

MAINTENANCE SOLUTIONS

A COMPLETE RANGE OF CONSUMABLES AND SERVICES FOR WELDING, HARD-FACING, AND INDUSTRIAL MAINTENANCE.



For over forty years, DAIKO has been a trusted reference in welding consumables, delivering quality and compliance with the highest standards required by leading industrial sectors.

Originally focused on corrosion-resistant alloys, DAIKO has progressively developed a comprehensive and highly specialized portfolio capable of meeting all welding needs. Our solutions cover a wide range of applications — SMAW, GTAW, GMAW, FCAW, SAW, and ESW — designed and manufactured through careful selection of raw materials and continuous collaboration with the most renowned international producers.

DAIKO stands out for its comprehensive offering of highvalue welding consumables and services for industrial maintenance. Our innovative, tailor-made solutions are designed to extend the service life of components, reduce unplanned downtime, and boost overall productivity through the use of advanced welding, brazing, and hardfacing technologies.

We provide versatile, high-performance processes, including arc welding, brazing, thermal spraying, PTA powders, and laser cladding, along with clad plates and custom-made components. These are technically advanced solutions, developed to ensure maximum efficiency even in the most complex systems and extreme environments.

One of our key strengths is the availability of ready-toship materials, which allows us to guarantee fast delivery, reliable logistics, and operational continuity for our customers.

DAIKO is internationally recognized as a qualified supplier to major industrial players operating across a wide range of sectors: from heavy industry and material processing to mining, cement plants, process industries, and facilities for the recycling of wood, plastics, glass, and waste treatment.





#### MAINTENANCE SOLUTIONS

# DURABLE SOLUTIONS FOR EVERY MAINTENANCE AND HARDFACING NEED



DAIKO is an Italian excellence, synonymous with a passion for technical quality and customer focus.

Over the years, it has established itself internationally, earning recognition and trust through its core values and unwavering commitment to delivering reliable, tailor-made solutions.

Consumables and solutions for industrial maintenance.
Repair, protection, and regeneration of worn components.
Advanced technologies and technical support for maximum operational efficiency.

DAIKO has developed a comprehensive range of welding consumables specifically designed to meet the needs of industrial maintenance, with a particular focus on the recycling sector, where the reliability of solutions is crucial to ensure operational continuity, efficiency, and cost control.

Our consumables are optimized for the repair and regeneration of mechanical components subject to wear, typically found in plants processing wood, plastics, glass, and waste. In these demanding environments—characterized by abrasion, erosion, impact, and high temperatures—we deliver durable, effective solutions that address the daily challenges faced by operators.

Over time, we have refined a highly specialized product line for hardfacing, anti-wear coatings, and heat-resistant overlays, ideal for protecting critical components such as screws, rollers, hoppers, blades, paddles, molds, shafts, and valves used in machinery for material separation, shredding, and handling.

Through an integrated offering of consumables and services, DAIKO supports recycling facilities in extending equipment life, minimizing downtime, and optimizing maintenance operations, making a tangible contribution to overall efficiency improvement.

This is made possible by the synergy of advanced technologies—welding, brazing, and hardfacing—combined with the in-depth know-how of our team, which ensures high-level support even under the most complex operating conditions.



## **CARBON STEELS**

PRODUCT	FORMAT	DESCRIPTION	MECHANICAL PROPERTIES			
PRODUCT	FORMAI	DESCRIPTION	RM	RS	<b>A</b> %	
G-TECH 101	Electrode	Post of the other Politics and the design that				
DAIKOW 107Ti	Solid wire	Product for welding light carpentry, also suitable for galvanized sheet metal.  The wires can be used in all positions, the elec-	500-600	>420	20	
DAIKOFCW 107Ti	Flux cored wire	trode also vertical down.				
G-TECH 102	Electrode	Product for welding medium light carpentry, espe-	F30, C00	/50	22	
DAIKOFCW 102R	Flux cored wire	cially for aesthetic applications with good mechani- cal characteristics. Specific for flat welding.	520-600	>450	23	
G-TECH 103	Electrode	Universal product for welding medium light	/70 550	/10	71	
DAIKOW SG2 HQ	Solid wire / TIG	carpentry. Welding in all positions (excluding vertical down).	470-550	>410	21	
G-TECH 57	Electrode					
DAIKOW 66	Solid wire / TIG	Welding consumables for steels resistant to at-	550-580	>460	. 10	
DAIKOFCW 66R	Flux cored wire	mosphéric corrosion (Corten type).			>19	
DAIKOMCW 66	Flux corea wire					
G-TECH 107B	Electrode					
DAIKOW SG3 HQ	Solid wire / TIG	Product for welding medium heavy carpentry. Welding in all positions with high mechanical cha-	580-650	>460	7.	
DAIKOFCW 107B	ell '	racteristics. Specific for carpentry and pipes joints subject to radiographic controls.			24	
DAIKOMCW 107	Flux cored wire					
G-TECH 107	Electrode	Special double-coated electrode for welding medium-heavy carpentry specific for maintenance and repair even on site and on surfaces that are not perfectly prepared.	550-640	>420	20	
G-TECH 90G	Electrode	Product for welding high yield strengh steel	596-610	>500	22	
G-TECH 109	Electrode	Product for welding high yield strength steels.	500			
DAIKOW NiMo	Solid wire / TIG	Specific for the repair of mechanical arms, buckets and other components of earthmoving vehicles.	690-780	>620	24	
G-TECH 96	Electrode	Dood out for welding high field the second				
DAIKOW 96	Solid wire / TIG	Product for welding high yield strength steels such as Strenx 900. Specific for the repair of mechanical arms, mechanical cranes and other vehi-	790-850	850 >690	20	
DAIKOMCW 115	Flux cored wire	cle components for earthmoving.				

## **MANGANESE STEELS**

PRODUCT	FORMAT	DESCRIPTION	ME	CHANICA	L PROPE	ERTIES
PRODUCT	FORMAI	DESCRIPTION	RM	RS	<b>A</b> %	HARDNESS
G-TECH 814Mn	Electrode	Product for welding 14% manganese alloys.	730-800	>440	24	200-420
DAIKOMCW 814	Flux cored wire	Specific for repair of sandblasting plates, crushing hammers etc	/30-800	>440		НВ
G-TECH 814MnCr	Electrode	Product for welding Mn and Cr alloys used for	760-820	>520	26	220-450 HB
DAIKOFCW 814MnCr	Flux cored wire	repairs of shredders and crushing plates.	760-820			
G-TECH 880	Electrode		500-680	>440	35	210-430 HB
DAIKOW 880	Solid wire / TIG	Product for welding manganese steels and joining of high yield strength steel with carbon steels and for dissimilar joints. It is also used as buffer layer before wear-resistant cladding.				
DAIKOFCW 880	Flux cored wire	Sistem cladding.				
G-TECH 307B	Floring	Product for welding Mn alloys used for re-	C20 700	. 410	26	220-380
G-TECH 307	Electrode	pairs in all positions of wear plates and for dissimilar joints.	620-780	>410	36	HB

N.B. wires are available in self-shielded (-0) or external shielding gas (-G) version.



## **DISSIMILAR STEELS AND NICKEL ALLOYS**

PRODUCT	FORMAT	MAT DESCRIPTION	MECHANICAL PROPERTIES			
PRODUCT	FURMAI	DESCRIPTION	RM	RS	<b>A</b> %	
G-TECH 860	Electrode					
DAIKOW 860	Solid wire / TIG	Special product for heterogeneous welding of stainless and carbon steels. Also used as buffer layer for subsequent coatings for high temperatures (such as cobalt and Cr-Ni-Mo	560-680	>500	35	
DAIKOFCW 860	Flux cored wire	alloys).				
G-TECH 890/G	Electrode	Product for welding dissimilar steels. It per- fectly welds high C-content steels with com- mon and stainless steels. Specific for repairs of gears, mechanical shafts etc	750-850	>600	25	
G-TECH 890/S	Electrode	Special product for welding dissimilar steels.	760-880	>620	28	
DAIKOW 890	Solid wire / TIG	Suitable for welding quenched and tem- pered/hardened steels with common and stainless steels and, in general, steels that are difficult to weld. Specific for repairs of				
DAIKOFCW 890/S	Flux cored wire	gears, mechanical components and edges and cracks on molds etc				
G-TECH 840 SX	Electrode	Product for repair on dissimilar, high-carbon steels and nickel alloys. It resists oxidation up to 900°C. Specific for repairs of cracks on furnaces, on structures of presses, cylinders, heat treatment cells, crucibles, and other components for high temperatures.	620-660	>380	35	
G-TECH 840B	Electrode	Product for welding on dissimilar steels, e.g				
DAIKOW 840	Solid wire / TIG	high carbon and nickel alloys. Resistant to oxidation up to 900°C. Specific for welding/ repair of ovens, crucibles and other high tem-	630-680	>380	35	
DAIKOFCW 840	Filo animato	perature components.				

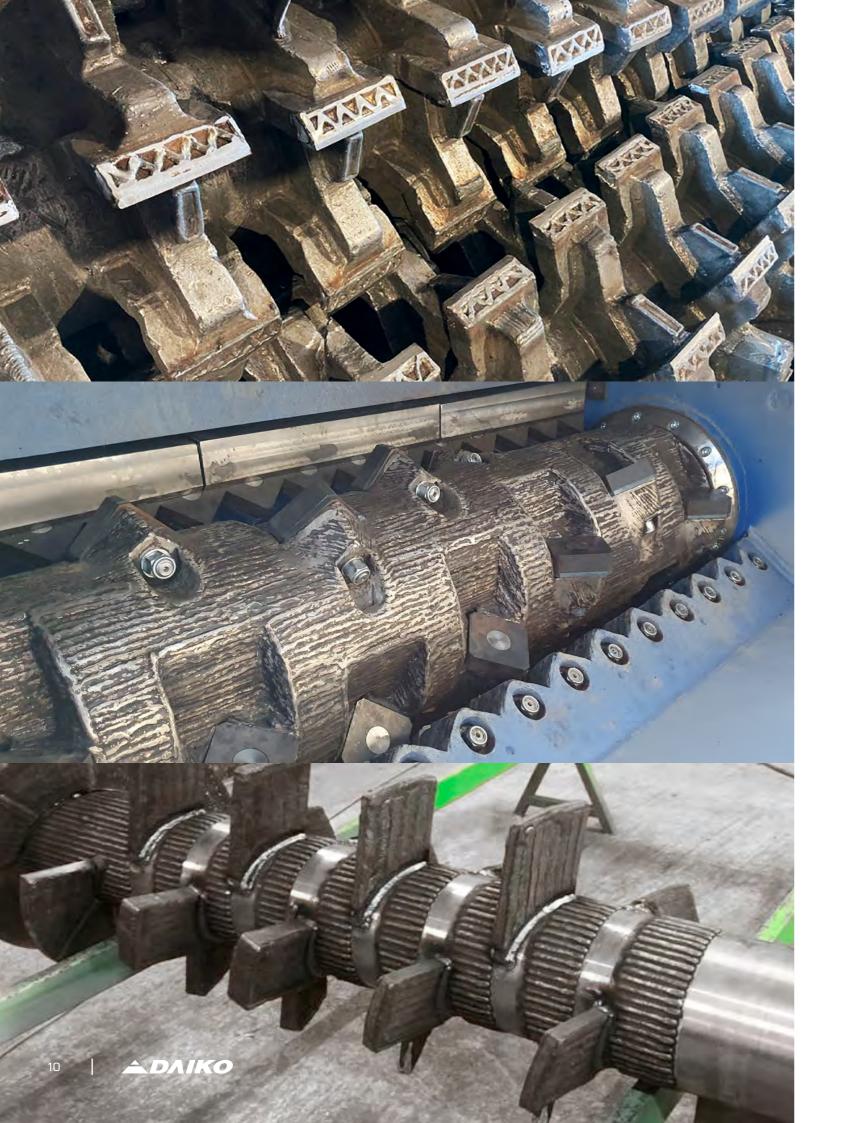
N.B. wires are available in self-shielded (-0) or external shielding gas (-G) version.

