



voestalpine Böhler Welding

Brazing Solutions for Car Engine Production





Join Expertise

Copper- and nickel-base brazing pastes to your requirements

As one of the leading suppliers of brazing consumables for the high-tech international automotive industry, voestalpine Böhler Welding offers customized brazing solutions for a demanding market.

Asia, Mexico and Europe are the main markets for brazing. As a competent partner for brazing applications, voestalpine Böhler Welding serves customers in the Automotive Industry. The industry trends are taken into account in product selection and product development:

- High-pressure fuel-direct systems
- Reduced emission components with high efficiency and economical fuel consumption in the car engine sub segment
- New EGR/AGR cooler systems to reduce emissions
- Torque converters for modern gearboxes
- Brazing in high-corrosion-resistant stainless steels

Rely on a strong Partnership

voestalpine Böhler Welding is involved in many global R&D projects and partnerships with automotive manufacturers. We are proud to support a wide range of major players including car producers and sub suppliers to OEMs. We provide both the technical support required to develop technical process optimization with the customer, choose the correct brazing consumable and support users in its optimal application, as well as choosing the correct brazing consumable and supporting users in its optimal application.



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Metallurgical Expertise for Best Welding Results

voestalpine Böhler Welding (formerly Böhler Welding Group) is a leading manufacturer and worldwide supplier of filler materials for industrial welding and brazing applications.

As a part of the voestalpine Group, Austria's largest steel manufacturer and one of the world's leading suppliers of specialized steel products, we are a part of a global network of metallurgy experts.

Our customers benefit from:

- Comprehensive welding and steel know-how under one roof
- Coordinated complete solutions comprised of steel and welding filler metals
- A partner offering maximum economic stability and technological expertise

Customer First

Absolute customer focus is our guiding principle. We see ourselves as a provider of solutions to challenging welding projects. We ensure that our customers get the right filler metals, use them correctly, and that all welding process parameters are adjusted for the best possible performance. We consider it as our responsibility to guarantee that we deliver to our customers, now and in the future, the best possible solutions. We also strive to develop new products, optimize existing products, and streamline processes so as to achieve very short turn-around times. We focus on technologically advanced industrial sectors and provide products that are geared to their specific requirements.

Three Competences – Three Brands

In our efforts to afford our customers the best possible support and promote development in line with specific targets, we have built our core competences within Joint Welding, Repair & Maintenance Welding and Soldering & Brazing.

This way we offer our customers the largest and most comprehensive product portfolio of filler materials within our three brands:

- Böhler Welding
- UTP Maintenance
- Fontargen Brazing



Take advantage of technically proven and customized products

Applications

We supply products for:

- Injection tubes
- EGR coolers
- Catalysts
- Torque converters

Product solutions

- Copper wires
- Copper, and nickel brazing pastes and powders
- Preforms
- Special sintered powder foils

Services

We provide additional value by offering:

- Process optimization with the customer
- Support in solving brazing problems
- Training courses for the staff
- Expertise in brazing techniques
- Intensive customer support provided by our competent internal and external staff

Important benefits for customers

- Solution provider
- Global distribution and sales network
- Broad product range
- Special demands
- Engineering support
- ISO 9001 / 14001 approvals
- AEO standard
- Just in time deliveries in all packing units
- Financial performance



Fontargen product range

Fontargen Products	Chemical analysis [% w/w]									Brazing gap [mm]	Brazing temp. [°C]	Characteristics
	Cu	Ni	Cr	Si	B	P	Sn	Fe	C			
For EGR-Coolers												
HTL 2 AP	-	Bal	7	4.5	3.1	< 0.02	-	3	< 0.06	0.02-0.15	1080	High metal content, good wetting, good dispensing
HTL 5 M AP	-	Bal	18	8	-	2	-	-	-	0.02-0.10	1060	Bor free alternative to HTL 2 AP
HTL 5 Cr AP	-	Bal	29	4	-	6	-	-	-	0.02-0.35	1100	Bor free, corrosion resistant, high Cr content with highest tensile shear strength
For catalytic converters												
HTL 2 AP	-	Bal	7	4.5	3.1	< 0.02	-	3	< 0.06	0.02-0.15	1080	Applied for low temp. catalytic converters (1080 °C)
HTL 5 AP	-	Bal	19	10.1	< 0.03	< 0.02	-	-	< 0.06	0.02-0.10	1190	Applied for high temp. catalytic converters (1160 °C)
For high and low pressure rails												
AP 21 CLP (CS)	99.9	-	-	-	-	-	-	-	-	≤ 0.10	1083	High metal content, easy to dispense
AP 25 CL W2	99.9	-	-	-	-	-	-	-	-	≤ 0.10	1083	Lower metal content compared to AP 21CLP (CS)
For torque converters												
AP 21 CL LK	99.9	-	-	-	-	-	-	-	-	≤ 0.10	1083	High metal content
AP 22GS	96	-	-	-	-	-	4	-	-	0.05-0.20	1070	Lower temperature, better strength compared to pure copper pastes

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Böhler Welding know-how joins steel

Customers in over 120 countries join the expertise of voestalpine Böhler Welding (formerly the Böhler Welding Group). Focused on filler metals, voestalpine Böhler Welding offers extensive technical consultation and individual solutions for industrial welding and soldering applications. Customer proximity is guaranteed by 40 subsidiaries in 28 countries, with the support of 2,200 employees, and through more than 1,000 distribution partners worldwide.



Böhler Welding – More than 2,000 products for joint welding in all conventional arc welding processes are united in a product portfolio that is unique throughout the world. Creating lasting connections is the brand's philosophy in welding and between people.



UTP Maintenance – Decades of industry experience and application know-how in the areas of repair as well as wear and surface protection, combined with innovative and custom-tailored products, guarantee customers an increase in the productivity and protection of their components.



Fontargen Brazing – Through deep insight into processing methods and ways of application, Fontargen Brazing provides the best brazing and soldering solutions based on proven products with German technology. The expertise of this brand's application engineers has been formulated over many years of experience from countless application cases.

forwarded by:

Global Industry Segment Management
Automotive

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