

Cutting conditions for solide steels for bimetal bandsaw blades based on selected cross sections and blade widths

Material	DIN	USA	JIS	Blade sizes (mm)											
				27x0,9 to 34x1,1		41x1,3 to 54x1,6		67x1,6 to 80x1,6							
				071 Serra	072 S Spectra	073 Delta	074 Master	075 Radial	070 Duratec	Vc (m/min)	Vz (cm ² /min)	Vc (m/min)	Vz (cm ² /min)	Vc (m/min)	Vz (cm ² /min)
Recommended blade						solid Ø50-350mm		solid Ø100-500mm		solid Ø400-2000mm					
1.0060	St 60-2	A 572 Gr.65	SM 58	✓	✓					65-70	35-40	60-65	40-45	40-50	20-30
1.0401	C15	1016	S 15C	✓	✓					65-70	35-40	60-65	40-45	40-50	20-30
1.0503	C45	1045	S 45C	✓	✓					68-74	40-45	65-70	45-50	40-55	20-35
1.0570	St 52-3	A572 Gr.50	SM 490	✓	✓					68-74	40-45	65-70	45-50	40-55	20-35
1.1158	Ck25	1025	S25C	✓	✓					68-74	40-45	60-70	45-50	40-55	20-30
1.1221	Ck60	1060	S58C	✓	✓					68-74	40-45	60-70	40-45	35-45	15-25
1.2080	X210Cr12	D3	SKD 1	✓	✓					33-37	10-18	25-35	15-20	15-20	5-10
1.2312	40CrMnMoS 8-6			✓	✓					49-53	22-30	45-50	28-32	25-30	10-15
1.2343	X38CrMoV5-1	H11	SKD 6	✓	✓					41-45	18-24	36-40	22-26	22-30	10-20
1.2363	X100CrMoV5-1	A2	SKD 12	✓	✓					38-42	15-20	30-36	18-22	20-26	8-14
1.2379	X155CrVMo12-1	D2	SKD 11	✓	✓					33-37	10-18	25-35	15-20	15-20	5-10
1.2510	100 MnCrW4	O1	SKS 3	✓	✓					42-46	18-24	36-42	22-26	26-30	12-18
1.2606	X37CrMoW 5-1	H12	SKD 62	✓	✓					42-46	18-24	36-42	22-26	20-28	8-16
1.2714	56 NiCrMoV7	L6	SKT 4	✓	✓					42-46	20-26	40-45	25-30	26-34	12-18
1.2842	90 MnCrV 8	O2		✓	✓					42-45	18-24	36-42	24-28	24-32	12-18
1.3343	S 6-5-2	M2	SKH 51	✓	✓					36-40	16-20	30-35	16-20	26-30	12-18
1.3247	S 2-20-1-8	M42	SKH 59	✓	✓					36-40	16-20	30-35	16-20	26-30	12-18
1.3965	X8CrMnNi 18-8	Nitronic 50		✓	✓	✓	✓	✓	✓	30-32	8-12	26-28	12-18	12-18	4-8
1.4006	X10Cr13	410	SUS410	✓	✓	✓	✓	✓	✓	32-34	12-16	30-34	16-22	20-26	8-14
1.4028	X 20 Cr 13	420	SUS 420J1	✓	✓	✓	✓	✓	✓	36-38	15-20	32-36	18-22	26-30	6-10
1.4125	X105CrMo17	440 C	SUS 440 C	✓	✓	✓	✓	✓	✓	34-37	12-18	28-32	16-18	16-22	6-10
1.4301	X5CrNi 18-10	304	SUS 304	✓	✓	✓	✓	✓	✓	36-38	15-20	32-36	18-22	16-22	6-10
1.4401	X5CrNiMo 17-12-2	316	SUS 316	✓	✓	✓	✓	✓	✓	34-36	14-18	28-32	16-18	16-22	6-10
1.4462	X2VrNiMoN 22-5-3	2205	SUS 329J3L	✓	✓	✓	✓	✓	✓	32-34	10-14	28-32	16-20	16-22	6-10
1.4571	X6 CrNiMoTi17-12-2	316 Ti	SUS 316	✓	✓	✓	✓	✓	✓	32-34	10-14	28-32	16-20	16-22	6-10
1.4841	X15CrNiSi 25-20	314	SUH 310		✓	✓	✓	✓	✓	28-32	8-12	26-30	12-16	14-20	4-8
1.4864	X12NiCrSi 36-16	330	SUH 330		✓	✓	✓	✓	✓	28-32	8-12	26-30	12-16	14-20	4-8
1.4923	X22 CrMoV 12-1				✓	✓	✓	✓	✓	28-32	8-12	26-30	12-16	14-20	4-8
1.4980	X5 NiCrTi 26-15	A286	SUH 660		✓	✓	✓	✓	✓	28-32	8-12	26-30	12-16	14-20	4-8
1.5710	36 NiCr6	(X)3140		✓	✓					48-52	22-28	44-48	28-32	26-34	12-18
1.5755	31 NiCr14	3415	SNC 815	✓	✓					50-54	24-30	46-52	30-36	30-36	14-20
1.6310	20 MnMoNi-5			✓	✓					48-52	22-28	44-48	28-32	26-34	12-18
1.6523	20 NiCrMo2	8620	SNCM 220	✓	✓					50-54	24-30	44-50	30-34	26-34	14-20
1.6546	40 NiCrMo 2-2	8640	SNCM 240	✓	✓					50-54	24-30	44-50	30-34	30-34	10-18
1.6562	40 NiCrMo7	E4340	SNB24-1-5	✓	✓					50-54	24-30	44-50	30-34	30-34	10-18
1.6749	23 CrNiMo 7-4-7			✓	✓					50-54	24-28	44-50	28-32	30-34	10-16
1.6985	28 CrMoNiV 4-9			✓	✓					54-58	28-34	48-54	32-38	36-40	16-22
1.7147	20 MnCr5	5120	SMnC420H	✓	✓					58-62	28-36	52-56	32-38	38-46	18-26
1.7225	42 CrMo4	4140	SCM 440	✓	✓					54-58	28-34	48-54	32-38	36-40	16-22
1.7228	50 CrMo4	4150	SCM 445	✓	✓					56-60	30-36	52-56	34-40	34-40	16-20
1.7335	13CrMo 4-4	A387 Gr. 12	SFVA F 12	✓	✓					62-64	32-38	56-60	36-44	40-46	18-26
1.7707	30 CrMoV9			✓	✓					54-58	28-34	44-50	28-34	28-34	16-20
1.8159	50 CrV4	6150	SUP10	✓	✓					52-54	24-30	52-48	32-38	32-40	12-20
1.8509	41 CrAlMo 7	A 355 Cl. A	SACM 645	✓	✓					42-45	18-24	36-40	22-26	18-24	8-14

Please note:

Above cutting chart refers to average experienced settings. Figures might differ depending on blade type, band saw machine type, condition of the material to be cut (surface, heat treatment, standard, ...) and the required cutting specification (tolerances, service life, ...). Please pay attention that the ultimate service life can only be reached after correct break-in-cutting - DETAILS SEE PAGE 21. If your material is not listed please do not hesitate to contact us for further information - DETAILS SEE PAGE 23