ADVANCED

BRAZING PRODUCTS™

PRODUCT CATALOGUE

INNOVATIVE BRAZING SOLUTIONS

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ADVANCED
BRAZING PRODUCTS™

About Us

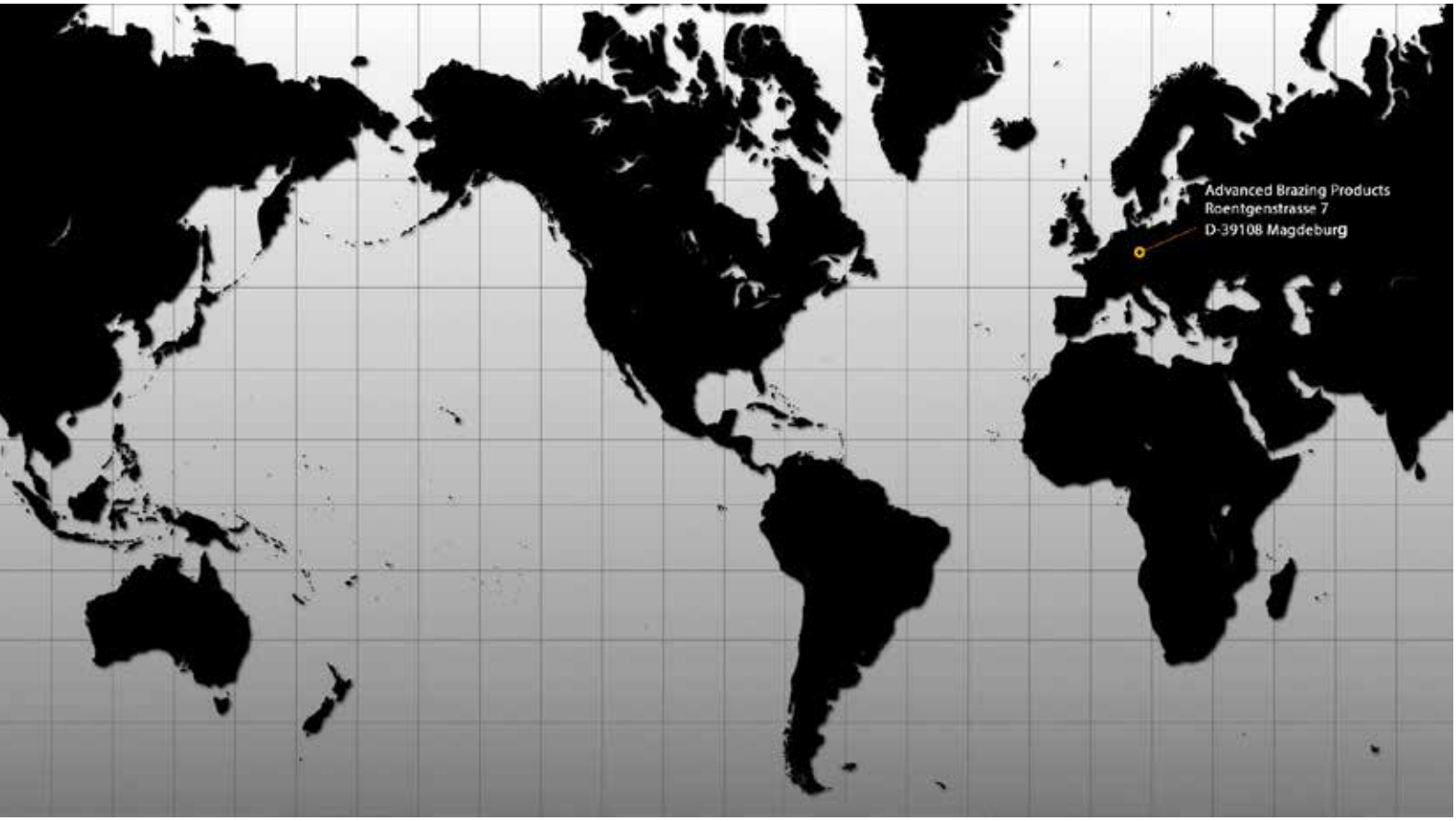
We are a global team of brazing experts acting locally to provide our customers with advanced brazing products and applicationi knowhow. Our team consists of experienced professionals with strong backgrounds in all areas of brazing technology. Our offer to the customer ranges from product development, application engineering, process design, training and product manufacturing.