### **STAINLESS STEELS**

PRODUCT	FORMAT	2555125101	MECHANICAL PROPERTIES			
	PORMAI	DESCRIPTION	RM	RS	<b>A</b> %	
G-TECH 308L	Electrode					
DAIKOW 308L	Solid wire / TIG	Low carbon austenitic stainless product for welding steel 304 – 304L. It grants good mechanical resistance and intergranular corrosion.	>520	>350	>35	
DAIKOFCW 308L	Flux cored wire	and mergrandial correspond				
G-TECH 316L	Electrode			>430		
DAIKOW 316L	Solid wire / TIG	Low carbon austenitic stainless pro- duct for welding steel 316 – 316L. Excellent mechanical resistance and intergranular corrosion.	>570		>28	
DAIKOFCW 316L	Flux cored wire					
G-TECH 309L	Electrode			>410		
DAIKOW 309L	Solid wire / TIG	Low carbon austenitic stainless pro- duct for welding stainless and carbon steels. Good resistance to temperatu- re and oxidation. Also used as buffer	>540		>27	
DAIKOFCW 309L	Flux cored wire	layer before surfacing.				
G-TECH 310	Electrode					
DAIKOW 310	Solid wire / TIG	Special product for welding refractory steels, resistant to oxidation up to about 1200°C. Specific for repairs on furnaces and heat treatment plants.	>570	>380	>30	
DAIKOFCW 310	Flux cored wire					

NOTE: the electrodes are available in basic (-15), semibasic (-16) and rutile (-17) versions



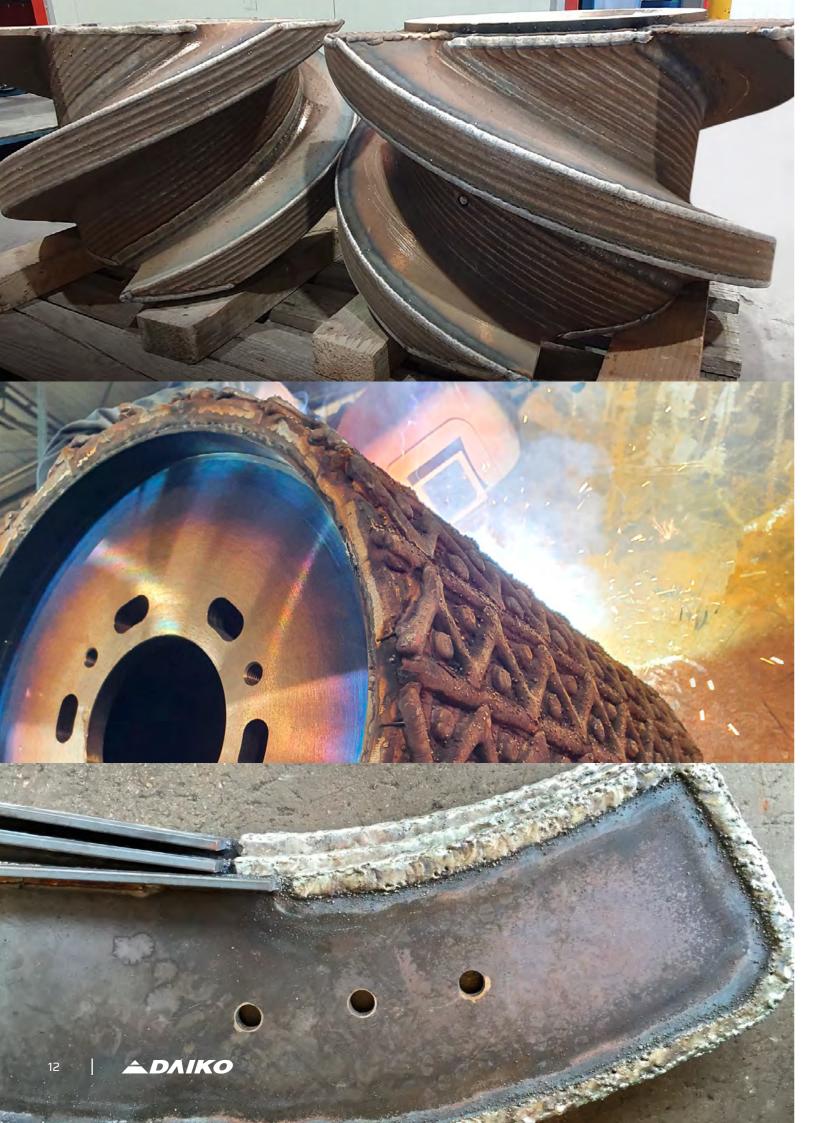


## **ANTI-WEAR / ANTI-ABRASION COATINGS**

			MECHANICAL PROPERTIES		
PRODUCT	FORMAT	DESCRIPTION	HARDNESS	TEMPERATURE RESISTANCE	
G-TECH 350	Electrode	Product for wear resistant coatings suitable for	250 LIB	F00%F	
DAIKOW 350	Solid wire/TIG	strong impacts and high pressures. Specific for tracks, overhead crane wheels etc	350 HB	500°C	
G-TECH 201R/B	Electrode	Product resistant to wear and moderate impacts.			
DAIKOW 201R - NR	Solid wire/TIG	Specific for hardfacing on buckets, crushing pliers in the cement sector. Suitable for reconstructing of components of plants for the production of brick,	600 HB	520°C	
DAIKOMCW 201R - NR	Flux cored wire	and agricultural tools.			
DAIKOMCW 203R	Flux cored wire	Specific product for wear resistant coatings, suitable for grinding and dragging rollers, resistant to impact and compression.	58-60 HRc	550°C	
DAIKOFCW 650	Flux cored wire	Product resistant to wear, impacts and strong com- pressions. Specific for hardfacing on components of mills for the crushing and disposal of waste.	50-54 HRc	400°C	
DAIKOFCW 600Ti	Flux cored wire	Titanium stabilized product, resistant to wear, impacts and strong compressions. Specific for hardfacing on crushing mills and rollers for the processing of coal and cement and clinker.	56-58 HRc	400°C	
DAIKOFCW 800 NR	Flux cored wire	Specific product for wear resistant coatings, suitable for reconstructing of augers and extrusion screws, and teeth of shredders in general. Resistant to impact and compression.	59-61 HRc	550°C	
DAIKOFCW 627	Flux cored wire	CrMoNb alloyed product resistant to wear, shocks and strong compressions. Specific for surfacing on mills crushers and shredders generally used in the recycling sector.	55-58 HRc	400°C	
DAIKOMCW 864	Flux cored wire	Niobium stabilized product, wear and impact resistant thanks to the formation of Nb carbides, which greatly reduce the formation of cracks. Specific for crushers of all kinds.	62-65 HRc	400°C	
G-TECH 850	Electrode	Product resistant to wear and moderate impacts. Specific for hardfacing of dredges, augers	55-59 HRc	600°C	
DAIKOFCW 850	Flux cored wire	and parts of mixers.	אט פר-רר	000 €	
G-TECH 640	Electrode	Product resistant to wear and moderate impact. Specific for hardfacing on crushing mills and	57-60 HRc	500°C	
DAIKOFCW 640	Flux cored wire	shredders for the recycling sector, transport augers etc	27-00 HKL	300 €	
DAIKOFCW 649	Flux cored wire	Specific for rotor coatings for rubber mixing, for coatings of crushing hammers, excavation augers, etc	58-60 HRc	550°C	
G-TECH 642	Electrode	Product resistant to wear and moderate impact.		45005	
DAIKOFCW 642	Flux cored wire	Specific for hardfacing on crushing mills, clay mixers, augers, dredges etc	59-61 HRc	450°C	

N.B. wires are available in self-shielded (-0) or external shielding gas (-G) version.





## **ANTI-WEAR / ANTI-ABRASION COATINGS**

			MECHANICAL PROPERTIES			
PRODUCT	FORMAT	DESCRIPTION	HARDNESS	TEMPERATURE RESISTANCE		
DAIKOFCW 655	Flux cored wire	Specific to resist wear in presence of light impacts, mainly used for furnaces, ceramics and recycling applications.	59-60 HRc	500°C		
DAIKOFCW 656 Mo	Flux cored wire	Specific for rotors for clay mixers, for hardfacing of oil pressing screws and compost press screws, etc.	59-60 HRc	650°C		
G-TECH 643	Electrode	Product strongly resistant to wear and light impacts. Specific for hardfacing on drills for				
DAIKOFCW 643	Flux cored wire	excavation, augers for the transport of gravel and particularly abrasive aggregates.	61-63 HRc	450°C		
G-TECH 661Nb	Electrode	Product highly resistant to abrasion and com- pression. The formation of Nb carbides pro-				
DAIKOFCW 661Nb	Flux cored wire	motes resistance to high temperatures and avoids the formation of cracks. Used for crushers and shredders in general.	62-64 HRc	650°C		
G-TECH 695	Electrode	Product highly resistant to abrasion, free from impacts. Specific for hardfacing on com-	63.65 UD.	050%		
DAIKOFCW 695	Flux cored wire	ponents subject to wear and high temperature such as slides and mixers for the handling of hot slag from steelworks and agglomerate.	62-65 HRc	850°C		
G-TECH 668	Electrode	Extra hard product strongly resistant to abrasion (without impacts). Specific for highly				
DAIKOFCW 668	Flux cored wire	abrasive fine dust mixers such as glass, silica and coal.	64-68 HRc	500°C		
DAIKOFCW 670Nb	Flux cored wire	Product highly resistant to abrasion, free from impacts. Specific for mixers and components for the ceramic processing sector.	68-70 HRc	350°C		
DAIKOFCW 690NT	Flux cored wire	Highly abrasion resistant product with moderate impacts. The deposit is characterized by the formation of complex carbides and borides that favor an extreme resistance to extremely severe wear.	70-71 HRc	350℃		
DAIKOFCW 729/G	Flux cored wire	CrMoNbBV alloyed product, highly resistant to extreme abrasion without impacts. Used for applications in mining, ceramics, etc	66-70 HRc	650°C		
G-TECH 2002	Electrode	Iron-based product containing about 50%	Matrice:			
DAIKOW 2002	Rod	Iron-based product containing about 60% tungsten carbides highly resistant to abrasion and moderate impact. Specific for dred-	55-60 HRc Carburi:	350°C		
DAIKOFCW 2002	Flux cored wire	ging and for hardfacing on excavator screws.	2300 HV			
G-TECH 2003	Electrode					
DAIKOW 2003	Rod	Nickel-chromium-boron-silicon-based pro-				
DAIKO 2003 FLEX	Cord	duct containing about 60% tungsten carbides highly resistant to abrasion and impact. Also	Matrice: 47-52 HRc	500°C		
DAIKOFCW 2003		resistant to chemical aggression and acid attacks. Specific for excavation in the oil &gas sector and in the drilling sector.	Carburi: 2300 HV			
DAIKOFCW 2003/S	Flux cored wire					

N.B. wires are available in self-shielded (-0) or external shielding gas (-G) version.



