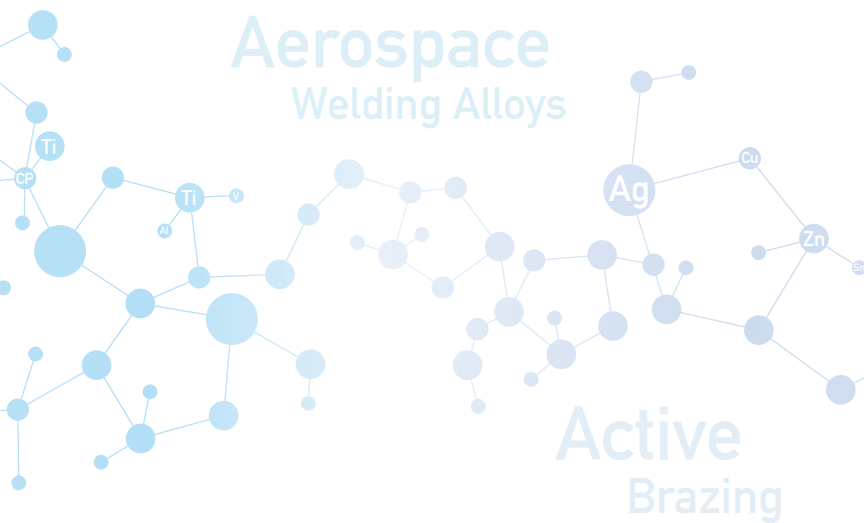


VBC Pura Weld™

Welding Product Line



Precious Metal
Brazing Alloys

Active
Brazing

Vacuum Brazing
Consultancy



vbcgroup

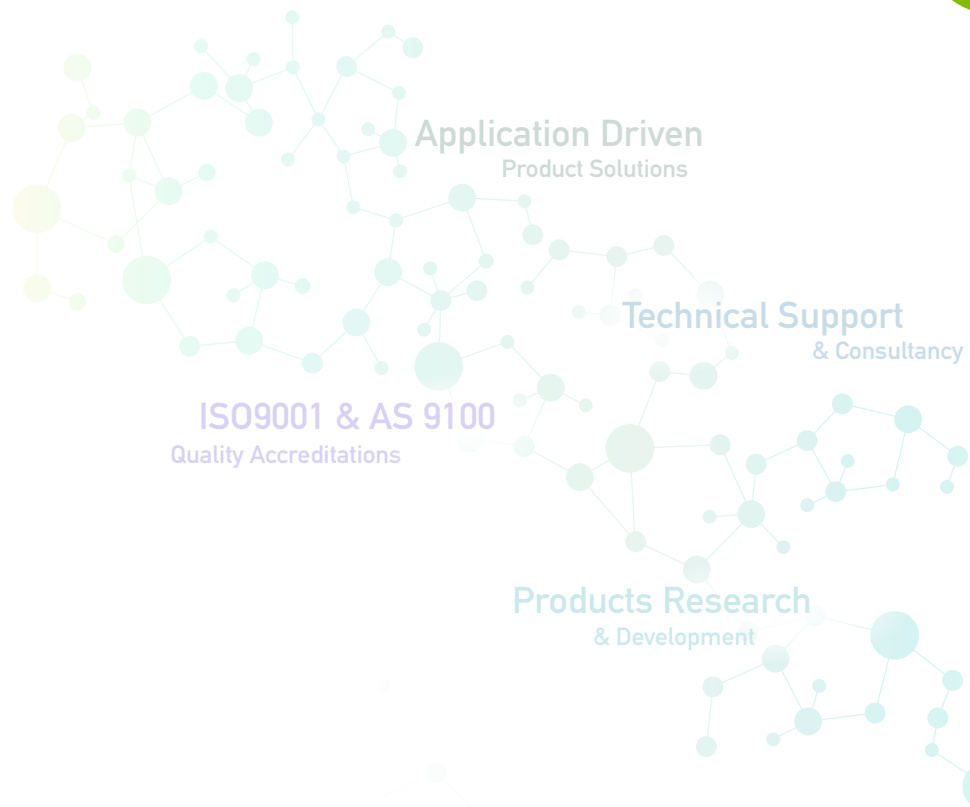


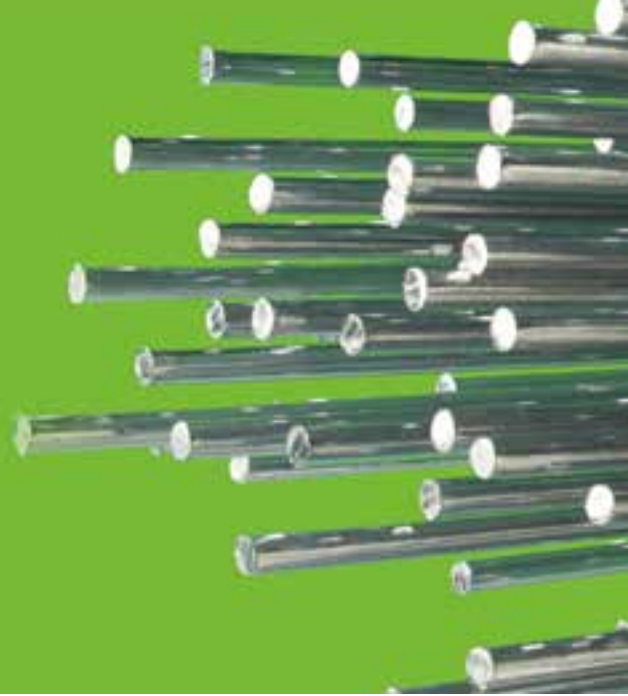
Welding Products

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 - Welding Wire Forms
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 - Product Identification and Packaging

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Welding Products

VBC Group is a provider of premium-quality welding rods and associated products. Our welding products meet the requirements of the most stringent aerospace quality approvals giving superior performance in the most demanding of applications.

In addition to our own Pura-Weld™ brand we can provide premium brand products from our supply partners. Consequently we have the capability to supply over 200 different types of welding wire. A wide range of welding wires from the various product families are held in stock at our facility.





Pura-Weld™ Welding Product Range

Welding Alloys	Pura-Weld™ Titanium Welding Alloys	Pura-Weld™ Cobalt Welding Alloys
	Pura-Weld™ Aluminium Welding Alloys	Pura-Weld™ Nickel Welding Alloys
	Pura-Weld™ Stainless Steel Welding Alloys	Welding Alloys for ALM / SMD / WAAM
Associated Welding Products	Other Welding Alloy Product Types	Weld Inserts
	Tungsten Electrodes	Deep-Penetration Welding Flux
	Micro Laser Welding Wire	Locking Wire
Welding Product Forms		

Welding Wire Forms
Rods / Straight lengths, Wire on Spools

Auxiliary Product Forms
Weld Inserts: Rings from Shaped Section, Electrodes


Product Identification and Packaging
Special identifications such as bespoke flagging or colour coding of rods are available on all welding wire products. Specialised cleaning and packaging options ensure the highest commercial cleanliness standards for welding wire are maintained.

Welding Wire Products

There are over 200 welding alloy references in VBC Group's product portfolio. Some of the most commonly requested alloys are shown in this section.


Pura-Weld™ Titanium Welding Alloys

Product Uses and Applications: These products are generally used in gas shielded welding processes (TIG, MIG and plasma-TIG) when joining titanium components. Titanium is used extensively in chemical processing, offshore and aerospace applications as well as in specialised areas such as motorsport and power generation.

