

Cr	Zn	Ga, V	Ti	Zr	Al	Be	Others each	Others total
-	0,04	V 0,05	0,03	-	99,70 (min)	0,0003	0,03	-
-	0,07	-	0,10-0,20	-	99,50 (min)	0,0003	0,03	-
-	0,10	V 0,05-0,15	0,10-0,20	0,10-0,25	rest	0,0003	0,05	0,15
-	0,05	-	0,04-0,15	-	rest	0,0003	0,05	0,15
-	0,10	-	0,15	-	rest	0,0003	0,05	0,15
-	0,20	-	0,15	-	rest	0,0003	0,05	0,15
0,15	0,20	-	-	-	rest	0,0003	0,05	0,15
0,05-0,20	0,25	-	0,05-0,20	-	rest	0,0003	0,05	0,15
0,30	0,20	-	0,15	-	rest	0,0003	0,05	0,15
0,05-0,20	0,10	-	0,06-0,20	-	rest	0,0003	0,05	0,15
0,05-0,20	0,25	-	0,05-0,20	-	rest	0,0003	0,05	0,15
0,05-0,20	0,20	-	0,05-0,20	-	rest	0,0003	0,05	0,15
0,05-0,25	0,25	-	0,15	-	rest	0,0003	0,05	0,15
0,05-0,25	0,25	-	0,15	0,10-0,20	rest	0,0003	0,05	0,15

Ni+Co	P	Pb	Si	Sn	Zn	Others total
-	0,05	0,02	2,8-4,0	0,2	0,4	0,5
-	0,05	0,02	2,8-2,95	0,2	0,4	0,5
0,1	0,015	0,01	0,1-0,4	0,5-1,0	-	0,2
-	0,01-0,4	0,02	-	4,0-7,0	0,1	0,2
*	-	0,02	0,2	*	0,2	0,4**
-	-	0,02	0,1	-	0,02	0,5
0,5-3,0	-	0,02	0,2	-	0,2	0,4
4,0-5,5	-	0,02	0,1	-	0,1	0,5
1,5-3,0	-	0,02	0,1	-	0,15	0,5



Safra, an excellence of the Italian industry since 1970, develops and produces **Aluminum** and **Copper** welding and brazing wires and rods in all alloys required for these applications. Since the beginning we have been moved by the sense of preeminence in **quality, consistency and service** to our customers, taking in account the different aspects of an efficient and top quality welding or brazing process, also customizing the product to specific customer needs. In fact, we can count all the major users of those products within our customers portfolio. Whether in the **automotive industries, shipyards, rolling stock or in other general industry fields**, you will find Safra labelled packaging, contributing every day to the productivity and excellent quality of the final products manufactured by our valued customers in all continents of the world.

We achieve those results and the respect of the market by exceeding customer expectations. We continue to develop our unique manufacturing processes to satisfy even future requirements.

The increasing demand of high quality products in all fields, move us to further strengthening our continuous efforts, offering the market a **top-quality product in terms weldability, feed ability, consistence and smart packaging solutions**.