## COATINGS FOR CUTTING TOOLS, MOULDS AND DIES

			MECHANICAL PROPERTIES		
PRODUCT	FORMAT	DESCRIPTION	HARDNESS	TEMPERATURE RESISTANCE	
G-TECH 3004	Electrode				
DAIKOW 3004	Solid wire/ TIG	Product for wear-resistant and strong impacts and compressions. Suitable for mold stands, blades and tools generally working hot.	38-42 HRc	600°C	
DAIKOFCW 3004	Flux cored wire	working not.			
G-TECH 3003	Electrode				
DAIKOW 3003	Solid wire/ TIG	Product for wear-resistant coatings with moderate impacts and compressions. Su- itable for punches, knives and tools and edges of hot working molds.	45-50 HRc	600°C	
DAIKOFCW 3003	Flux cored wire	cages of flot working filoloss.			
G-TECH 3002	Electrode	Product for wear-resistant coatings, and	55-58 HRc		
DAIKOW 3002	Solid wire/ TIG	compressions. Suitable for punches, knives and tools and edges of hot working molds. Workable only by grinding wheel		600°C	
DAIKOFCW 3002	Flux cored wire	or EDM.			
G-TECH 1CrMo	Electrode		230/270 Hb		
DAIKOW 1CrMo	Solid wire/ TIG	Product for repairing and reconstructing on quench and tempered steels. The color of the deposit is similar to the base material.		550°C	
DAIKOFCW 1CrMoB	Flux cored wire	Dase Illatellat.			
G-TECH 650W	Electrode	Product for the hardfacing of tools for hot and cold cutting, also used for surfacing	/F /7 UD-	FE00C	
DAIKOFCW 650W	Flux cored wire	on teeth of shredders for the recycling sector in general and crusher hammers.	45-47 HRc	550°C	
G-TECH 655W	Electrode	Product for hardfacing tools for hot and cold cutting, also used for surfacing on	F2 F6 UP-	FECOS	
DAIKOFCW 655W	Flux cored wire	crushing hammers, for the plastic treat- ment and recycling sector, wood, etc.	53-56 HRc	550°C	
G-TECH 659W	Flow sored wire	Product for hardfacing tools for hot and cold cutting, also used for surfacing on	E0 C0 UP-	FF0%C	
DAIKOFCW 659W	Flux cored wire	teeth of shredders for the recycling, aluminum, wood and compost sectors.	58-60 HRc	550°C	

N.B. wires are available in self-shielded (-0) or external shielding gas (-G) version.

## COATINGS FOR CUTTING TOOLS, MOULDS AND DIES

			CARATTERISTICHE MECCANI			
PRODUCT	FORMAT	DESCRIPTION	HARDNESS	TEMPERATURE RESISTANCE		
G-TECH 660W	Electrode	Product for hardfacing tools for hot and cold cutting, also used on teeth of shredders for the	50.50.00	55005		
DAIKOFCW 660W	Flux cored wire	recycling, aluminum, wood and compost sectors.	58-60 HRc	550°C		
G-TECH 3001HS	Electrode	Product for hardfacing on rapid steel tools such	50.52.110	50005		
DAIKOW 3001HS	Solid wire/ TIG	as knives for plastic, punches for both hot and cold processing of sheets.	60-63 HRc	600°C		
DAIKOW 3013H	Solid wire/ TIG	Product for hardfacing on wear-resistant hot-working steels. Specific for repairing spindles, punches, blades for shears and hammers in general. Also used for blades for cutting timber.	55-60 HRc	600°C		
G-TECH 3018Mg	Electrode		38-40 HRc			
DAIKOW 3018Mg	Solid wire/ TIG	Product for repair and reconstruction on hot extrusion steels. Specific for die-casting molds of aluminum alloys and other non-ferrous and	saldato 53-54 HRc	750°C		
DAIKOFCW 3018Mg	Flux cored wire	surfacing on steel type Maraging etc.	temprato			
G-TECH 65H	Electrode		57-60 HRc			
DAIKOW 65H	Solid wire/ TIG	Product resistant to hot oxidation, specific for hardfacing on rollers for steel mills, guides of rolling mills and shearing tools in general.		550°C		
DAIKOFCW-MCW 65H	Flux cored wire		d shearing tools in general.			
G-TECH 3750	Electrode	Special product alloyed with Cr-Co-Mo specific for repairs and hardfacing on molds and dies	42-48 HRc	750°C		
DAIKOFCW 3750	Flux cored wire	for hot forging.	42-48 HKC	750-C		
G-TECH 1002	Electrode	Special nickel-based product resistant to specific hot oxidation for hardfacing on molds and	250 HB saldato	900°C		
DAIKOW 1002	Solid wire/ TIG	tools for forging.	400 HB incrudito	900 C		
G-TECH 1002Co	Electrode	Special nickel-based product linked alloyed with cobalt, resistant to specific hot oxidation,	270 HB saldato			
DAIKOFCW 1002Co	Flux cored wire	for hardfacing on molds and tools for forging. Also used as a base layer for subsequent har- dfacing with cobalt-based alloys.	450 HB incrudito	1000°C		
DAIKOFCW 520Co	Flux cored wire	Special nickel-based product alloyed with Cr-Mo-Co-W-Ti, resistant to high temperature oxidation and specific for hardfacing on hammers and tools for hot forging.	350 HB saldato 470 HB incrudito	750°C		
G-TECH 6170Co	Electrode	Special nickel-based product alloyed with Cr- Mo-Co resistant to high temperature oxidation	250 HB saldato	1000°C		
DAIKOW 6170Co	Solid wire/ TIG	and specific for hardfacing on components for hot forging.	350 HB incrudito	IUUU-C		

N.B. wires are available in self-shielded (-0) or external shielding gas (-G) version.



## **MARTENSITIC HARDFACING**

			MECHANICAL PROPERTIES			
PRODUCT	FORMAT	DESCRIPTION	HARDNESS	TEMPERATURE RESISTANCE		
G-TECH 410	Electrode	Product resistant to hot oxidation, specific for the repair and reconstruction of molds				
DAIKOW 410	Solid wire/TIG	for the production of lights and transparent plastics	34-35 HRc	450°C		
DAIKOW 4130	Solid wire/TIG	High-strength product used for welding on steels of similar composition. Used in the aeronautical sector, automotive and tools and punches for forging.	36-40 HRc	450°C		
G-TECH 410NiMo	Electrode					
DAIKOW 410NiMo	Solid wire/TIG	Product resistant to hot oxidation, specific for the repair of hydraulic turbines, paper mill impellers. Also used for hardfacing on continuous section rellers for steel mills	38-42 HRc	500°C		
DAIKOFCW 4140 N-L-H	Flux cored wire	continuous casting rollers for steel mills.				
G-TECH 4122	Electrode					
DAIKOW 4122	Solid wire/TIG	Product resistant to specific hot oxidation for hardfacing on steel mill rollers and on valves and components for oil &gas.	for hardfacing on steel mill rollers and on 46-50 HRc		n steel mill rollers and on 45 50 Apr	450°C
DAIKOFCW 4122	Flux cored wire					
G-TECH 430	Electrode					
DAIKOW 430	Solid wire/TIG	Product resistant to hot oxidation, specific for repair and coatings on continuous casting rollers for steel mills, sliding guides etc.	220-250 Hb	500°C		
DAIKOFCW 430	Flux cored wire	9.000				
G-TECH 420	Electrode					
DAIKOW 420 B-C	Solid wire/TIG	Product resistant to hot oxidation, specific for repairing hardfacing on continuous casting rollers and rollers generally for steel mills.	32-38 HRc saldato 42-48 HRc temprato	500°C		
DAIKOFCW 420	Flux cored wire	3.223.	ic.iipiaio			

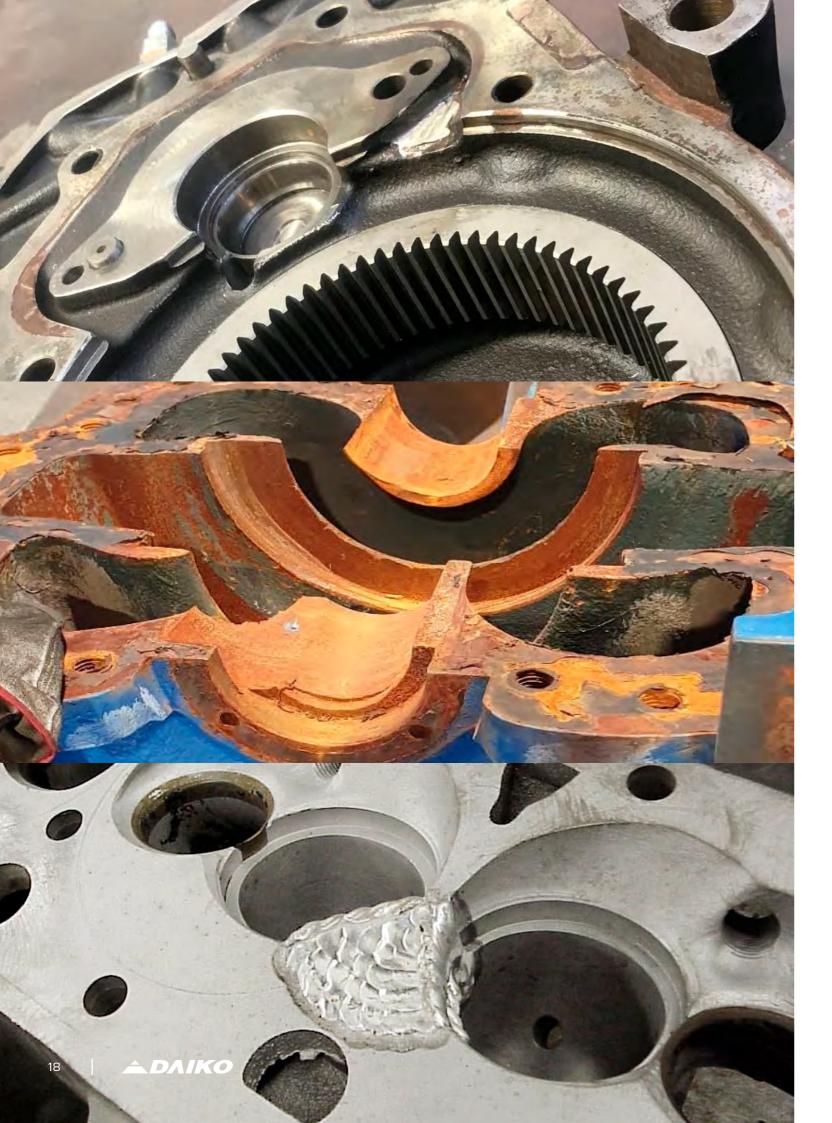
N.B. wires are available in self-shielded (-0) or external shielding gas (-G) version.

