

**BLUEBRAZE BRAZING ALLOYS.
MORE EFFICIENCY.
SAME QUALITY.**

**+
MORE
BRAZING
ALLOY**

**LESS
SILVER**



BRAZETEC BlueBraz

Less silver! Same brazing temperature!
Same strength! More brazing alloy!

Decades of experience and successful development work formed the basis for a globally unique innovation in the field of silver brazing alloys – the result: **BrazeTec BlueBraz**!

For years, we have been offering a greater independence from the precious metals market and increased planning reliability thanks to a reduced silver content in our brazing alloys. The quality and processing temperature remain the same.

Significantly more brazing operations with the same amount of material.

/ Less silver: up to minus 21%.

Thanks to the significantly reduced silver content of our BrazeTec BlueBraz brazing alloys, you are now less dependent on fluctuations in silver prices on the precious metals market and can plan your material costs with greater certainty.

For the tool industry, we offer our massive brazing alloy BrazeTec BlueBraz 2810 as well as our sandwich alloys BrazeTec BlueBraz 28/Cu, BrazeTec BlueBraz 28/Cu^{plus}.

For plant engineering and refrigeration and air conditioning technology, the brazing alloys BrazeTec BlueBraz 3510, BrazeTec BlueBraz 3010, and BrazeTec BlueBraz 2410 are available as alternatives to the well-known AgCuZnSn-based silver brazing alloys.

If you are interested, you will find the delivery forms and further technical data in the following tables.

/ Same processing properties:

Design, processes, and processing remain unchanged. When developing BrazeTec BlueBraz, the top priority, in addition to reducing silver content, was to retain the important material properties of standard brazing alloys.

The functionality of BrazeTec BlueBraz has been confirmed in extensive tests and trials. For you as a customer, this means that designs or processes do not need to be changed in general. Processing continues as usual.

/ More brazing alloy around six percent, more brazing material per kilogram.

Like gold, silver has a high density. Thanks to the lower silver content of BrazeTec BlueBraz, the density of our new brazing alloys is reduced.

This means that you get up to five meters more brazing material per kilogram. In future, you will be able to carry out around six percent more brazing with the same amount of material or, conversely, save on material costs – permanently!

We will be happy to advise you on your specific application and are available to provide you with advice and support from our application technology team.



Product Name	Reduction in Silver Content *	Typical Fields of Application
Massive Brazing Alloys		
BrazeTec BlueBraz 3510	- 10 w.-%	HVACR-Industry
BrazeTec BlueBraz 3010	- 10 w.-%	HVACR-Industry
BrazeTec BlueBraz 2810	- 21 w.-%	Tooling Industry
BrazeTec BlueBraz 2410	- 10 w.-%	HVACR-Industry
BrazeTec BlueBraz 2010	- 10 w.-%	HVACR-Industry
Sandwich Alloys		
BrazeTec BlueBraz 28/Cu	- 10.5 w.-%	Tooling Industry
BrazeTec BlueBraz 28/Cu ^{plus}	- 10.5 w.-%	Tooling Industry

*) Brazing filler metal quantity depending on the lower density of BrazeTec BlueBraz, compared to standard brazing filler metals BrazeTec 4576, BrazeTec 4076, BrazeTec 3476, and BrazeTec 3076, as well as tool brazing filler metals BrazeTec 4900, BrazeTec 49/Cu, and BrazeTec 49/Cu^{plus}.

Comparison of Tooling Alloys with silver-reduced solders BrazeTec BlueBraz Brazing Alloys

