

Trade name:		Brocadur CCZ	Brocadur CCB	Brocadur CCNB	Brocadur CCNB-EH	Brocadur NIBE	Brocadur B20	Brocadur CNCS
Chemical composition (in % of weight)	Cr	0.8	-	-	-	-	-	0.4
	Zr	0.1	-	-	-	-	-	-
	Co	-	2.0	1.0	1.0	-	0.4	-
	Ni	-	-	1.0	1.0	1.7	0.4	2.4
	Be	-	0.5	0.5	0.5	0.3	2.0	-
	Al	-	-	-	-	-	-	-
	Si	-	-	-	-	-	-	0.7
	P	-	0.2	-	-	-	-	-
	Others	max. 0.2	max. 0.2	max. 0.2	max. 0.2	max. 0.2	max. 0.2	max. 0.2
	Cu	remainder	remainder	remainder	remainder	remainder	remainder	remainder
Mechanical properties (standard values at 20° C):								
Hardness Brinell	HB 30	135-170	230-260	230-260	265-285	210-250	320-370	180-220
Tensile strenght	N/mm ²	380-470	720-820	720-820	750-850	700-760	1200-1300	500-700
0,2% - yield strenght	N/mm ²	320-410	660-740	660-740	700-760	650-700	950-1050	450-600
Elongation A 5	%	14-18	10-14	10-14	8-12	10-14	2-5	min. 5
Modules of elasticity	N/mm ²	125 x 10 ³	135 x 10 ³	135 x 10 ³	135 x 10 ³	135 x 10 ³	135 x 10 ³	115 x 10 ³
Softening temperature	°C	500	480	480	480	480	300	480
Physical properties (Standard values at 20° C):								
Specific weight	g/cm ³	8.9	8.8	8.8	8.8	8.8	8.3	8.7
Thermal conductivity	W/mK	320	250	250	260	290	120	160
Electrical conductivity	% IACS	80 (47 MS/m)	48 (28 MS/m)	48 (28 MS/m)	50 (29 MS/m)	69 (40 MS/m)	26 (15 MS/m)	48 (28 MS/m)
Thermal expansion coefficient	20-300C	17.0 x 10 ⁻⁶ /K	17.2 x 10 ⁻⁶ /K	17.2 x 10 ⁻⁶ /K	17.2 x 10 ⁻⁶ /K	17.2 x 10 ⁻⁶ /K	17.0 x 10 ⁻⁶ /K	16.0 x 10 ⁻⁶ /K
Forms of delivery:								
Round drawn		o	o	o	o	o	o	o
Round forged		o	o	o	o	o	o	o
Flat, square, hexagon drawn		o	o	o	o	o	o	o
Flat, square forged		o	o	o	o	o	o	o
Forged plates		o	o	o	o	o	o	o
Cut from forged round bar / plate		o	o	o	o	o	o	o
Cut from premachined round bar / plate		o	o	o	o	o	o	o
Tube		o						

Note: N/mm² = 1MPa

1MS/m = 1 m/Ωmm²

100% IACS = 58 MS/m