## COBALT ALLOYS

			MECHANICAL PROPERTIES		
PRODUCT	FORMAT	DESCRIPTION	HARDNESS	TEMPERATURE RESISTANCE	
G-TECH 1010	Electrode				
DAIKOW 1010	TIG	Product for wear-resistant surfacing also in presence of corrosion and oxidation up to 900 °C. Specific for hot sliding guides and turbine components.	53-58 HRc	900°C	
DAIKOFCW 1010	Flux cored wire	,			
G-TECH 1006	Electrode	Draduct for war waith at aufair.			
DAIKOW 1006	TIG	Product for wear-resistant surfacing also in presence of corrosion and oxidation up to 900 °C. Specific for hot sliding guides and valve seats in the	36-44 HRc	900°C	
DAIKOFCW 1006 / LC	Flux cored wire	oil &gas sector.			
G-TECH 1008	Electrode	Product for wear-resistant surfacing			
DAIKOW 1008	TIG	also in presence of corrosion and oxi- dation up to 900 °C. Specific for bla- des and shearing knives in the wood sector and for hardfacing on punches	46-50 HRc	900°C	
DAIKOFCW 1008	Flux cored wire	and matrices for the processing of stainless steels.			
G-TECH 1021	Electrode	Product for wear-resistant surfacing			
DAIKOW 1021	TIG	also in presence of corrosion and oxi- dation up to 1000 °C. Specific for har- dfacing on blades and knives for hot cutting in the steel sector.	33-36 HRc saldato 44-47 HRc incrudito	1000°C	
DAIKOFCW 1021	Flux cored wire	Very resistant to impacts and com- pression, free from cracks.			
G-TECH 1025	Flux cored wire	Product for wear-resistant surfacing also in presence of corrosion and oxi-			
DAIKOW 1025	TIG	dation up to 800 °C. Specific for bla- des and shearing knives in the wood sector and for hardfacing on punches	200-220 HB saldato 38-40 HRc incrudito	800°C	
DAIKOFCW 1025	Flux cored wire	and matrices for the processing of stainless steels.	ilicidullo		
DAIKOFCW 1050	Flux cored wire	Product for wear-resistant surfacing also in presence of corrosion and oxidation up to 700 °C. Specific for hardfacing on valves, screws and various components of the oil &gas sector.	46-56 HRc	700°C	

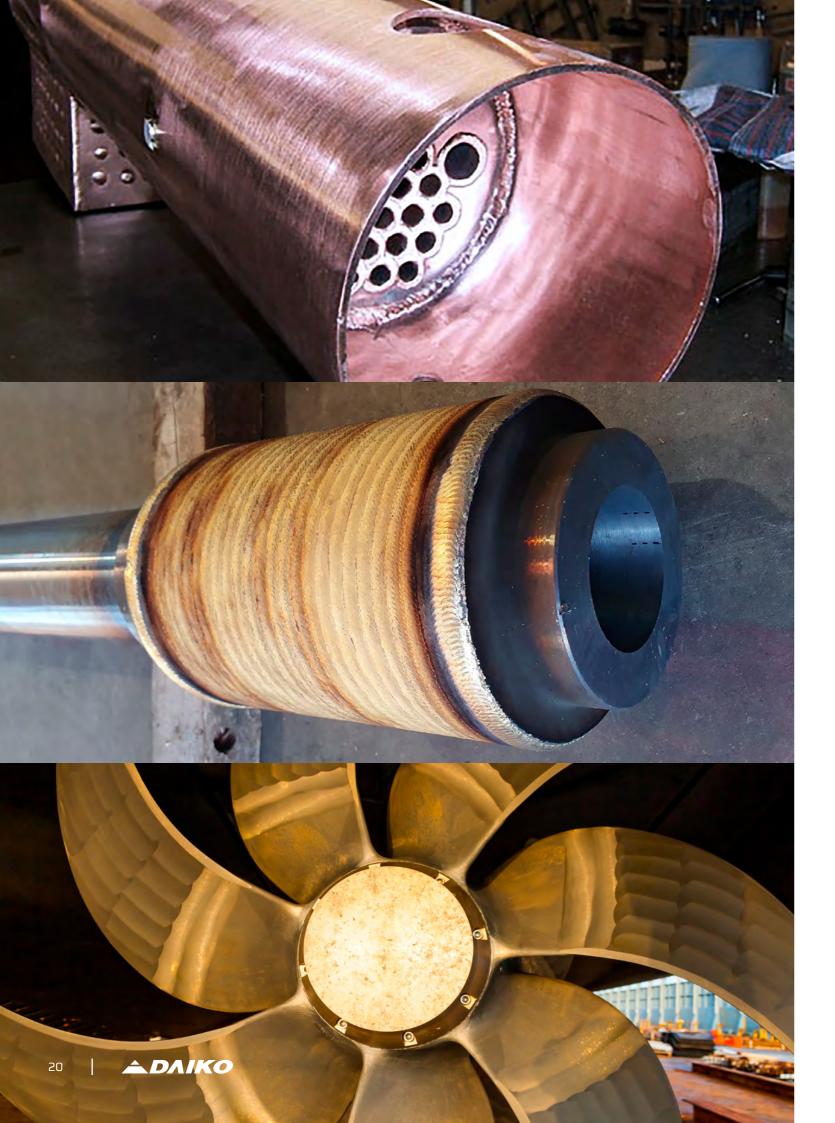
N.B. wires are available in self-shielded (-0) or external shielding gas (-G) version.





## **CAST IRONS**

			MECHANICAL PROPERTIES				
PRODUCT	FORMAT	DESCRIPTION	HARDNESS	RM	RS	<b>A</b> %	
G-TECH 324	Electrode	Pure nickel product for welding and re- pairing gray cast iron and malleable cast	140-160 HB	450 MPa	300 MPa	20	
DAIKOW 324	Solid wire/TIG	irons. The weld metal is very elastic and can be worked with tools.	140-100 FIB	430 IVIPa	300 MPa	20	
G-TECH 323	Electrode	Nickel/iron based product for welding and repairing graphitic cast irons and mechan-	170 200 LID	(FOMP-	220 MD-	10	
DAIKOW 323	Solid wire/TIG	ical cast irons. Very durable weld metal. It is also used for joining cast with steels in general.	170-200 HB	450 MPa	230 MPa	10	
G-TECH 3235	Electrode	Nickel/iron based product for welding and repairing graphitic cast irons and mechan-					
DAIKOFCW 323S	Flux cored wire	ical cast irons. Thanks to the high nickel content, the deposit is very tenacious. It is also used for joining cast with steels in general.	160-180 HB	500 MPa	350 MPa	12	
DAIKOFCW 321	Flux cored wire	Nickel/iron based product for welding and repairing graphitic cast irons and for mixed cast iron welds with steels.	140-160 HB	430 MPa	220 MPa	10	
DAIKOFCW 345	Flux cored wire	Nickel/iron-based product for welding and repairing cast iron castings and for mixed cast iron welds with steels.	150-170 HB	550 MPa	340 MPa	16	
G-TECH 330Cu	Electrode	Nickel-copper-based product for welding and repairing cast irons that are difficult	1CO 100 LID	220 MD2	200 MD5	10	
DAIKOW 330Cu	Solid wire/TIG	to weld. The deposit can be worked with tools.	160-180 HB	330 MPa	200 MPa	18	
G-TECH 306Cu	Electrode	Product based on nickel and iron with copper for welding and repairing cast irons that need a good arc strike and a malleable deposit.	180-200 HB	380 MPa	240 MPa	15	
G-TECH 305	Electrode	Nickel-iron-based product with bimetallic core for welding and repairing cast irons when high quality mechanical and aesthetical deposit is needed.	190-210 HB	450 MPa	250 MPa	14	
G-TECH 301	Electrode	Economical product for repairing hot iron castings. The deposit has the same color of the base material.	150-220 HB	520 MPa	330 MPa	8	
G-TECH 301V	Electrode	Special product for welding and hardfacing cast iron. The deposit has the same color as the base material.	240-260 HB	580 MPa	350 MPa	8	



## **COPPER AND ITS ALLOYS**

			MECHANICAL PROPERTIES				
PRODUCT	FORMAT	DESCRIPTION	HARDNESS	RM	RS	<b>A</b> %	
G-TECH CuSn	Electrode	Special product for copper welding with excellent					
DAIKOW CuSn	Solid wire/ TIG	electrical conductivity. Specific for welding of electrolytic cells and components for steelworks.	60-70 HB	190 MPa	60 MPa	35	
DAIKOW CuAg	Solid wire/ TIG	Special product for copper welding with excellent electrical conductivity. Specific for welding of electrical components, conductors etc.	70-90 HB	210 MPa	70 MPa	35	
DAIKOW CuSi3	Solid wire/ TIG	Special product for welding copper and its alloys, and also for joining copper with steels. Specific for welding galvanized sheet in general.	90 HB	350 MPa	150 MPa	42	
G-TECH CuSn7	Electrode	Special product for welding copper/tin alloys. Spe-					
DAIKOW CuSn6	Solid wire/ TIG	cific for welding of bronzes and castings in gener- al, also for artistic applications.	80 HB	260 MPa	140 MPa	20	
DAIKOW CuSn8	Solid wire/ TIG	Special product for welding copper/tin alloys. Specific for welding valves and castings in general, even for artistic applications.	90 HB	280 MPa	150 MPa	20	
DAIKOW CuSn9	Solid wire/ TIG	Special product for welding copper alloys with a high tin content. Specific for welding of special bronzes and castings in general, even for artistic applications of high quality.	100 HB	360 MPa	180 MPa	42	
DAIKOW CuSn12	Solid wire/ TIG	Special product for welding copper alloys with a high tin content. Specific for welding of special bronzes and castings in general, even for artistic applications of high quality	90 HB	280 MPa	150 MPa	20	
G-TECH 401	Electrode	Special product for welding Bz/Al alloys. Specific for welding pump bodies, naval propellers, anti-					
DAIKOW 401	Solid wire/ TIG	friction plating, etc. It is also used to weld brass alloys for color similarity.	100 HB	400 MPa	180 MPa	40	
G-TECH 405	Electrode	Special product for welding Bz/Al alloys. Specific					
DAIKOW 405	Solid wire/ TIG	for welds and antifriction plating etc. Repair of sliding guides, bearings etc.	140 HB	500 MPa	210 MPa	35	
DAIKOW CuAl8Ni2	Solid wire/ TIG	Special product for welding Bz/Al alloys. Specific for wear resistant platings. Repair of guides sliding, bushings etc.	150 HB	530 MPa	240 MPa	30	
DAIKOW CuAl8Ni6	Solid wire/ TIG	Special product for welding CuAl-Ni alloys, excellent resistance to fretting wear with metals in general, specific for guides and bushings	200 HB	690 MPa	270 MPa	16	
G-TECH 403	Electrode	Wear-resistant product for hardfacing on all					
DAIKOW CuMn13Al	Solid wire/ TIG	steels, resistant to corrosion and cavitation. Specific for turbines, ship hinges etc.	250-290 HB	900 MPa	350 MPa	10	
G-TECH 413	Electrode	Special product for welding Cupro-nickel alloy 70/30. Specific for the construction and repair of	80.117	2001:-	455.45	2,	
DAIKOW 413	Solid wire/ TIG	exhaust pipes in the shipbuilding segment and plating of heat exchangers.	80 HB	300 MPa	160 MPa	34	
DAIKOW 412	Solid wire/ TIG	Special product for welding Cupro-nickel alloy 90/10. Specific for the construction and repair of exhaust pipes in the shipbuilding segment and plating of heat exchangers.	115 HB	420 MPa	210 MPa	36	