Product Name	Composition in w. %						Melting Range acc. to DSC app.	Brazing Temperature min.	Shear Strength ^{*)} min.	Density	ISO 17672	Delivery Forms			
	Ag	Cu	Zn	Mn	Ni	In	in °C	in °C	in MPa	in g/cm ³					
BrazeTec 4900	49	16	23	7.5	4.5	-	680 - 705	690	250	8.9	Ag449	•	•	•	•
BrazeTec 4900 A	49	27.5	20.5	2.5	0.5	-	670 - 720	710	240	8.9	-	•	•	•	•
BrazeTec 5081	50	20	28	-	2	-	670 - 730	700	230	9.2	Ag450	•	•	•	•
BrazeTec BlueBraz 2810	28	39	20	10	1	2	680 - 760	710	250	8.7	-	•	•	•	•
Sandwich Alloys ^{*)}															
BrazeTec 49/Cu	49	27.5	20.5	2.5	0.5	-	670 - 720	710	150	9.0	-	-	-	•	•
BrazeTec BlueBraz 28/Cu	28	39	20	10	1	2	680 - 760	710	150	8.7	-	-	-	•	•
BrazeTec 49/Cu ^{plus}	49	27.5	20.5	2.5	0.5	-	670 - 720	710	180	9.0	-	-	-	•	•
BrazeTec BlueBraz 28/Cu ^{plus}	28	39	20	10	1	2	680 - 760	710	180	8.7	-	-	-	•	•

^{*)} Measured acc. to BrazeTec Standard, composite: 1.2210 & K10.

^{*)} The information on the composition of sandwich alloys refers exclusively to the brazing alloy layer.

Comparison of **BrazeTec Silver Brazing Alloys**, cadmium-free with silver-reduced **BrazeTec BlueBraz** Silver Brazing Alloys

Product Name	Composition in w. %							Melting Range acc. to DSC app. in °C	Brazing Tempe- rature min. in °C	Shear Strength Acc. DIN EN 12797 in MPa		Density in g/cm³	ISO 17672	Delivery Forms			
	Ag	Cu	Zn	Mn	Sn	In	Si			S 235	E 295			30	III	100	gear
BrazeTec 4576	45	27	25.5	-	2.5	-	-	645 - 695	695	350	430	9.1	Ag145	•	•	•	•
BrazeTec BlueBraz 3510	35	32.6	20	10	2	-	0.4	680 - 700	700	320	420	8.6	-	•	•	-	-
BrazeTec 4076	40	30	28	-	2	-	-	665 - 725	725	350	430	9.0	Ag140	•	•	•	•
BrazeTec BlueBraz 3010	30	37.5	20	10	2	-	0.2	690 - 730	730	350	430	8.4	-	•	•	-	-
BrazeTec 3476	34	36	27.5	-	2.5	-	-	655 - 745	745	360	480	8.9	Ag134	•	•	•	•
BrazeTec BlueBraz 2410	24	43.7	20	10	2	-	0.3	690 - 750	750	330	480	8.4	-	•	•	-	-
BrazeTec 3076	30	36	32	-	2	-	-	675 - 760	760	360	480	8.8	Ag130	•	•	-	•
BrazeTec BlueBraz 2010	20	42.5	25	10	-	2	0.2	710 - 765	765	300	440	8.3	-	•	•	-	-



Less silver! Same temperature! More Brazing Alloy!

Product Name	More Brazing Alloy Quantity	More Brazing Alloy as Wire e.g. Ø 1.5 mm	More Brazing Alloy as Strip e.g. 2.5 mm x 0.3 mm
	in w.-%/kg *	in m/kg *	in m/kg *
Massive Brazing Alloys			
BrazeTec BlueBraz 3510	+ 5.8	+ 3.6	-
BrazeTec BlueBraz 3010	+ 7.1	+ 4.5	-
BrazeTec BlueBraz 2810	+ 2.3	+ 1.5	+ 3.4
BrazeTec BlueBraz 2410	+ 6.0	+ 3.8	-
BrazeTec BlueBraz 2010	+ 6.0	+ 3.9	-
Sandwich Alloys			
BrazeTec BlueBraz 28/Cu	+ 3.5	-	+ 5.1
BrazeTec BlueBraz 28/Cu ^{plus}	+ 3.5	-	+ 5.1

*) Brazing filler metal quantity depending on the lower density of BrazeTec BlueBraz, compared to standard brazing filler metals BrazeTec 4576, BrazeTec 4076, BrazeTec 3476, and BrazeTec 3076, as well as tool brazing filler metals BrazeTec 4900, BrazeTec 49/Cu, and BrazeTec 49/Cu^{plus}.