Our focus is on advanced brazing soluions, products and services that support our customers in achieving optimal, repeatable and economical brazing results.

We guaranetee that our customers will save money with our coste effective products and solutions.

Our Locations

Our main office is located in Magdaburg, Germany. We have several distributors in Europe and Africa. We plan to add new distributors and sales offices each year. Please check our website for the most up to date location list and contacts.



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Technical Resources

Structural / Chemical Anlysis

- Optical microscopy
- Electron microscopy
- X-ray diffraction analysis
- ICP-AES

Structural / Chemical Anlysis

- Creep properties
- Tensile and Yields Testing
- Hardness
- DTA (Differential Thermal Analysis)

Brazing Trials

- Flame Brazing
- Induction Brazing
- Furnace Brazing

Brazing Product Development / Protoyping

- New Pastes Developments
- Alloy Development and Protoyping

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Cadmiumfreie Silberlote
Silver Alloys Without Cadmium

Bezeichnung Products References	Zusammensetzung / Composition in Gew. %					Schmelzbereich Melting Range °C	Arbeitstemp. Working Temp. °C	Dichte Density g/cm3	Zugfestigkeit Tensile Strength N/mm2	Internernationale Normen / International Norms			
	Ag	Cu	Zn	Sn	Sonstige Others					AWS A5.8	EN 1044	DIN 8513	EN 17672
APB 01	1	60	39	-	-	890-900	890	8,3	350	-	-	-	-
APB 20	20	44	36	-	0,2 % Si	690-810	800	8,7	330	-	AG 206	L-Ag 20	-
APB 25	25	41	34	-	-	700-800	790	8,8	420	-	AG 205	L-Ag 25	Ag 225
APB 25 Sn	25	40	33	2	-	680-760	750	8,7	420	B Ag 37	AG 108	L-Ag 25Sn	Ag 125
APB 30	30	38	32	-	-	650-750	740	8,8	505	B Ag 20	AG 204	L-Ag 30	Ag 230
APB 30 Sn	30	36	32	2	-	680-765	750	8,9	460	-	AG 107	L-Ag 30Sn	Ag 130
APB 33	33	34	33	-	-	700-740	735	8,9	535	-	-	-	-
APB 34 Sn	34	36	27	3	-	630-730	725	9	420	-	AG 106	L-Ag 34Sn	Ag 134
APB 35	35	32	33	-	-	680-750	740	9	430	B Ag 35	-	-	Ag 235
APB 38 Sn	38	31	29	2	-	650-720	700	8,8	430	B Ag 34	-	-	Ag 138
APB 40 Ni	40	30	28	-	Ni 2	670-780	770	8,9	350	B Ag 4	-	-	Ag 440
APB 40 Sn	40	30	28	2	-	640-700	690	9,1	430	B Ag 28	AG 105	L-Ag 40Sn	Ag 140
APB 44	44	30	26	-	-	675-735	725	9,1	545	-	AG 203	L-Ag 44	Ag 244
APB 45 Sn	45	27	25	3	-	640-680	670	9,2	350	B Ag 36	AG 104°	L-Ag 45Sn	Ag 145
APB 49 Ni Mn	49	16	23	-	Mn 7,5 Ni 4,5	625-705	695	8,9	350 T	B Ag 22	AG 502	L-Ag 49	Ag 449
APB 49 Ni Mn Special	49			-	Mn 2,5 Ni 0,5	670-690	685	9	350 T	-	-	-	-
APB 50 Ni	50	20	28	-	Ni 2	660-750	740	9	450	B Ag 24	-	-	Ag 450
APB 55 Sn	55	21	22	2	-	620-660	650	9,4	390	-	AG 103	L-Ag 55Sn °	Ag 155
APB 56 Sn	56	22	17	5	-	620-650	645	9,5	410	B Ag 7	AG 102	-	Ag 156