## **ALUMINIUM AND ITS ALLOYS**

			MECHANICAL PROPERTIES			
PRODUCT	FORMAT	DESCRIPTION	RM	RS	<b>A</b> %	
G-TECH AI 99,8	Electrode	Product for welding pure aluminum, resistant to corrosion. Specific for the industrial electrical	90-110	70	30	
DAIKOW AI 99,8	Solid wire/TIG	sector, excellent conductivity. Suitable for welding 1070-1080-1450-1100 alloys.	30-110	70	30	
G-TECH 605	Electrode	Product for welding aluminum silicon alloys. Specific for repairing engine blocks and	110-130	80	20	
DAIKOW 605 (AISi5)	Solid wire/TIG	castings, generally in Āl/Si ālloy. Construction of frames for trade fair furniture etc.	110-130	80	20	
G-TECH 601	Electrode	Product for welding alloys with a high silicon content. Specific for repairing monoblocs	130-150	70	18	
DAIKOW 601 (AlSi12)	Solid wire/TIG	castings, heads of diesel engines etc.				
DAIKOW AIMg3	Solid wire/TIG	Product for welding magnesium aluminum alloys, resistant to corrosion. Excellent resistance to high temperatures.	230-250	120	22	
DAIKOW AIMg5	Solid wire/TIG	Product for welding aluminum alloys from 3 to 5% magnesium, resistant to marine corrosion. Specific for shipbuilding and carpentry where high mechanical strength is required.	270-290	125	30	
DAIKOW AlMg4,5Mn	Solid wire/TIG	Product for welding magnesium aluminum alloys, excellent corrosion resistance. Specific for carpentry constructions and shipbuilding where high mechanical characteristics and impact resistance are required.	300-320	130	30	
DAIKOW Mg 92-8	TIG chopsticks	Rod for welding magnesium and its alloys. Specific for welding and repair of components in the automotive sector and, in particular, for motorcycle crankcases.	170-180	95	2	

## **CUTTING GAND BEVELING**

PRODUCT	FORMAT	DESCRIPTION
G-TECH 390	Electrode	Electrode used for beveling on all types of steel, cast iron etc. Used for cutting previous welds and for beveling on castings.
CARBONE GIUNTABILE E NON GIUNTABILE	Electrode in graphite	Electrode in graphite, coppered to be used with generator in combination with compressed air. Specific for cutting and beveling, on all types of carbon steels, stainless steels and cast iron. Mainly used for large removals.

## **TITANIUM ALLOYS**

			MECHANICAL PROPERTIES		
PRODUCT	FORMAT	FORMAT DESCRIPTION		RS	
DAIKOW Ti-1	Wire/TIG	Commercially pure titanium. It is the grade with the least mechanical strength, but which guarantees maximum ductility. The deposit guarantees excellent corrosion resistance in oxidizing environments.	300-340	250	
DAIKOW Ti-2	Wire/TIG	Universal product for welding titanium gr. 1, 2, 3 and 4. It offers excellent weldability and is used especially in the chemical industry.	400-540	275	
DAIKOW Ti-5	Wire/TIG	Product for welding titanium grade 5. It offers extreme mechanical strength combined with excellent corrosion resistance. Used in aerospace, chemical, energy production and oil & Gas.	890-920	810	
DAIKOW Ti-7	Wire/TIG	Product with mechanical properties similar to grade 2 but with improved corrosion resistance.	380-420	275	
DAIKOW Ti-12	Wire/TIG	Product with excellent corrosion resistance and good mechanical characteristics. Mainly used in the chemical sector for pressure vessels and pipes.	480-490	345	



## ALLOYS FOR BRAZING AND BRAZING

PRODUCT F		FORMAT	DESCRIPTION	BLENDING	MECHANICAL PROPERTIES		
	rkoboci	TORMAT	RANGE		RM N/MMQ.	<b>A</b> %	
	DAIKOSB 52	Rod	Fluid alloy for the economic brazing of copper, specific for the thermohydraulic sector.	710-785°C	230-260	3,5	
	DAIKOSB 53	Rod	Very fluid alloy for the economical brazing of copper, specific for thermohydraulic sector, and for narrow tolerances.	710-730°C	250-290	5	
	DAIKOSB 54	Rod	Very fluid alloy with low Ag content, for copper brazing, specific for the industrial refrigeration sector. Very smooth and durable.	645-785°C	270-320	7	
	DAIKOSB 55	Rod	Very fluid alloy with a high Ag content, for copper brazing, specific for the industrial refrigeration sector. Very smooth and durable.	650-815°C	290-340	10	
	DAIKOSB 56	Rod	Cadmium-free low Ag alloy, very resistant, specific for brazing of ferrous material, copper alloys, hard metals etc.	690-810°C	370-440	25	
	DAIKOSB 57	Rod	Alloy with low content of Ag+Sn, cadmium-free, very resistant and fluid, specific for brazing of ferrous material, copper and nickel alloys.	680-760°C	340-390	20	
	DAIKOSB 58	Rod	Medium-content alloy of Ag, cadmium-free, very fluid, for brazing in the refrigeration sector and unions between ferrous and copper alloys.	677-766°C	320-350	18	
	DAIKOSB 59	Rod	Medium content alloy of Ag +Sn, cadmium-free, very fluid, for capillary brazing in the refrigeration sector and unions between copper and brass, copper and steel, also for the food sector.	665-755°C	310-340	20	
	DAIKOSB 60	Rod	Medium/high content alloy of Ag+Sn, cadmium-free, very fluid and capillary bath, specific for the refrigeration sector and unions between copper and brass, copper and steel, also for food and chemical plants.	630-730°C	310-330	21	
	DAIKOSB 61	Rod	High Ag alloy, cadmium-free, for fluid and capillary brazing, specific for the food and chemical sector. Very requested for use at low temperature and micro brazing.	677-732°C	320-370	26	
	DAIKOSB 62	Rod	Alloy with a high content of Ag+Sn, cadmium-free, for fluid and capillary brazing, specific for the food and chemical sector. In great demand for use at low temperature and minor repairs of cracks etc.	650-710°C	310-360	27	
	DAIKOSB 63	Rod	Alloy with very high ag content, cadmium-free, for very fluid and capillary brazing, on stainless steel and copper, specific for the food and chemical sector. In great demand for use in the chemical and pharmaceutical industry.	630-660°C	350-410	30	

NOTE: chopsticks available in both SB (uncoated) and SBR (deoxidizer coated) versions

## ALLOYS FOR BRAZING AND BRAZING

PRODUCT	FORMAT DESCRIPTION		BLENDING	MECHANICAL PROPERTIES	
PRODUCT	TORMAT	BESCRIP HOR	RANGE	RM N/MMQ.	<b>A</b> %
DAIKOSB 64	Rod	Alloy with very high ag content, cadmium-free, for very fluid and capillary brazing, on stainless steel and copper, specific for the food and chemical sector. In great demand for use in the chemical and pharmaceutical industry.	620-655°C	355-420	32
DAIKOSB 85PR	Rod	Partially coated alloy for brazing all copper alloys that are difficult to weld. Usable for both flame and TIG applications.	820-860°C	750-810	22
DAIKOSB 412/F	Flux cored rod	Rod containing deoxidizing flux, for the brazing of the aluminium/Si 10-12 alloys used in the vintage bodywork and repair sector of radiators.	560-580°C	120-150	18
DAIKOSB 410/S	Flux cored rod	Rod containing deoxidizer, for brazing aluminum alloys series 4043-4047. Specific for repair of engine blocks and components of silicon aluminum alloys.	575-580°C	130-160	25
DAIKOSB ZnAI2	Rod	Self-shielded cored ZnAl alloy, for brazing aluminum alloys. Specific for the repair of heat exchangers, aluminum condensers etc. Very smooth and durable.	377-385°C	190-220	24
DAIKOSB ZnAl22	Rod	Self-shielded cored ZnAl alloy, for brazing alumi- num alloys. Specific for the repair of radiators, heat exchangers etc. Very fluid and ductile for small thicknesses.	430-490°C	170-200	20
DAIKOSB 510	Rod	Copper/zinc alloy with high mechanical strength, for the brazing of steel, cast iron and brass. Specific for antifriction surfacing, for repairing naval propellers and brass components.	865-890°C	780-840	22
DAIKOSB 511	Rod	Copper/zinc and nickel alloy with high mechanical strength, for steels brazing in general. Specific for the production of metal furniture, braze welding of tools and joining high pressure pipes.	940-980°C	810-870	20
DAIKOSB 600 Sn	Rod	Tin alloy rod used in the electronics sector, and for economic tinning in general.	235-295°C	-	-
DAIKOSB 605 Ag	Rod	Tin/Ag alloy rod used in the electrical/electron- ic sector, quality tinning with excellent electrical conductivity.	ic sector, quality tinning with excellent electrical 220-280°C -		-
DAIKOSB 635 Pb	Rod	Tin/Lead alloy rod for tinning in general. Used in the funerary field and for the stagnating of cop- per gutters.	250-300°C	-	-
DAIKOSB 650 Pb	Rod	Tin/Lead alloy rod for tinning in general. Used in the funerary field and for the stagnating of cop- per gutters.	270-320°C	-	-

NOTE: chopsticks available in both SB (uncoated) and SBR (deoxidizer coated) versions



## **FLUXES**

PRODUCT	FORMAT	DESCRIPTION	MELTING POINT
DAIKO N	Powder	Deoxidizer for brazing copper and its alloys, used as	520.0400
DAIKO N/P	Paste	an active protection to prevent the formation of oxides on the workpiece to be as welded.	520-840°
DAIKO H	Powder	Deoxidizer for the brazing of stainless steel, extremely	F00 0000
DAIKO H/P	Paste	fluid, penetrates even in very thin spaces. Used for capillary brazing.	500-800°
DAIKO OT	Powder	Deoxidizer for brazing brass and brass/nickel. Also	700,000
DAIKO OT/P	Paste	used for brazing hard metals.	790-980°
DAIKO AL	Powder	Deoxidizer for brazing aluminum and its alloys.	500-700°
DAIKO GHISAL	Powder	Deoxidizer for autogenous welding of cast iron, used to avoid the formation of oxides.	790-980°
DAIKO H7 SN	Liquid	Deoxidizer for use with tin and tin/Ag alloys.	180-290°
DAIKO STAGNAL	Paste	Deoxidizer in paste to be used for unions of copper plates, and tin copper. Excellent electrical conductivity. Do not point the flame directly at the product.	190-220°
UNIVERSAL 1000	Paste	Deoxidizer in paste specific for brazing alloys with high Ag content, mainly used for joining stainless steels.	400-800°



