

## Welding Indicator for welding basic materials of different types.

Basic materials (typical materials)	NiCu- alloyings	NiCrFe- alloyings	Heat-resisting CrNi-steels	Stainless CrNiMo-steels	Stainless CrNi-steels	Base metals Cr-steels <sup>3)</sup>	
Alloying type	NiCu30Fe CuNi30Fe	NiCr15Fe NiCr22Mo9Nb	X15CrNiSi25-20 X15CrNiSi20-12	X3CrNiMo17-13-3 X2CrNiMo18-14-3 X10CrNiMoNb18-12	X5CrNi18-10 X2CrNi19-11 X6CrNiNb18-10	X12Cr13 (X 10 Cr13) X6Cr17	
Unalloyed a. low- alloyed steels	P235GH-S500N (HI-StE 500)	CW. 190	CW. 82 B CW. 625	CW. 4332 CW. 82 B CW. 625	CW. 4459 CW. 4332 CW. 4431 CW. 4370 CW. 4430 <sup>1)</sup>	CW. 4459 CW. 4332 CW. 4431 CW. 4370 CW. 4430 <sup>1)</sup>	CW. 4370 CW. 4332 CW. 29/9 <sup>1)</sup>
Creep resistant steels <sup>2)</sup>	16Mo3 (15 Mo 3)	CW. 190	CW. 82 B CW. 625	CW. 4332 CW. 4459 CW. 82 B CW. 625	CW. 4459 CW. 4370 CW. 82 B CW. 625	CW. 4459 CW. 4370 CW. 82 B CW. 625	CW. 4370 CW. 4332 CW. 82 B
	13CrMo4-5 G17CrMo9-10 X20CrMoV12-1	CW. 190	CW. 82 B	CW. 82 B	CW. 82 B	CW. 82 B	CW. 82 B
Ferritic Cr steels <sup>3)</sup>	X12Cr13 X6Cr17	CW. 190	CW. 82 B CW. 625	CW. 4332 CW. 4459 CW. 82 B	CW. 4459 CW. 4332 CW. 4370	CW. 4459 CW. 4332 CW. 4370	CW. 4459 CW. 4332 CW. 4370
CrNi- steels	X5CrNi18-10 X2CrNi19-11 X6CrNiNb18-10	CW. 190	CW. 82 B CW. 625	CW. 4332 CW. 4459	CW. 4316 CW. 4551 CW. 4430 CW. 4576	CW. 4316 CW. 4551	
CrNiMo- steels	X3CrNiMo17-13-3 X2CrNiMo18-14-3 X10CrNiMoNb18-12	CW. 190	CW. 82 B CW. 625	CW. 4332 CW. 4459	CW. 4430 CW. 4576		
Heat- resisting steels	X15CrNiSi25-20 X15CrNiSi20-12	CW. 190	CW. 82 B CW. 625	CW. 4323 CW. 4519 CW. 82 B			
NiCrFe- Alloyings	NiCr15Fe NiCr22Mo9Nb	CW. 190	CW. 82 B CW. 82 B				

**CARBO-WELD Type = CW.**

- <sup>1)</sup> Take into account all elements and the position on the Schaeffler diagram!
- <sup>2)</sup> Attention should be made to preheating, heat treatment and interpass temperature!
- <sup>3)</sup> Preheating should be considered in all cases.

Old material names are indicated in parentheses, e.g. (15 Mo 3).