Silberhartlote für besondere Anwendungen
Silver Brazing Alloys For Special Applications

Bezeichnung Products References	Zusammensetzung / Composition in Gew. %					Schmelzbereich Melting Range °C	Arbeitstemp. Working Temp. °C	Dichte Density g/cm3	Zugfestigkeit Tensile Strength N/mm2	Internernationale Normen / International Norms			
	Ag	Cu	Zn	Sn	Sonstige Others					AWS A5.8	EN 1044	DIN 8513	EN 17672
APB 60 A Sn	60	30	-	10	-	600-720	710	-	420	B Ag 18	Ag 402	-	Ag 160
APB 60 Sn	60	23	14	3	-	620-685	675	9,6	420	-	Ag 101	L-Ag 60Sn	-
APB 72	72	28	-	-	-	779	779	10	350	B Ag 8	Ag 401	-	Ag 272
APB 72 Zn	72		28			710-730	720	9,8		-	-	-	-

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Cadmiumhaltige Silberlote
Alloys With Cadmium *

Bezeichnung Products References	Zusammensetzung / Composition in Gew. %					Schmelzbereich Melting Range °C	Arbeitstemp. Working Temp. °C	Dichte Density g/cm3	Zugfestigkeit Tensile Strength N/mm2	Internationale Normen / International Norms			
	Ag	Cu	Zn	Cd	Sonstige Oth-					AWS A5.8	EN 1044	DIN 8513	EN 17672
APB 2020	20	40	25	15	-	605-765	750	8.8	380	-	AG 309	L-Ag20 Cd	-
APB 2520	25	30	27.5	17.5	-	605-720	710	8.8	420	BAg-33	AG 307	L-Ag25Cd	Ag 326
APB 3020	30	28	21	21	-	600-690	680	9.1	535	BAg-2a	AG 306	L-Ag30Cd	Ag 330
APB 4020	40	19	21	20	-	595-630	610	9.3	505	-	AG 304	L-Ag40Cd	Ag 340

*** restricted in EU for limited applications.**

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Hartlote für Kupfer und Kupferbasiswerkstoffe
Brazing Alloys For Copper And Copper Based Base Materials

Bezeichnung Products References	Zusammensetzung / Composition in Gew. %				Schmelzbereich Melting Range °C	Arbeitstemp. Working	Dichte Density	Zugfestigkeit Tensile Strength	Internernationale Normen / International Norms			
	Ag	Cu	P	Others					AWS A5.8	EN 1044	DIN 8513	EN 17672
ABP 95	-	95	5	-	710-920		8,2	250	-	-	-	-
ABP 94	-	94	6	-	710-880		8,1	250	-	CP 203	L-CuP6	CuP 179
ABP 93	-	93	7	-	710-820		8,1	250	BCup-2	CP 202	L-CuP7	CuP 180
NanoPhos™ ABP 93		93	7	-	710-820		8,1	250	BCup-2	CP 202	L-CuP7	CuP 180
ABP 7Sn7	-	86	7	Sn 7	645-695		8	250	-	CP 302	-	CuP 386
ABP 92	-	92	8	-	710-750		8	250	-	CP 201	L-CuP8	CuP 182
NanoPhos™ ABP 92	-	92	8	-	710-750		8	250	-	CP 201	L-CuP8	CuP 182
ABP CuPAg 0,4	0,4	93,6	6	-	710-740		8,1	250	-	-	-	-
ABP 1	1	92,5	6,5	-	645-810		-	8,1	-	-	-	-
NanoPhos™ ABP 1	1	92,5	6,5	-	645-810		-	8,1	-	-	-	-
ABP 2	2	91,8	6,2	-	645-800		8,1	250	BCup-6	CP 105	L-Ag2P	CuP 279
NanoPhos™ ABP 2	2	91,8	6,2	-	645-800		8,1	250	BCup-6	CP 105	L-Ag2P	CuP 279
ABP 5	5	88,8	6,2	-	645-810		8,2	250	BCup-3	CP 104	L-Ag5P	CuP 281
NanoPhos™ ABP 5	5	88,8	6,2	-	645-810		8,2	250	BCup-3	CP 104	L-Ag5	CuP 281
ABP 15	15	80	5	-	645-800		8,4	250	BCup-5	CP 102	L-Ag15 P	CuP 284
NanoPhos™ ABP15	15	80	5	-	645-800		8,4	250	BCup-5	CP 102°	L-Ag15P	CuP 284
ABP 18	18	75	7	-	645-670		8,6	250	-	CP 101	-	CuP 286

NanoPhos™ technologie sind Kupferphosphorlote die keine Porosität in der Lötstelle verursachen, da sie spritzerfrei und ohne Phosphorabbrand aufmelzen.