## METALSPRAY POWDERS FOR HARDFACING

PRODUCT	DESCRIPTION	HARDNESS
DAIKOPW 30 WC	Wear-resistant coatings, high resistance to abrasion and corrosion at high temperatures, thicknesses from 0.5 up to 2.0mm on Carbon Steel (1.0mm max on Stainless Steel).  Machining is possible with grinding wheel.	Matrix 60 HRc WC 1900HV
DAIKOPW 40 WC	Wear-resistant coatings, high resistance to abrasion and corrosion at high temperatures, thicknesses from 0.3 up to 1.5mm on Carbon Steel (0.8mm max on Stainless Steel).  Machining is possible with grinding wheel.	Matrix 60 HRc WC 1900HV
DAIKOPW 155 WC	Wear-resistant coatings, high resistance to abrasion and corrosion at high temperatures, thicknesses from 0.8 up to 3.0mm on Carbon Steel (2.0mm max on Stainless Steel).  Machining is possible with grinding wheel.	Matrix 53 HRc WC 1900HV
DAIKOPW 60WC	Wear-resistant coatings, high resistance to abrasion and corrosion at high temperatures, thicknesses from 0.3 up to 1.0mm on Carbon Steel (0.7mm max on Stainless Steel).  Machining is possible with grinding wheel.	Matrix 60 HRc WC 1900HV
DAIKOPW 80WC	Wear-resistant coatings, high resistance to abrasion and corrosion at high temperatures, thicknesses from 0.3 up to 0.8mm on Carbon Steel (0.5mm max on Stainless Steel).  Machining is possible with grinding wheel.	Matrix 60 HRc WC 1900HV
DAIKOPW 555 WC	Anti-wear coatings, high resistance to abrasion and corrosion at high temperatures, thicknesses from 0.8 up to 5.0mm on Carbon Steel (2.0mm max on Stainless Steel).  Machining is possible with grinding wheel.	Matrix 48 HRc WC 1900HV
DAIKOPW 22GL	Designed for the glass industry, used for geometrical and dimensional reconstructions or single-layer coatings on cast iron. Applicable thickness from 0.5 to 3.0mm.	22 HRc
DAIKOPW 27GL	Designed for the glass industry, used for geometrical and dimensional reconstructions or single-layer coatings on cast iron. Applicable thickness from 0.5 to 3.0mm.	25 HRc
DAIKOPW 28GL	Designed for the glass industry, used for geometrical and dimensional reconstructions or single-layer coatings on cast iron. Applicable thickness from 0.5 to 3.0mm.	28 HRc
DAIKOPW 30GL	Designed for the glass industry, used for geometrical and dimensional reconstructions or single-layer coatings on cast iron. Applicable thickness from 0.5 to 3.0mm.	30 HRc
DAIKOPW 33	Restoration and protection of sliding parts, corrosion-resistant, thickness from 0.3 to 3.0mm on Carbon Steel (1.0 mm on Stainless Steel). Excellent surface finish after machining or grinding.	33 HRc
DAIKOPW 45	Restoration and protection of sliding parts, corrosion-resistant, thickness from 0.3 to 3.0mm on Carbon Steel (1.0 mm on Stainless Steel). Excellent surface finish after machining or grinding.	40 HRc
DAIKOPW 62Cr	Restoration and protection of sliding parts, corrosion-resistant, thickness from 0.3 to 1.0mm on Carbon Steel (0.7mm on Stainless Steel). Excellent surface finish after machining or grinding.	60 HRc
DAIKOPW 1006	Co-based powder for coatings, resistant to combined wear, corrosion, and oxidation up to 900°C. Designed for PTA or Laser Cladding systems, depending on the torch deposition capacity and powder particle size. Cobalt Alloy Gr.6.	40 HRc
DAIKOPW 1008	Co-based powder for coatings, resistant to combined wear, corrosion, and oxidation up to 750°C. Designed for PTA or Laser Cladding systems, depending on the torch deposition capacity and powder particle size. Cobalt Alloy Gr.12.	45 HRc
DAIKOPW 1021	Co-based powder for coatings, resistant to combined wear, corrosion, and hot sliding.  Designed for PTA or Laser Cladding systems, depending on the torch deposition capacity and powder particle size. Cobalt Alloy Gr.21.	30 HRc
DAIKOPW 660LCD	Wear-resistant coatings, high resistance to abrasion and corrosion at high temperatures, thicknesses from 0.5 to 1.5mm on Carbon Steel (0.8mm on Stainless Steel).  Designed for Laser Cladding and PTA. Machining is possible with grinding wheel.	Matrix 60 HRc WC 1900HV
DAIKOPW 560LCD	Wear-resistant coatings, high resistance to abrasion and corrosion at high temperatures, thicknesses from 0.5 to 1.5mm on Carbon Steel (0.8mm on Stainless Steel).  Designed for Laser Cladding and PTA. Machining is possible with grinding wheel.	Matrix 60 HRc WC 1900HV
DAIKOPW 555LCD	Wear-resistant coatings, high resistance to abrasion and corrosion at high temperatures, thicknesses from 0.5 to 2.0mm on Carbon Steel (1.0mm on Stainless Steel).  Designed for Laser Cladding and PTA. Machining is possible with grinding wheel.	Matrix 55 HRc WC 1900HV
DAIKOPW 550LCD	Wear-resistant coatings, high resistance to abrasion and corrosion at high temperatures, thicknesses from 0.5 to 2.0mm on Carbon Steel (1.0mm on Stainless Steel).  Designed for Laser Cladding and PTA. Machining is possible with grinding wheel.	Matrix 55 HRc WC 1900HV
DAIKOPW 625LCD	Wear, corrosion, and oxidation-resistant coatings up to 800°C. Geometric restoration on all alloys, including cast iron. Deposition from 1.0 to 6.0mm. Machinable with grinding wheels, excellent post-grinding finish.	-
DAIKOPW 33LCD	Designed for geometric restoration, excellent for glass molds and crack resistance.  Machinable with grinding wheels, perfect for profiles and edges.	33 HRc
DAIKOPW 86-10-4	Hard coatings with excellent wear and corrosion resistance. High-quality post-grinding or lapping, making it suitable for abrasion, erosion, and metal-to-metal friction, particularly when high protection against corrosion is required.	-

NOTE: All powders can be supplied in various grain sizes, depending on the application process. (SPRAY – SPRAY AND FUSE – PTA)
Other types of Ni and Co based powders can be supplied on request.

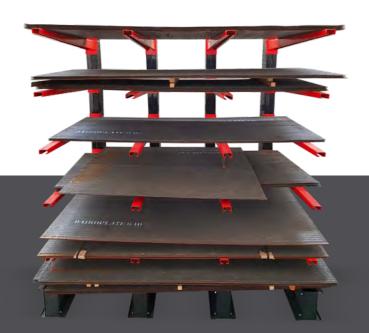
**ADNIKO** 

#### **CLADDED WEAR PLATE**

PRODUCT	DESCRIPTION	HARDNESS
DAIKOPLATE 640 DAIKOPLATE 655	Highly alloyed anti-wear sheet made with a chrome carbide plating on a carbon steel base that guarantees exceptional wear resistance with moderate shocks and temperature resistant up to 450°C.	60-62 HRc
DAIKOPLATE 695	Highly alloyed extra hard sheet made with a mixed carbide plating on a carbon steel base that guarantees exceptional wear resistance at temperatures above 600 ° C thanks to the addition of elements such as Nb, Mo, W and V.	61-64 HRc

## DAIKOPLATE wear-resistant plated sheets

DAIKOPLATE 640 is an extra hard plate made with a chromium carbide cladding on a carbon steel base which guarantees exceptional resistance to wear in conditions of high stress and moderate impacts. DAIKOPLATE 640 guarantees good heat resistance up to 500° C. DAIKOPLATE 695 has been developed for higher temperatures applications.



#### **CLADDED WEAR TUBES**

PRODUCT	DESCRIPTION	HARDNESS
DAIKOTUBE 201R DAIKOTUBE 655	Highly alloyed wear pipe madewith an internal plating of chromium carbides on a carbon steel base that guarantees exceptional wear resistance with moderate shocks and temperature resistant up to 275°C (201R) - 400° (655)	58-60 HRc
DAIKOTUBE 640 DAIKOTUBE 695	High-alloy wear-resistant pipe, made from clad plate, designed to ensure excellent wear resistance under moderate impact and temperatures up to 400°C (grade 640) or 500°C (grade 695).	60-64 HRc



#### DAIKOTUBE Wear-resistant plated tubes

DAIKOTUBE is internally cladded with chromium carbides on a carbon steel base which guarantees exceptional resistance to wear in conditions of high stress and moderate impacts. DAIKOTUBE 640 guarantees good heat resistance up to 500° C. DAIKOTUBE 695 has been developed for higher temperatures applications.

#### Clad chemical composition and hardness

Тур	С	Mn	Si	Cr	Mo	Nb	v	w	Others (including B)	Hardness
640 3+3	4,0÷5,5	2,0÷3,0	0,8÷1,0	22÷25	-	-	-	-	0,5÷0,7	55÷58 HRC
655	4,0÷5,5	2,0÷3,0	1	28	-	-	-	-	1	60 HRC
640	4,0÷5,5	2,0÷3,0	0,8÷1,0	23÷30	-	-	-	-	0,5÷0,7	60÷62 HRC
695	4,9÷5,3	0,2÷0,5	0,8÷1,0	24÷27	3,0÷4,0	4,0÷5,0	0,8÷1,2	1,8÷2,2	0,5÷0,7	62÷65 HRC

#### ■ Typical thicknesses

	BASE METAL	CLADDING
3+3	3 mm	3 mm
5+3	5 mm	3 mm
6+4	6 mm	4 mm
8+5	8 mm	5 mm
10+5	10 mm	5 mm

#### Typical dimensions

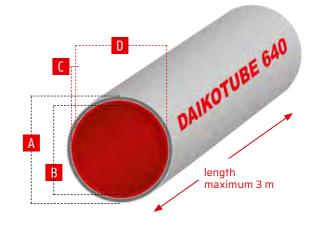
BASE METAL	CLADDED AREA
1500 X 3000 mm	1400 x 2950 mm
2000 X 3000 mm	1900 x 2950 mm

#### Clad chemical composition and hardness

	Тур	С	Mn	Si	Cr	Мо	Nb	v	w	Others (including B)	Hardness
	201R	0,4÷0,6	0,5÷1	2,6÷3,0	9÷10	-	-	-	-	-	58÷60 HRC
	655	4,5÷5,0	-	1	28	-	-	-	-	1	59 HRC
	640	4,0÷5,5	2,0÷3,0	0,8÷1,0	23÷30	-	-	-	-	0,5÷0,7	60÷62 HRC
	695	4,9÷5,3	0,2÷0,5	0,8÷1,0	24÷27	3,0÷4,0	4,0÷5,0	0,8÷1,2	1,8÷2,2	0,5÷0,7	62÷65 HRC

#### Dimensions

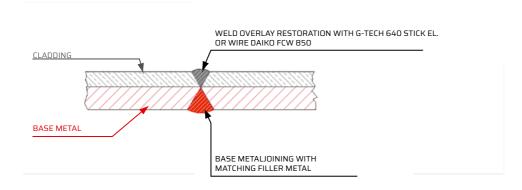
ø OUTER	ø INNER	CLAD THICKNESS C	Ø INNER WITH CLAD D	
70 mm	54 mm	2,5 mm	49 mm	
101,6 mm	85,6 mm	3,5 mm	78,6 mm	
121 mm	105 mm	3,5 mm	98 mm	
139,7 mm	119,7 mm	3,5 mm	112,7 mm	
171 mm	151 mm	3,5 mm	144 mm	
203 mm	183 mm	3,5 mm	176 mm	



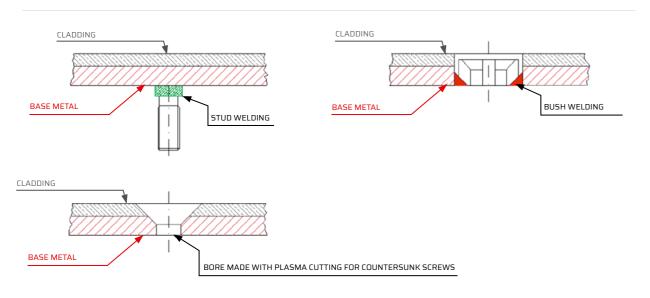


Non-standard sizes available on request, based on customer's drawings and specifications.

