	7.56	49900
	342	1184	400	32	16	1120	70.0	6.00	43500
	317	1176	400	28	16	1120	70.0	6.85	40300
	278	1170	350	25	16	1120	70.0	6.68	35400
	249	1170	275	25	16	1120	70.0	5.18	31700



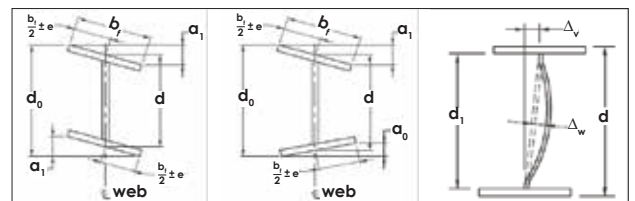
#### Note:

- All welds are done to **AS/NZS 1554.1**  
Category **SP (deep penetration welds)**

- Welds sizes are determined by the minimum yield strength requirements specified in AZ/NZS 3679.2:2016 standards

### B. \*Permissible Tolerances for Welded Beams - Table 2.4

Designation	Permissible variation of depth	Permissible variation of flange width	Permissible out-of-square on each flange	Permissible total out-of-square	Permissible web off-centre
Depth	d	$b_f$	$a_1$ or $a_0$	$a_1 + a_0$	e
700 WB	±3.0	±3.0	±(0.012* $b_f$ ) mm or ±3.0	±6.0	±3.5
800 WB					
900 WB					
1000 WB					
1200 WB					



\* Note: Innovative Steel permissible tolerances for welded beams exceeds the AS/NZ 3679.2:2016 Standard by %40 in each category

## Product Type: Welded Column - AS/NZS 3679.2:2016

### General Description:

At Innovative Steel Solutions, our products are manufactured to meet strict sustainable protocols. Our products meet Australian standard and is **ACRS** accredited.

Our welded columns come in various standards, grades, and sizes to meet your market applications requirements. Welded columns range from mild steel to high strength steel to suit all your project requirements.

Welded Column Grades & Sizes - Table 3.1






Designation	Length (m)						
	9.0	10.5	12.0	13.5	15.0	16.5	18.0
500 WC	●	●	●	●	●	●	●
400 WC	●	●	●	●	●	●	●
350 WC	●	●	●	●	●	●	●

Option for enquiries for custom lengths available

### Custom Welded Sections - Table 3.2

When considering Project requirements, the process generally leads fabricators to tender to specified specifications with a slight deviation. At Innovative Steel Solutions, we offer custom welded columns (CWC) built to suit your project and design needs, which include better manufacturing tolerances than AS/NZ 3679.2:2016

We supply a wide range of CWC's:

Icon	Designation
	Welded Columns
	Tapered Welded Columns
	King Cross Columns
	Welded Box Columns
	Circular Welded Columns: - Longitudinal submerged arc welded (LSAW) - Spiral submerged arc welded (SSAW)

### Markets & Applications

-  Structural Steel Construction
-  Infrastructure
-  Heavy Equipment
-  Fabrication & Erection
-  Marine & Civil

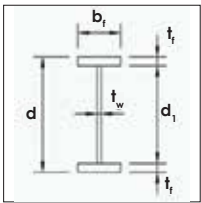
### Manufacturing Specifications

-  AS/NZ 3679.2: 2016 - Welded Beams  
- ACRS CERTIFIED
-  AS/NZ 3678: 2016 - Hot Rolled Plate  
- ACRS CERTIFIED
-  AS/NZ 1554.1 - Semi-Auto SAW Welding
-  ISO 9001, ISO 14001 & ISO 18001
-  WPS & PQR To Suit Australian Standards
-  Member Of WSA (World Steel Association)  
- Climate Action Member
-  EPD (Environmental Product Declaration)
-  No Wastage - Welded Columns  
- Cut To Size
-  ResponsibleSteel™ Member

## Product Details & Specifications: Gr. 350WC, 400WC & 500WC

### A. Standard Dimensions - Table 3.3

Designation	Weight kg/m	Depth Of Section d	Flange		Web Thickness $t_w$	Depth B/W Flanges $d_1$	d1	(bf-tw) $2t_f$	Area of Cross Section $A_g$
			Width $b_f$	Thickness $t_f$					
350 WC	280	355	350	40	28	275	9.82	4.03	35700
	258	347	350	36	28	275	9.82	4.47	32900
	230	339	350	32	25	275	11.00	5.08	29300
	197	331	350	28	20	275	13.80	5.89	25100
400 WC	361	430	400	40	40	350	8.75	4.50	46000
	328	430	400	40	28	350	12.50	4.65	41800
	303	422	400	36	28	350	12.50	5.17	38600
	270	414	400	32	25	350	14.00	5.86	34400
	212	400	400	25	20	350	17.50	7.60	27000
	181	390	400	20	20	350	17.50	9.50	23000
	144	382	400	16	16	350	21.90	12.00	18400
500 WC	440	480	500	40	40	400	10.00	5.75	56000
	414	480	500	40	32	400	12.50	5.85	52800
	383	472	500	36	32	400	12.50	6.50	48800
	340	514	500	32	25	400	18.00	7.42	43200
	290	506	500	28	20	400	22.50	8.57	37000
	267	500	500	25	20	400	22.50	9.60	34000
	228	490	500	20	20	400	22.50	12.00	29000



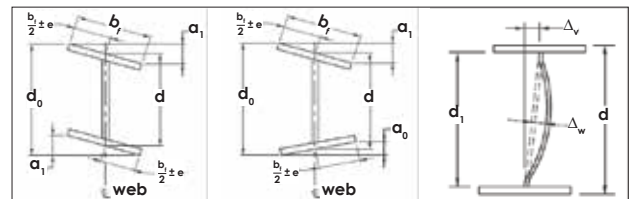
#### Note:

- All welds are done to **AS/NZS 1554.1**  
Category **SP (deep penetration welds)**

- Welds sizes are determined by the minimum  
yield strength requirements specified in  
AZ/NZS 3679.2:2016 standards

### B. \*Permissible Tolerances for Welded Columns - Table 3.4

Designation	Weight	Permissible variation of depth d	Permissible variation of flange width $b_f$	Permissible out -of-square on each flange $a_1$ or $a_0$	Permissible total out-of-square $a_1$ or $a_0$	Permissible web off-centre e
	kg/m					
350 WC	280	±3.0	±3.0	±(0.012*b <sub>f</sub> ) mm or ±3.0	±6.0	±3.5
	258					
	230					
	197					
400 WC	361					
	328					
	303					
	270					
	212					
	181					
	144					
500 WC	440					
	414					
	383					
	340					
	290					
	267					
	228					



\* Note: Innovative Steel permissible tolerances for  
welded columns exceeds the AS/NZ 3679.2:2016  
Standard by %40 in each category