NanoPhos™ technologies are copper phosphorus alloys without foaming, boiling, sparkling and loss of phosphorus resulting in porosity in brazed joints.

NanoPhos™ technology with no loss of phosphorus, not boiling or sparking of the alloy in the brazed joint. Result is 50% few leaks.

NanoPhos™ technologie spritzerfrei und ohne Phosphorabbrand resultat keine Porositöt in der Lötstelle.

Standard technology with loss of phosphorus and sparkling resulting in increased leakage.

Starndard technologie mit Spritzer, Phosphorabbrand und Porositöt.

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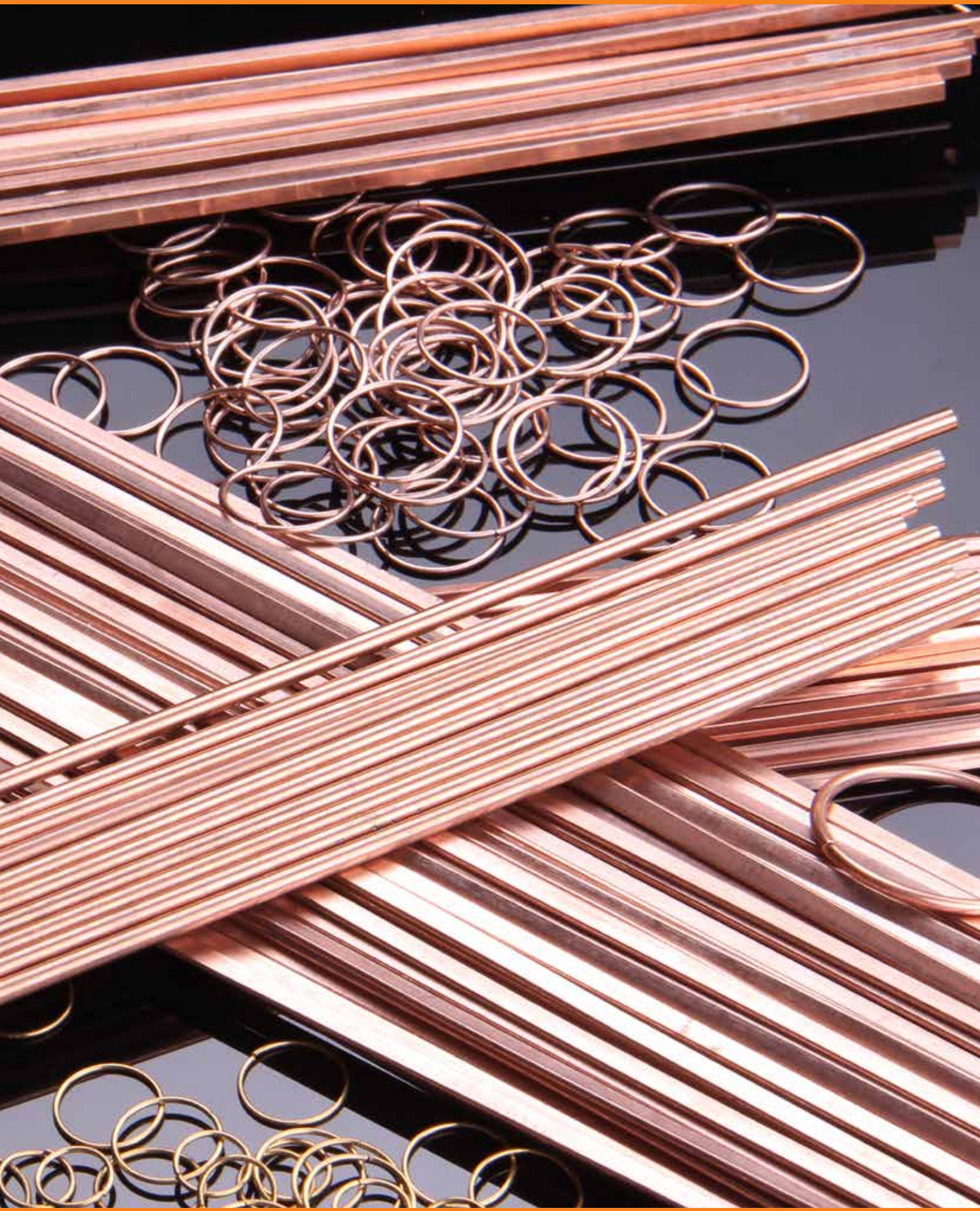