#### ■ Plates joining



#### ■ Fixing systems



#### ■ Main industrial sectors and applications

INDUSTRIES	PRODUCTS
Cement production - Energy production	Separators - fans - chutes - cyclones
Steel mills - Paper, glass and recycling industries	mixers - silos - conveyors - hoppers
Agricultural industries - Quarries - etc	screw conveyors - pipes etc



## HARDNESS COMPARISON TABLE

Tensile Strength	Vickers Hardness	Sphere Intender	Brinell Hardness		cwell Iness	Tensile Strength	Vickers Hardness	Sphere Intender	Brinell Hardness		well ness
N/mm²	HV	mm	НВ	HRB	HRC	N/mm²	HV	mm	НВ	HRB	HRC
200	63	7,32	60			690	215	4,22	204	94	
210	65	7,22	62			700	219	4,19	208		
220	69	7.04	66			705	220	4,18	209	95	
230	72	6,95	68			710	222	4,16	211	95,5	
240	75	6,82	71			720	225	4,13	214	96	
250	79	6,67	75			730	228	4,11	216		
255	80	6,63	76			740	230	4,08	219	96,5	
260	82	6,56	78	/1		750	233	4,07	221	97	
270	85	6,45	81	41	-	755	235	4,05	223	075	
280 285	88 90	6,35 6,28	84 86	45 48		760 770	237 240	4,03 4,01	225 228	97,5 98	
290	91	6,25	87	49		780	243	3,98	231	96	21
300	94	6,19	89	51		785	245	3,97	233		
305	95	13,16	90	5.2		790	247	3,95	235	99	
310	97	6,10	92	54		800	250	3,93	238	99,5	22
320	100	6,01	95	56		810	253	3,91	240		
330	103	5,93	98	58		820	255	0,89	242		23
335	105	5,87	100	59		830	258	3,87	245		
340	107	5,B3	102	60		835	260	3,85	247		24
350	110	5,75	105	62		840	262	3,84	249		
360	113	5,70	107	63,5		850	265	3,82	252		
370	115	5,66	109	64,5		860	268	3,80	255		25
380	119	5,57	113	66		865	270	3,78	257		
385	120	5,54	114	67		870	272	3,77	258		
390	122	5,50	116	67,5		880	275	3,76	261		26
400	125	5,44	119	69		890	278	3,74	264		
410	128	5,38	122	70		900	280	3,72	266		27
415	130	5,33	124	71		910	283	3,70	269		
420	132	5,32	125	72		915	285	3,69	271		70
430	135	5,26	128	73		920	287	3,68	273		28
440 450	138 140	5,20 5,17	131 133	74 75		930 940	290 293	3,66 3,64	276 278		29
460	143	5,17	136	76,5		950	285	3,63	280		23
465	145	5,08	138	70,5		960	299	3,61	2B4		
470	147	5,05	140	7715		965	300	3,60	285		
480	150	5,00	143	78,5		970	302	3,59	287		30
490	153	4,96	145	79,6		980	305	3,57	290		
495	155	4,93	147	80		990	308	3,55	293		
500	157	4,90	149	81		995	310	3,54	295		31
510	160	4,86	152	81,5		1000	311	3,53	296		
520	163	4,81	155	82,5		1010	314	3,52	299		
530	165	4,78	151	83		1020	317	3,50	301		32
540	168	4,74	160	84,5		1030	320	3,49	304		
545	170	4,71	162.	85		1040	323	3,47	307		
550	172	4,70	163	85,5		1050	327	3,45	311		33
560	175	4,66	166	86		1060	330	3,44	314		
570	178	4,62	169	86,5		1070	333	3,43	316		7.
575	180	4,59	171	87		1080	336	3,41	319		34
580	181	4,58	172	00		1090	339	3,40	322		
590 595	184 185	4,54 4,53	175 176	88		1095 1100	340 342	3,39 3,38	323 325	-	35
600	185	4,53 4,51	176	89		1110	342	3,38	325		33
610	190	4,47	181	89,5		1120	349	3,35	332		
620	193	4,44	184	90		1125	350	3,34	333		
625	196	4,43	185	50		1130	352	3,33	334		
630	191	4,40	187	91		1140	355	3,32	337		36
640	200	4,37	190	91,5		1150	358	3,31	340		
650	203	4,34	193	92		1155	360	3,30	342		
660	205	4,32	195	92,5		1160	361	3,29	343		
670	208	4,29	198	93		1170	364	3,28	346		37
675	210	4,27	199	93,5		1180	367	3,26	349		
680	212	4,25	201			1190	370	3,25	352		

Tensile Strength	Vickers Hardness	Sphere Intender	Brinell Hardness		kwell Iness	Tensile Strength	Vickers Hardness	Sphere Intender	Brinell Hardness		well lness
N/mm²	HV	mm	нв	HRB	HRC	N/mm²	HV	mm	нв	HRB	HRC
1200	373	3,24	354		38	1750	533	2,72	506		
1210	376	3,23	357			1760	536	2,71	509		
1220	380	3,21	361			1770	539		512		
1230	382	3,2	363		39	1775	540	2,70	513		
1240	385	3,19	366			1780	541	,	514		52
1250	388	3,18	369			1790	544	2,69	517		
1255	390	3,17	371			1800	547	_,	520		
1260	392	3,	372		40	1810	550	2,68	523		
1270	394	3,16	374			1820	553	2,67	525		
1280	397	3,14	377			1830	556	2,07	528		
1290	400	3,13	380			1840	559	2,66	531		
1300	403	3,12	383		41	1845	560	2,00	532		53
					41			2.05			23
1310	407	3,10,	387			1850	561	2,65	533		
1320	410	3,09	390			1860	564	5.57	536		
1330	413	3,08	393		42	1870	567	2,64	539		
1340	417	3,07	396			1880	570		542		
1350	420	3,06	399			1890	572	2,63	543		
1360	423	3,05	402			1900	5'15	2,62	546		
1370	426	3,04	405			1910	578		549		54
1380	429		408			1920	580	2.61	551		
1385	430	3,02	409			1930	583	2,60	554		
1390	431		410			1940	586		557		
1400	434	3,01	413		44	1950	589	2,59	560		
1410	437	3,00	415			1955	590	,	561		
1420	440	2,99	418			1960	591		562		
1430	443	2,98	421			1970	594	2,58	564		
1440	446	2,97	424		45	1980	596	2,50	567		55
					45			2.57			55
1450	449	2,96	427			1990	599	2,57	569		
1455	450		428			1995	600		570		
1460	452	2,95,	429			2000	602	2,56	572		
1470	455	2,94	432			2010	605		575		
1480	458	2,93	435		46	2020	607	2,55	577		
1485	460		437			2030	610		580		
1490	461	2,92	438			2040	613	2,54	582		
1500	464	2,91	441			2050	615		584		56
1510	467	2,9	444			2060	618	2,53	587		
1520	470	2,89	447			2070	620		589		
1530	473		449		47	2080	623	2,52	592		
1540	475	2,88	452			2090	626		595		
1550	479	2,81	455			2100	629	2,51	598		
1555	480	_,_,	456			2105	630	_,_,	599		
1560	481	2,86	457			2110	631		600		
1570	484	2,85	460		48	2120	634	2,50	602		
1580	486	2,00	462		70	2130	636		604		
		204				2140		2.40			F 7
1590	489	2,84	465				639	2,49	607		57
1595	490	2,83	466			2145	640		608		
1600	491	_	467			2150	641		609		
1610	494	2,82	470			2160	644	2,48	612		
1620	497		472		49	2170	647	2.47	615		
1630	500		475			2180	650		620		
1640	503	2,8	478			2190	653	2,46	622		
1650	506	2,79	481			2200	655				58
1660	509		483				675				59
1665	510	2,78	485				698				60
1670	511		486				720				61
1680	514	2,77	488		50		745				62
1690	517	2,76	491				773				63
1700	520	2,75	494				800				64
		2,/5									
1710	522	27/	495				829				65
1720	525	2,74	499				864				66
1730	527		501		51		900				67
1740	530	2,73	504				940				68

#### **DIAGRAMS**

Proper storage of welding consumables, whether opened or sealed, is essential to prevent quality issues such as porosity and high levels of diffusible hydrogen, which may lead to cracking in the welded joint.

Upon arrival at the warehouse, all products must be inspected for any damage to the packaging or the contents.

If only the packaging is damaged and the material is deemed recoverable, reconditioning may be carried out.

If reconditioning is not possible, or the material appears damaged or corroded, it must be discarded.

Consumables should be stored in clean, dry environments, on pallets or shelving, avoiding:

direct exposure to sunlight

contact with walls or floors

stacking of full pallets on top of one another

Products must remain in their original, sealed packaging, clearly labeled, and used according to a first-in, first-out (FIFO) inventory system.

Recommended environmental storage conditions Frost-free environment (mandatory)

Recommended temperature and relative humidity:

5-15 °C → humidity <90%

15-25 °C → humidity <55%

25-35 °C → humidity <30%

To avoid condensation, materials must be acclimatized before opening, especially when there is a temperature difference between the storage area and the welding zone.

#### MMA (SMAW) Electrodes

Any electrodes that are wet or contaminated must be discarded. Based on the three main types of electrode coatings, the following is recommended:

Rutile: medium-to-high  $H_2$  content (~25 ml/100g). Typically do not require reconditioning. If needed, they can be dried at 100–110 °C for 1 hour. Ready to use directly from the package.

Cellulosic: high  $H_2$  content (~40 ml/100g). Must not be dried. Use as supplied.

Basic: very low  $H_2$  content (~4 ml/100g). Require baking at 350 °C for 2 hours. Treatment may vary by  $\pm 50$  °C depending on the application.