Key Products	Trade Name	AWS A5.16	AMS	MSRR	OMAT	Key Points	Forms
Pura-Weld™ 0070	CP Ti	ER Ti-2	AMS 4951	9500/70	366	There are approximately 15 alloys in VBC Group's range of ultra-pure titanium welding filler metals.	
Pura-Weld™ 0073	6Al-4V Ti	ER Ti-5	AMS 4954	9500/73	3/145A		
Pura-Weld™ 0074	6-2-4-2 Ti	-	AMS 4952	9500/74	3/250		
Pura-Weld™ 0075	Titanium 829	-	-	9500/75	3/217		
Pura-Weld™ 0076	Titanium 685	-	-	9500/76	3/200		
Pura-Weld™ 0078	6Al-4V Ti ELI	ER Ti-23	AMS 4956	9500/78	3/145A		
Pura-Weld™ 9007	TiPd – ERTi 7	ER Ti-7	-	-	-		

Pura-Weld™ Aluminium Welding Alloys

Product Uses and Applications: Aluminium alloys 1, 3, 5, 6 and some 7 series alloys can be welded using TIG, MIG and oxyfuel processes. Aluminium is used in pipe and tube fittings in chemical plant, heat exchanger, aerospace and structural applications.

Key Products	Trade Name	AWS A5.10	AMS	MSRR	OMAT	Key Points	Forms
Pura-Weld™ 0031	4047 / 4047A	ER 4047	AMS 4185	9500/31	-	VBC Group's premium quality aluminium welding products provide a reliable solution for welding lightweight aluminium alloys in a range of applications.	
Pura-Weld™ 0032	4043 / 4043A	ER 4043	AMS 4190	9500/32	310		
Pura-Weld™ 0033	3103, NG3	-	-	9500/33	3/361A		
Pura-Weld™ 0035	4145	ER 4145	AMS 4184	9500/35	3/337		
Pura-Weld™ 0038	5356A	ER 5356	-	9500/38	3/61		
Pura-Weld™ 0045	2319	ER 2319	AMS 4191	9500/45	3/264		
Pura-Weld™ 9110	1100	ER 1100	AMS 4180	-	-		
Pura-Weld™ 9464	4643	ER 4643	AMS 4189	-	-		

Pura-Weld™ Other Welding Alloy Product Groups



Product Type	Typical Alloys	Standard	MSRR	OMAT	Key Points
Mild Steel Welding Alloys	Mild / carbon steel and ferrous alloys	Various – over 45 alloy types	-	-	VBC Group is able to supply the complete range of welding filler materials including iron, copper, magnesium and zirconium welding materials.
Copper Welding Alloys	Bronze and brass alloys	Various	-	-	
Magnesium Welding Alloys*	Pura-Weld™ 0050 Pura-Weld™ 0051	A5.19 EZ33A A5.19 AZ92A	9500/50 9500/51	308 3/58	
Zirconium Welding Alloys	Pura-Weld™ 9702	A5.24 ER Zr 2	-	-	

*There are minimum economic order quantities for these products, please contact VBC Group for more information.



Pura-Weld™ Stainless Steel Welding Alloys 

Product Uses and Applications: These stainless steel welding alloys find use in a wide range of industries. VBC Group is able to provide commercial grades as well as grades for aerospace and power generation.

Key Products	Trade Name	AMS	Other Specifications	MSRR	OMAT	Key Points	Forms
Pura-Weld™ 0002	18-8Nb	-	MSRR 6677	9500/2	306	With 45 alloys in VBC Group's stainless steel welding wire range we offer one of the broadest ranges of products on the market today	 
Pura-Weld™ 0005	FV520, FIW	-	-	-	-		
Pura-Weld™ 0010	JETHETE M190	5822	Special Purity Grade	9500/10	3/54		
Pura-Weld™ 9240	17-4PH	5825	AWS A5.9 ER630	9500/240	-		
Pura-Weld™ 0212	312	5784	AWS A5.9 ER312	9500/212	3/163		
Pura-Weld™ 9309	309L	-	AWS A5.9 ER 309LMo	-	-		
Pura-Weld™ 9316	316L	5692	AWS A5.9 ER316L	9500/208	-		
Pura-Weld™ 0205	410	5776	AWS A5.9 ER410	9500/205	-		




Welding Wire Products

Pura-Weld™ Cobalt Welding Alloys



Product Uses and Applications: These cobalt welding, casting and hard facing alloys are for use on cobalt superalloys. Many applications can be found in gas turbines where high temperature strength, resistance to oxidation and wear resistance are required.