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Messinghartlote
Brass Alloys

Bezeichnung Products References	Zusammensetzung / Composition in Gew. %					Schmelzbereich Melting Range	Arbeitstemp. Working	Dichte Density	Zugfestigkeit Tensile Strength	Internernationale Normen / International Norms			
	Cu	Zn	Ni	Si	Others					AWS A5.8	EN 1044	DIN 8513	EN 17672
ABP 773	48	41,8	10	0,2	-	920-935	930	8,7	480	RBCuZn D	CU 305	L-CuN10Zn42	Cu 773
ABP 470A			-	0,25	-	890-900	900	8,4	370	-	CU 301	L-CuZn40	Cu 470a
ABP MSMnSn	59		-	0,15	Mn0,8 -Sn0,8	865	865	8,4	380	RBCuZnC	-	L-CuZn39Sn	-
ABP MSSn1	59		-	0,25	Sn 1	870-890	885	8,4	400	RBCuZn A	CU 302	-	-
ABP MS680	58	39,6	0,5	0,15	Mn0,8 - Sn 0,95	870-890					CU 306		Cu 680

Aluminiumlote
Aluminium Alloys

Bezeichnung Products References	Zusammensetzung / Composition in Gew. %				Schmelzbereich Melting Range °C	Arbeitstemp. Working Temp. °C Arbeitstemp. Working Temp. °C	Dichte Density g/cm3	Zugfestigkeit Tensile Strength N/mm2	Internernationale Normen / International Norms			
	Al	Si	Zn	Ag					AWS A5.8	EN 1044	DIN 8513	BS 1845
ABP AL12	88	12	-	-	575-585	580	2,65	125	BAlSi-4	AL104	L-Al Si12	B/SB AL88Si
ABP AL2	2	-	98	-	375-388	380	7,04	-	-	-	-	-
ABP AL22	22	-	78	-	440-470	450	6,47	-	-	-	-	-
ABP AL15	15	-	85	-	382-450	450	5,73	-	-	-	-	-
ABP AL12 FCW	88	12	-	-	575-585	580	2,65	125	BAlSi-4	AL104	L-AlSi12	B/SBAL-88Si
ABP AL2 FCW	2	-	98	-	375-388	380	7,04	-	-	-	-	
ABP AL15 FCW	15	-	85	-	382-450	450	5,73	-	-	-	-	
ABP AL22 FCW	22	-	78	-	440-470	450	6,47	-	-	-	-	



Flussmittel gefüllte Aluminiumlote
Flux Cored Aluminium Alloys

Bezeichnung Products References	Zusammensetzung/ CompositioninGew.%				Schmelzbereich MeltingRange °C	Arbeitstemp. Working temp.	Dichte Density g/cm3	Zugfestigkeit TensileStrength N/mm2	InternernationaleNormen/ InternationalNorms			
	Al	Si	Zn	Ag					AWS A5.8	EN 1044	DIN 8513	EN 17672
ABP AL12 FCW	88	12	-	-	575-585	580	2,65	125	BAl-Si-4	AL104	L-AlSi12	B/SBAL-88Si
ABP AL2 FCW	2	-	98	-	375-388	380	7,04	-	-	-	-	
ABP AL15 FCW	15	-	85	-	382-450	450	5,73	-	-	-	-	
ABP AL22 FCW	22	-	78	-	440-470	450	6,47	-	-	-	-	
ABP ALAG FCW	18	-	78	4	420-460	450	7,47	-	-	-	-	