The process should not be repeated more than 5 times or exceed a total of 10 hours, to avoid deterioration of the coating.

Use of Holding Ovens

Reconditioned electrodes should be placed in a preheated oven at <100 °C. arranged in no more than four lauers.

Any electrodes with chipped coating must be discarded.

To avoid thermal shock during cooling:

lower the temperature to ~80 °C before removal;

store in heated quivers at 70–100 °C, in sufficient quantity for one shift.

Electrodes not used by the end of the shift must be reconditioned again or discarded.

#### GMAW. GTAW. and SAW Wires

Do not require reconditioning prior to use.

A simple visual inspection is sufficient; if there is physical damage or surface corrosion, they must be discarded.

#### **FCAW Cored Wires**

Must be stored in dry environments with controlled temperature and humidity.

They must not be placed in an oven.

If moisture contamination is suspected, they must be discarded — no recovery attempts should be made.

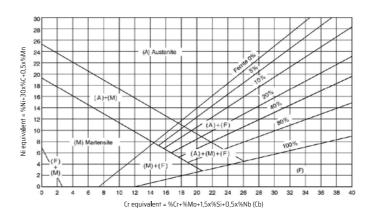
#### **SAW Welding Fluxes**

Fused fluxes: non-hygroscopic; can be used directly if packaging is intact. If moist, they may be dried at 100 °C for 1 hour.

Agglomerated fluxes: moisture-absorbent. For welding where low hydrogen content (<5 ml/100g) is required, reconditioning at 300–350 °C for 2-4 hours in dedicated ovens is necessary.

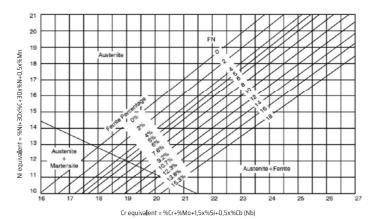
If not fully consumed within the shift, they must be stored in heated hoppers at 100–200 °C, protected from air exposure.

For further information, please visit daikowelding.com



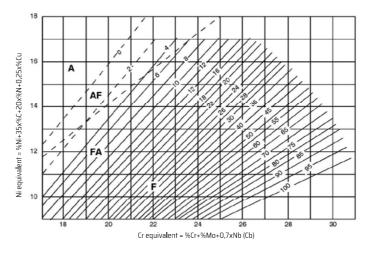
#### SCHAEFFLER DIAGRAM

The Schaeffler diagram is useful for predicting the constitution of your stainless steel weld deposit. Depending on the alloying elements it contains, the Schaeffler diagram provides information on the various phases (structures) present. The chromium equivalent is calculated from the weight percentage of ferriteforming elements (Cr, Si, Mo, Nb, W) and the nickel equivalent is calculated from the weight percentage of austenite-forming elements (C, Ni, Mn, Cu, N). The position in the Schaeffler diagram defined by the Crand Ni-equivalents gives the proportions of martensite, austenite and ferrite in the resulting microstrutture.



#### **DELONG DIAGRAM**

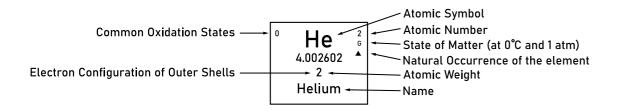
This refines the Schaffler diagram by taking account of the strong austenite stabilising tendency of nitrogen. The chromium equivalent is unaffected but the nickel equivalent is modified to Ni (eq) = Ni +  $(30 \times C) + (0.5 \times Mn) + (30 \times N)$ 

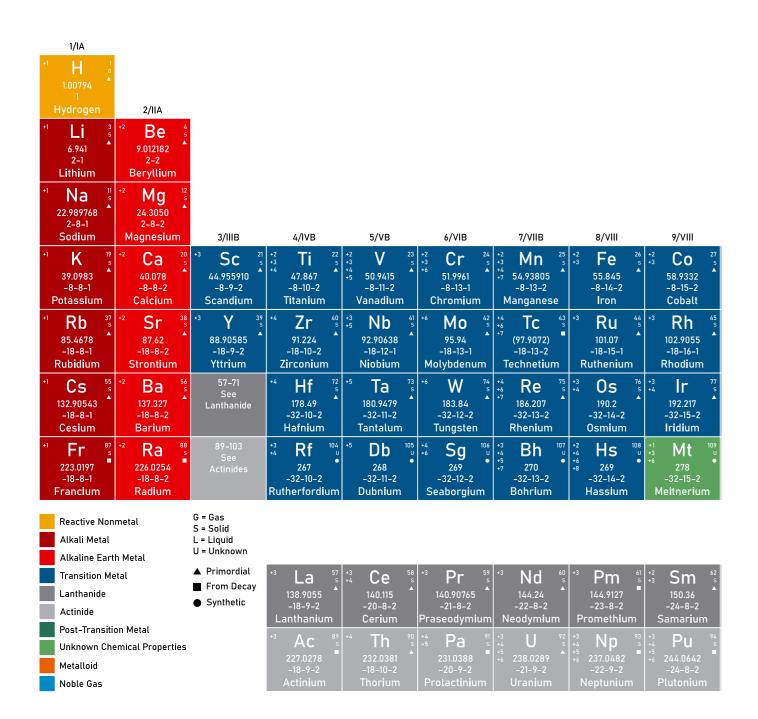


#### WRC - 1992 DIAGRAM

Diagram developed to increase the accuracy of Ferrite Number (FN) prediction in stainless steel weld metal and related dissimilar metal joints. The WRC-1992 diagram includes a coefficient for Cu in the Ni equivalent.

#### PERIODIC TABLE OF THE ELEMENTS





	13/IIIA 14/IVA	15/VA 16/VIA	18/VIIIA/0    He  4.002602  17/VIIA  Helium
·	*3 B 5 24 C 6 5 10.811 2-3 Boron Carbon	22 N 7 6 23 15.9994 4 14.00674 15.9994 2-6 Nitrogen Oxygen	-1 F
10/VIII 11/IB 12/IIB	*3 Al 13 ± 26.981539		18
** Ni	Ga 31 54 Ge 32 54 Ge 55 72.61 8-18-4 Germanium	13 As 33 +4 Se 34 5 74.92159 -8-18-5 Arsenic Selenium	±1 Br 35 0 Kr 36 0 79.904
** Pd ** Ag ** Cd ** 107.8682 ** 112.411 ** 18-18-1 Palladium Silver Cadmium	** In ** ** ** * * * * * * * * * * * * *		t1
195.08 -32-16-2 Platium   Gold   Hg   Hg   Hg   Hg   Hg   Hg   Hg   H	*1 Tl 81 5 44 Pb 82 5 5 44 Pb 15 5 44 Pb 15 5 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	*3 Bi *3 *4 Po *5 *4 Po *5 *4 *5 *5 *4 *5 *5 *6 *5 *5 *6 *5 *5 *6 *5 *5 *6 *5 *5 *6 *5 *5 *5 *6 *5 *5 *5 *5 *5 *5 *5 *5 *5 *5 *5 *5 *5	at At 85 209.9871 209.9871 -32-18-7 Astatine Radon
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	*1 Nh 113	11	

Eu 63 5 151.965 25-8-2 Europium	+3 <b>Gd</b> 64 s 157.25 -25-9-2 Gadolinium	+3 <b>Tb</b> 65 s 158.92534	*3 <b>Dy</b> 66 5 162.50 -28-8-2 Dysprosium	*3 <b>Ho</b> *5 164.93032 * -29-8-2 Holmium	*3 <b>Er</b> 68 5 167.26 4 5 -30-8-2 Erbium	*3 <b>Tm</b> 69 s s 168.93421 * -31-8-2 Thulium	*3 <b>Yb</b> 5 173.04 4 -32-8-2 Ytterbium	174.967 -32-9-2 Lutetium
*3 Am *5 s	r³ Cm %	+3 +4 <b>Bk</b> 97 s	+3 Cf %	*3 Es "5	** Fm 100	+3 +4 Md <sup>101</sup> U	+2 +3 <b>No</b> 102	+3 <b>Lr</b> 103
+5 +6 243.0614	247.0703	247.0703	251.0796	252.083	257.0951	258.10	259.1009	262.11
-25-8-2 Americium	-25-9-2 Curium	-27-8-2 Berkeljum	-28-8-2 Californium	-29-8-2 Einsteinium	-30-8-2 Fermium	-31-8-2 Mendelevium	-32-8-2 Nobelium	-32-9-2 Lawrencium

### MAINTENANCE SOLUTIONS



#### INTEGRATED PRODUCTION CONTROL

At DAIKO, we fully understand our customers' priorities: having access to high-performance, reliable, and consistently dependable products. That is why quality has always been one of our core objectives.

We dedicate the utmost attention to every stage of the production process, carefully monitoring all aspects that influence the manufacturing of high-performance welding consumables. We have established, documented, and maintain a Factory Production Control (FPC) system in accordance with EN 13479, to ensure that every product placed on the market complies with the declared performance of the essential characteristics.

Through an integrated production control approach, we have developed an organizational system that places continuous improvement at the heart of every activity. Our FPC system includes operational procedures, regular inspections, systematic testing and evaluations, enabling us to effectively control raw materials, incoming goods, equipment, production processes, and the final product.

As further confirmation of our commitment to quality, we are recognized as a qualified manufacturer in accordance with the VdTÜV-Merkblatt Schweißtechnik 1153:2017 standard.

## QUALITY ENVIRONMENT HEALTH AND SAFETY

In a global context where quality, safety, and sustainability are essential requirements, DAIKO is committed to ensuring a production process that meets the highest international standards.

We believe that customer trust is built through transparency, reliability, and responsibility. That's why we continuously improve our operational practices, placing product quality, people's safety, and environmental respect at the core of our activities.

It all begins with a rigorous selection of raw materials, prioritizing suppliers who share our values in terms of quality and sustainability. All materials undergo thorough testing to ensure compliance with applicable regulations and international standards.

Throughout the production process, we apply an integrated management system that monitors every phase, ensuring that each product fully meets technical and safety specifications. Our personnel receive regular training on safe work practices and quality control procedures, so that every team member actively contributes to maintaining high standards of excellence.

DAIKO is also strongly committed to protecting the health and safety of its employees and to preserving the environment. For us, sustainable development means meeting today's needs without compromising those of future generations. We adopt a life-cycle approach to our products and services, balancing risks and opportunities with a long-term perspective.

We believe that continuous improvement is only achievable through structured management and a clear strategic vision. In this spirit, DAIKO follows the principles and requirements of ISO 9001, ISO 14001, and ISO 45001 standards, ensuring quality, environmental responsibility, and occupational health and safety.



#### DAIKO S.R.L.

Via Toscana, 3A-3B 20056 - Grezzago (MILANO) - Italy Ph.+39 02 9090477

Via Aquileia, 13-15-17 31048 - S. Biagio di Callalta (TREVISO) - Italy Ph. +39 0422 796367

**LEGAL OFFICE**DAIKO S.R.L
Viale G. G. Felissent 84/D - 31100 - TREVISO - Italy
REA 416562 VAT and T.C. IT04907220265

daikowelding.com info@daikowelding.com

**ADAIKO** 