Key Products	Trade Name	AMS	Other Specifications	MSRR	OMAT	Key Points	Forms
Pura-Weld™ 0015	PMET 913, Alloy 12H, Stellite 12, HS12	-	-	9500/15	311	Cobalt alloys can be used for hardfacing, welding of gas turbine engine blades and hot section components as well as for repair of high or low pressure turbine blades.	
Pura-Weld™ 0019	PMET 906, Alloy 6, Stellite 6, HS 6	5788	-	9500/15	358		
Pura-Weld™ 0023	PMET 905, L-605, Stellite 25, HS 25	5796	-	9500/23	-		
Pura-Weld™ 0025	PMET 931, HS31 / Stellite 31	5789	-	9500/25	-		
Pura-Weld™ 0226	PMET 994, CM64, PWA694, Stellite 694	-	-	9500/226	-		
Pura-Weld™ 0228	PMET 912, HS 12 (ECoCr-B)	-	-	9500/228	-		
Pura-Weld™ 0248	PMET 972, Merl 72	-	PWA 795	9500/248	-		
Pura-Weld™ 9018	PMET 918, Mar M 918	5814	-	-	-		
Pura-Weld™ 9414	PMET 914, FSX414	-	-	-	-		
Pura-Weld™ 9509	PMET 909, Mar M 509	-	PWA1185, GE B50TF89	-	-		
Pura-Weld™ 9800	PMET 980, T-800, Triballoy 800	-	GE B50TF193	-	-		
Pura-Weld™ 9210	PMET 921	5819	-	-	-		

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Pura-Weld™ Nickel Welding Alloys



Product Uses and Applications: VBC Group's nickel superalloy welding wires are used in high temperature and strength applications such as for gas and land based turbine engine components. There are around 50 alloy references in the range, the most commonly specified are listed below.

Key Products	Trade Name	AMS	Other Specifications	MSRR	OMAT	Key Points	Forms
Pura-Weld™ 0003	NC 80/20	5676	AWS A5.14 ERNiCr-6	9500/3	305D	These high temperature nickel alloys are used on gas turbine engine components subject to hot gas flow, such as blades, vanes, combustors, frames and castings.	
Pura-Weld™ 0004	Nimonic™ 90	5829	ISO 18274 NiCr20Co18Ti3	9500/4	312		
Pura-Weld™ 0009	FM 92	5675	AWS A5.14 ERNiCrFe-6	9500/9	314		
Pura-Weld™ 0016	PMET863, Nimonic™ C263	5966	GE B50A783	9500/16	3/62		
Pura-Weld™ 0202	PMET865, Waspalloy™	5828	-	9500/202	3/99		
Pura-Weld™ 0213	PMET870, Hastelloy™W	5786	AWS A5.14 ERNiMo-3	9500/213	3/33		
Pura-Weld™ 0216	FM82	5836	AWS A5.14:2005 ERNiCr-3	9500/216	3/170		
Pura-Weld™ 0215	PMET 875, Hastelloy™X	5798	AWS A5.14 ERNiMo-2	9500/215	3/165		
Pura-Weld™ 0220	PMET 818, IN 718	5832	-	9500/220	3/206		
Pura-Weld™ 0227	IN 901	5830	-	9500/227	3/203		
Pura-Weld™ 0237	PMET 860 Inco™ 625	5837	AWS A5.14 ERNiCrMo-3	9500/237	3/172		
Pura-Weld™ 0247	PMET 842, Rene™142	-	GE B50TF274	9500/247	-		
Pura-Weld™ 9247	PMET 847, Mar M 247	-	EMS 55447	-	-		
Pura-Weld™ 9738	PMET 838, Inco 738	-	PWA 1451, GE B50TF191	-	-		
Pura-Weld™ 9080	PMET 880, Rene 80	-	GE B50TF259	-	-		

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VBC Group supplies both welding and brazing filler metals used to manufacture critical components in jet engine applications



Nickel Brazing

Aluminium Brazing & Weld Alloys

vbc group

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Braze Pastes

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