Foils - Copper Phosporus

Bezeichnung Products References	Zusammensetzung / Composition in Gew. %				Schmelzbereich Melting Range °C	Arbeitstemp. Working Temp.	Dichte Density	Zugfestigkeit Tensile Strength N/mm2	Internationale Normen / International Norms			
	Ag	Cu	P	Others					AWS A5.8	EN 1044	DIN 8513	EN 17672
ABP CuPAg5	5	88,8	6,2	-	645-810	800	8,2	250	BCup-3	CP 104	L - Ag 5 P	Cu P 281
ABP CuPAg15	15	80	5	-	645-800	790	8,4	250	BCup-5	CP 102	L - Ag 15 P	Cu P 284
NanoPhos™ CuPAg15	15	80	5	-	645-800	790	8,4	250	BCup-5	CP 102 °	L - Ag 15 P	Cu P 284

Foils - Silver Alloys

Bezeichnung Products References	Zusammensetzung / Composition in Gew. %					Schmelzbereich Melting Range °C	Arbeitstemp. Working Temp. °C	Zugfestigkeit Tensile Strength N/mm2	Internernationale Normen / International Norms			
	Ag	Cu	Zn	Sn	Otros Others Autres				AWS A5.8	EN 1044	DIN 8513	EN 17672
ABP 25 Sn	25	40	33	2	-	680-760	8,7	420	B Ag 37	Ag 108	L-Ag 25Sn	Ag 125
ABP 30 Sn	30	36	32	2	-	680-765	8,9	460	-	Ag 107	L-Ag 30Sn	Ag 130
ABP 34 Sn	34	36	27	3	-	630-730	9	420	-	Ag 106	L-Ag 34Sn	Ag 134
ABP 38 Sn	38	31	29	2	-	650-720	8,8	430	B Ag 34	-	-	Ag 138
ABP 40 Ni	40	30	28	-	Ni 2	670-780	8,9	350	B Ag 4	-	-	Ag 440
ABP 40 Sn	40	30	28	2	-	640-700	9,1	430	B Ag 28	Ag 105	L-Ag 40Sn	Ag 140
ABP 45	45	30	25	-	-	660-740	9,2	410	B Ag 5	-	-	Ag 245
ABP 45 Sn	45	27	25	3	-	640-680	9,2	350	B Ag 36	Ag 104°	L-Ag 45Sn	Ag 145
ABP 49 Ni Mn	49	16	23	-	Mn 7,5 Ni 4,5	625-705	8,9	350 T	B Ag 22	Ag 502	L-Ag 49	Ag 449
ABP 49 Ni Mn L	49	27,5	20,5	-	Mn 2,5 Ni 0,5	670-690	9	350 T	-	-	-	-
ABP 49 Ni Mn L - CU	49	27,5	20,5	-	Mn 2,5 Ni 0,5	670-690	9	350 T	-	-	-	-
ABP 50 Ni	50	20	28	-	Ni 2	660-750	9	450	B Ag 24	-	-	Ag 450
ABP 55 Sn	55	21	22	2	-	620-660	9,4	390	-	Ag 103	L-Ag 55Sn °	Ag 155
ABP 56 Sn	56	22	17	5	-	620-650	9,5	410	B Ag 7	Ag 102	-	Ag 156
ABP 72	72	28	-	-	-	779	10	350	B Ag 8	Ag 401	-	Ag 272

Range of Sizes:
Thickness from .15mm up to .6mm
Width: From 2mm up to 125mm

Please contact us for further details.

