



Profile Cut Dynamics is a steel service centre specialising in Oxyfuel cutting as well as bending, rolling and guillotining. We also have a HighDefinition Plasma machine capable of cutting both mild and stainless steels. We stock forms of carbon steel as well as stainless steel.

We are able to achieve quick turn around time excellent quality and of course service with a smile. This is made possible by our employees who are all geared towards a more personalised approach when dealing with customer.

Profile Cut Dynamics in Sebenza operates 24 Hours a day offering "the best service in the business" The general delivery time at PCD is one to three days but when a customer has a breakdown, every effort to accommodate him is made.

Our CAD drawing and nesting of components ensures accuracy and economy for **You** the customer.

Profile Cut Dynamics complies with all statutory BEE requirements while maintaining the highest levels of staff competency.

## **WE ARE STOCKIST OF THE FOLLOWING MATERIALS**

- > Commercial Quality Plate
- > Grade 350WA
- > Grade 50C
- > S355
- > SS10/200 Hardwearing Plate
- > ROQ - last
- > ROQTUFF
- > Stainless Steel

**CNC FLAME | HD PLASMA | LASER CUTTING  
GUILLOTINE | BENDING | CAD NESTING**

**011 609 8691/2/3**  
**WWW.PCD.ZA.COM**

15A Engwena Road,  
Sebenza, Edenvale, 1613  
GPS: Lon. -26.12 1370 Lat. -28.17 7860



011 609 8691/2/3

WWW.PCD.ZA.COM

DESIGNATION	EQUIVALENT FORMER DESIGNATION IN	
EN 10025:1993	BS4360:1386	SABS 1431: 1987
S275	GR 43 A	300 WA
S275 J	GR 43 B	300 WB
S275 JO	GR 43 C	300 WC
S275 J2 G3	GR 43 D	300 WD
S355	GR 50 A	350 WA
S355 JR	GR 50 B	350 WB
S355 JO	GR 50 C	350 WC
S355 J2 G3	GR 50 D	350 WD

## COMPARITIVE CHARTS FOR INFROMATION AND REFERENCE PURPOSES ONLY

These charts are taken from all data sheets mentioned below each table. For more in depth specs and Mittal's ladle analysis please ask for a copy of the relevant data sheet.

### MAXIMUM CHEMICAL COPOSITION(LADLE ANALYSIS, PECENT) AS SPECIFIED IN SABS 1431-1987 - TABLE 2 (AS AMENDED)

GRADE	C	Mn	Si	P	S	Nb	V	Nb+V	Al	Cu	Ni	Cr	MO
300 WA	0.22	1.60	1.50	0.04	0.05	0.03	0.03	0.04	0.10	0.35	0.30	0.30	0.10
30 WC	0.22	1.60	1.50	0.04	0.05	0.03	0.03	0.04	0.10	0.35	0.30	0.30	0.10
3 WDD	0.22	1.60	1.50	0.04	0.04	0.10	0.10	0.10	0.10	0.35	0.30	0.30	0.10
350 WA	0.22	1.60	1.50	0.04	0.04	0.10	0.10	0.10	0.10	0.35	0.30	0.30	0.10
350 WC	0.22	1.60	1.50	0.04	0.04	0.10	0.10	0.10	0.10	0.35	0.30	0.30	0.10
350 WDD	0.22	1.60	1.50	0.04	0.04	0.10	0.10	0.10	0.10	0.35	0.30	0.30	0.10

Further info refer Mittal Steel Data Sheet A3.3

### MAXIMUM CHEMICAL COPOSITION(LADLE ANALYSIS, PECENT) AS SPECIFIED IN BD 4360: 1986

GRADE	C	Mn	Si	P	S	Nb	V
43 A	0.25	1.60	1.50	0.05	0.05	-	-
43 B	0.21	1.50	1.50	0.05	0.05	-	-
43 C	0.18	1.50	1.50	0.04	0.04	-	-
43 D	0.16	1.50	1.50	0.04	0.04	0.003	0.003
50 B	0.20	1.50	1.50	0.05	0.05	0.003	0.003
50 C	0.20	1.50	1.50	0.04	0.04	0.003	0.003
50 D	0.18	1.50	1.50	0.04	0.04	0.003	0.003
50 DD	0.18	1.50	1.50	0.04	0.04	0.003	0.003

Further info refer Mittal Steel Data Sheet A3.2

### MAXIMUM CHEMICAL COMPOSITION (LADLE ANALYSIS, PERCENT) AS SPECIFIED IN BS BN 10025: 1993

GRADE	C	Mn	Si	P	S	Nb	V
S 235	0.22	1.60	1.50	1.05	1.05	-	-
S 275	0.25	1.60	1.50	1.05	1.05	-	-
S355	0.23	1.60	1.50	1.05	1.05	0.003- 0.10	0.003- 0.10

Further info refer Mittal Steel Data Sheet A3.4

### MECHANICAL PROPERTIES

GRADE	TENSILE STRNGTH (Mpa)	MINIMUM YIELD STRESS (Mpa) FOR THICKNESS t (mm)				MIN ELONGATION (%) ON A GAUGE LENGTH OF			CHARPY V-NOTCH IMPACT TEST		
		3<t<16	16<t<40	40<t<63	63<t<100	50 mm	200 mm	5.65/So	TEST TEMP c	MIN AVE ENERGY (J)	MAX THICK (mm)
43 A	430-580	275	265	255	245	-	20	22	-	-	-
43 B	430-580	275	265	255	245	-	20	22	20	27	100
43 C	430-580	275	265	255	245	-	20	22	0	27	100
43 D	430-580	275	265	255	245	-	20	22	-20	27	100
300 WA	450-620	300	300	290	280	24	20	22	-	-	-
300 WC	450-620	300	300	290	280	24	20	22	0	27	100
350 WA	480-650	350	350	340	325	22	18	20	-	-	-
350 WC	480-650	350	350	340	325	22	18	20	0	27	80
50 B	490-640	355	345	340	325	-	18	20	20	27	100
50 C	490-640	355	345	340	325	-	18	20	0	27	100
50 D	490-640	355	345	340	325	-	18	20	-20	27	100
S 275 JR	410-560	275	265	255	245	REFER DATA SHEET A3 , 4 TABLE 4			20	27	100
S 275 JO	410-560	275	265	255	245				-20	27	100
S 275 J2G3	410-560	275	265	25	245				-20	27	-
S 355 J3	490-630	355	345	335	325				0	27	-
S 355 JO	490-630	355	345	335	325				0	27	-
S 355 J2G3	490-630	355	345	335	325				-20	27	-

Further info refer Mittal Steel Data Sheet A3.2 , A3.3 AND A 3.4

### FLATNESS TOLERANCE FOR CARBON STEEL PLATES

THICKNESS t (mm)	TOLERANCE FOR WIDTH w (mm)							
	900<w<1200	1200<w<1500	1500<w<1800	1800<w<2100	2100<w<2400	2400<w<2700	2400<w<2700	2400<w<2700
4.5<t<6	19	24	32	35	38	41	44	48
6<t<10	16	19	24	29	32	35	38	41
10<t<12	14	16	16	19	22	25	29	32
12<t<20	13	14	16	16	19	25	25	29
20<t<25	13	14	16	16	16	19	22	25
25<t<50	13	13	14	14	16	16	16	18
50<t<100	10	11	13	13	13	13	13	16

Flatness is measured as the maximum deviation from a horizontal flat surface. Table shows the permissible deviations from flat for plates up to 4.0 m in length or for any 4.0 m of length plates.