ADVANCED
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Lotformteile: Ringe
Brazing Alloy Pre-Forms: Rings

Alloy Group	Min Wire ID	MAx Wire ID	Min Ring ID	MAx Ring ID
Silver	.8mm	3mm	8mm	35mm
Copper Phos-phorus / Silver	1.2mm	3.0mm	8mm	35mm
Aluminium Solid	1.0mm	4.0mm	8mm	35mm
Flux Cored	1.5mm	3.0mm	8mm	35mm

Lotformteile: Stanzteile
Brazing Alloy Pre-Forms: Stamped Parts

Alloy Group	Min Foil Thicknes	Max Foil Thickness	Min Stamping Width	Max Stamping Width
Silver	0.1mm	3mm	2mm	125mm
Copper Phos-phorus / Silver	0.3mm	3.0mm	2mm	100mm
Aluminium	0.2mm	4.0mm	2mm	300mm
Copper	0.05mm	3.0mm	2mm	300mm

Lotpasten (Cu/Ni)
Brazing Pastes (Cu/Ni)

Bezeichnung Products References	Zusammensetzung / Composition in Gew. %				Schmelzbereich Melting Range °C	Internernationale Normen / International Norms		
	Cu	Sn	Ni	Otros Others Autres		AWS A5.8	EN 1044	EN 17672
ABP CU 100	100			-	1085	BCu-3	Cu 102	Cu 102
ABP CU 97	94	6		-	910-1040	-	Ag 107	Ag 130
ABP CU 97 Ni 3	97		3	-	1085-1100	-	Ag 106	Ag 134

Bezeichnung Products References	Zusammensetzung / Composition in Gew. %							Schmelzbereich Melting Range °C	Internernationale Normen / International Norms		
	Nii	Cr	Si	B	Fe	C	P		AWS A5.8	EN 1044	EN 17672
ABP BNi-1	Rem.	14	4,5	3,1	4,5	0,75	0,02	980 - 1060	Ni 600	NI 101	BNi-1
ABP BNi-1A	Rem.	14	4,5	3,1	4,5	0,06	0,02	980 - 1070	Ni 610	NI 1A1	BNi-1a
ABP BNi-9	Rem.	15		3,6	1,5	0,06	0,02	1055	Ni 612	NI 109	BNi-9
ABP BNi-2	Rem.	7	4,5	3,12	3	0,06	0,02	970 - 1000	Ni 620	NI 102	BNi-2
ABP BNi3	Rem.		4,5	3,12	0,5	0,06	0,02	980 - 1040	Ni 630	NI 103	BNi-3
ABP BNi-4	Rem.		3,5	1,85	1,5	0,06	0,02	980 - 1070	Ni 631	NI 104	BNi-4
ABP BNi-5	Rem.	19		0,03		0,06	0,02	1080 - 1135	Ni 650	NI 105	BNi-5
ABP BNi-6	Rem.						11	875	Ni 700	NI 106	BNi-6
ABP BNi-7	Rem.	14	0,1	0,02	0,2	0,06	10,1	890	Ni 710	NI 107	BNi-7
ABP BNi-12	Rem.	25	0,1	0,02	0,2	0,06	10	880 - 950	Ni 720	NI 112	BNi-12

For aluminium products please see our BTE Aluminium products guide.

ADVANCED
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Hartlotflussmittel
Brazing Fluxes

Bezeichnung Products References	Wirktemp. Activity Range	AWS-FB	EN 1045	Description
ABP Advanced Clean™ BRASS PF	750-1050	FB 3D	FH 21	Non-Toxi Brass Alloy Flux
ABP S500 PF / FS / DF	450-800	FB 3A	FH 10	Excellent Medium Temp Flux
ABP L 460 PF / FS / DF	> 460	FB 3K	FH 21	Excellent Low Temp Flux
ABP Advanced Clean™ L PF / FS / DF	400-850	FB 3A	FH 10	Non-Toxic Low Temp Flux
ABP Advanced Clean™ S PF / FS / DF	450-900	FB 3A	FH 10	Non-Toxic Medium Temp Flux
ABP Advanced Clean™ HT PF / FS / DF	500-990	FB 3A	FH 10	Non-Toxic High Temp Flux
ABP I-85 Advanced Clean™ FS / DF	500-990	FB 3A	FH 10	Non-Toxic Flux Automated Carbide Tool Production
ABP ALICOR PF / FS / DF	400-650	FB 3C	FL 10	Corrosive Aluminium Flux
ABP ALINOC PF / FS / DF	577-610		FL 20	Non-Corrosive Aluminium Flux
SPECIAL B PS/AF	450-950		FH 12	Brown Flux

For aluminium products please see our BTE Aluminium products guide.

Advanced Clean™ is the newest development is boric acid free fluxes.
Note: DF=Dispensable Flux / SF=Water Based Slurry Flux / PF=Powder Flux

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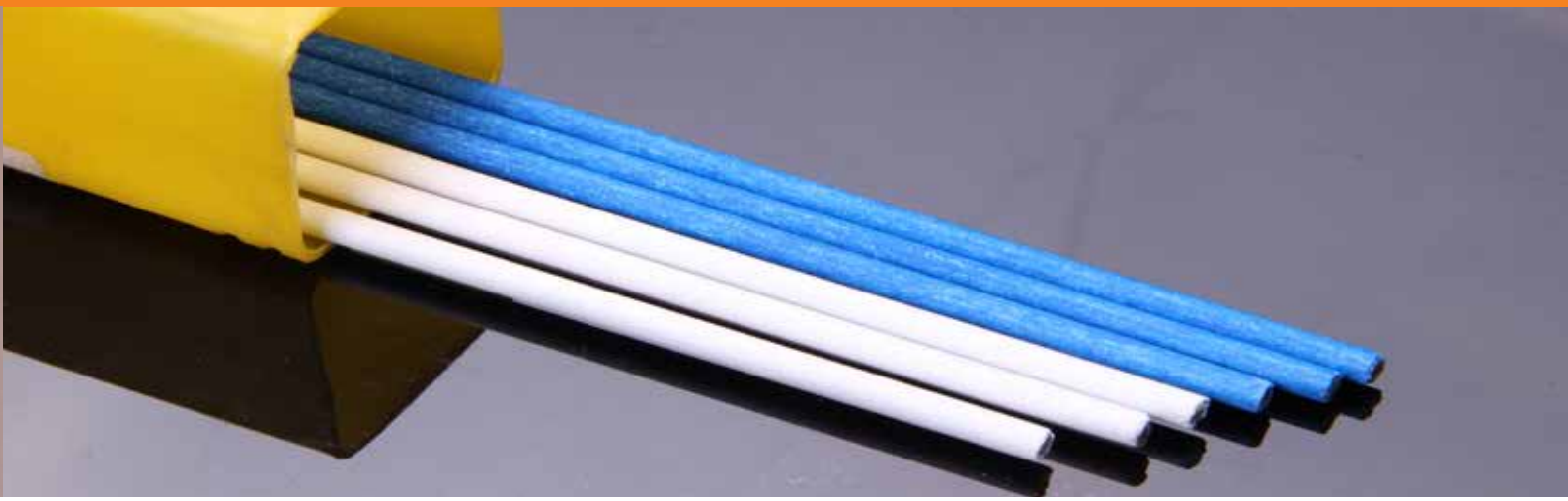

Flussmittelumhüllte Lotstäbe
Flux Coated Rods

Coating Type	Activity Range C°	AWS-FB	EN 1045	Description
ABP Advanced Clean™ BRASS PW	750-1050	FB 3D	FH 21	Non-Toxic Brass Alloy Flux
ABP Advanced Clean™ L Flexible	400-850	FB 3A	FH 10	Non-Toxic Low Temp Flux
ABP Advanced Clean™ L Non-Flexible	400-850	FB 3A	FH 10	Non-Toxic Low Temp Flux
ABP Advanced Clean™ HT Flexible	500-990	FB 3A	FH 10	Non-Toxic High Temp Flux
ABP Advanced Clean™ HT Non-Flexible	500-990	FB 3A	FH 10	Non-Toxic High Temp Flux
ABP Advanced Clean™ L Non-Flexible	400-850	FB 3A	FH 10	Non-Toxic Low Temp Flux
ABP S500 Flexible	450-800	FB 3A	FH 10	Excellent Medium Temp Flux
ABP S500 Non-Flexible	450-800	FB 3A	FH 10	Excellent Medium Temp Flux

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