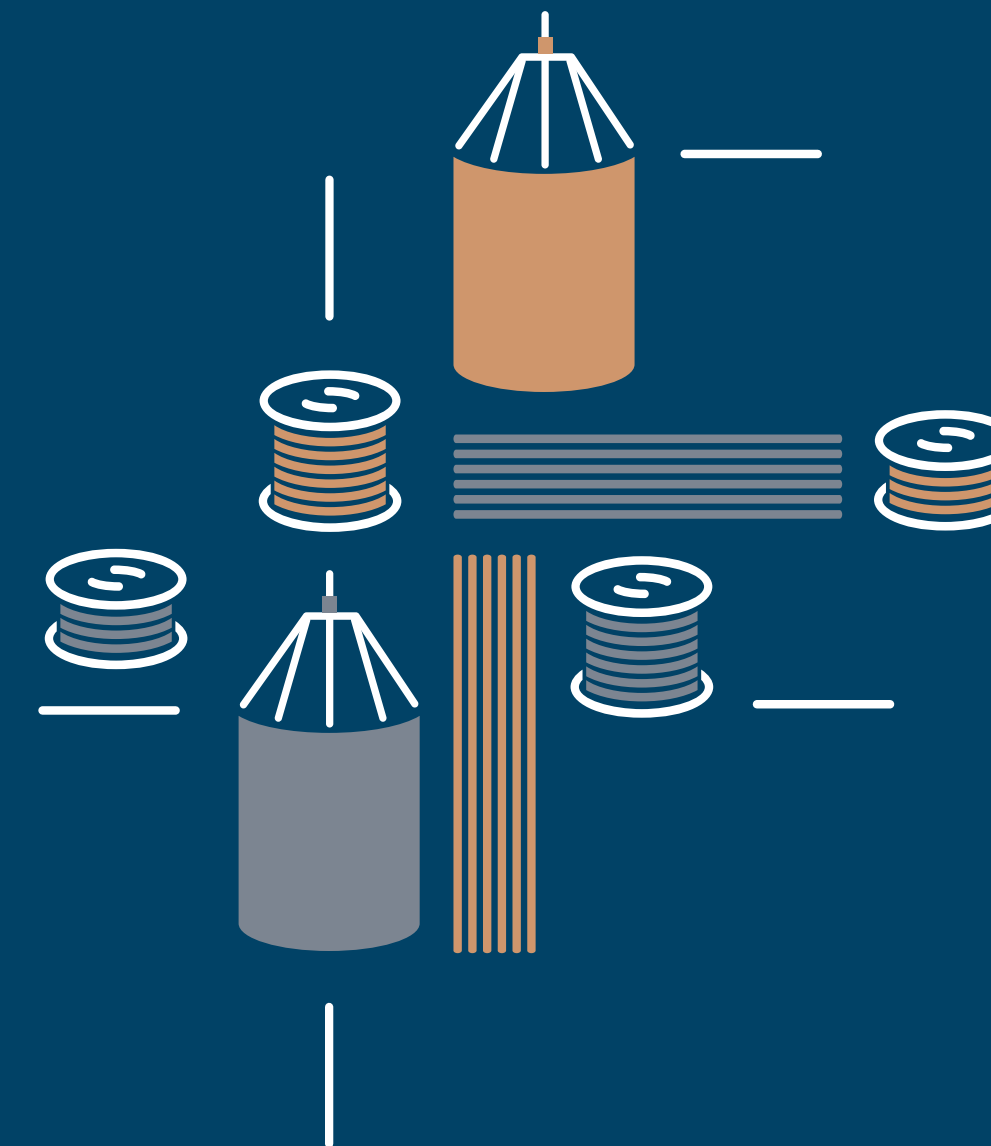


Approvals by



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ALUMINIUM & COPPER
 WELDING ALLOYS WIRES & RODS

ALUMINIUM ALLOYS EN ISO 18273

PRODUCT NAME	NUMERICAL	CHEMICAL	Si	Fe	Cu	Mn	Mg
SAFRA Al99,7	Al 1070	Al99,7	0,20	0,25	0,04	0,03	0,03
SAFRA Al99,5Ti	Al 1450	Al99,5Ti	0,25	0,40	0,05	0,05	0,05
SAFRA 2319	Al 2319	AlCu6MnZrTi	0,20	0,30	5,8-6,8	0,20-0,40	0,02
SAFRA 4008	Al Z **	AlSi7Mg	6,5-7,5	0,09	0,05	0,05	0,30-0,45
SAFRA AlSi5	Al 4043A	AlSi5(A)	4,5-6,0	0,6	0,30	0,15	0,20
SAFRA AlSi12	Al 4047A	AlSi12(A)	11,0-13,0	0,6	0,30	0,15	0,10
SAFRA 4145	Al 4145	AlSi10Cu4	9,3-10,7	0,8	3,3-4,7	0,15	0,15
SAFRA AlMg2,7Mn	Al 5554	AlMg2,7Mn	0,25	0,40	0,10	0,50-1,0	2,4-3,0
SAFRA AlMg3	Al 5754*	AlMg3	0,40	0,40	0,10	0,50	2,6-3,6
SAFRA AlMg5	Al 5356	AlMg5Cr(A)	0,25	0,40	0,10	0,05-0,20	4,5-5,5
SAFRA 5556	Al 5556	AlMg5Mn1Ti(A)	0,25	0,40	0,10	0,50-1,0	4,7-5,5
SAFRA 5556A	Al 5556A	AlMg5Mn1(A)	0,25	0,40	0,10	0,6-1,0	5,0-5,5
SAFRA AlMg4,5Mn	Al 5183	AlMg4,5Mn0,7(A)	0,40	0,40	0,10	0,50-1,0	4,3-5,2
SAFRA AlMg4,5MnZr	Al 5087	AlMg4,5MnZr(A)	0,25	0,40	0,05	0,7-1,1	4,5-5,2
SAFRA 66	Al Z	AlMg6Zr	*** Chemical analysis on request				
SAFRA AlMg6	Al Z	AlMg6	*** Chemical analysis on request				

* For Alloy Al 5754, the sum (Mn + Cr): 0,10 to 0,6

** = nearest equivalent is S Al 4010-AlSi7Mg

NOTE: single values shown in the table are maximum values, unless otherwise noted.

COPPER ALLOYS EN ISO 24373

PRODUCT NAME	NUMERICAL	CHEMICAL	Cu	Al	Fe	Mn
SAFRA CuSi3	Cu 6560	CuSi3Mn1	bal.	0,02	0,5	0,5-1,5
SAFRA CuSi28L	Cu 6560	CuSi3Mn1	bal.	0,02	0,5	0,5-1,5
SAFRA CuSn	Cu 1898A	CuSn1MnSi	bal.	0,01	0,03	0,1-0,4
SAFRA CuSn6	Cu 5180A	CuSn6P	bal.	0,01	0,1	-
SAFRA CuAl8	Cu 6100	CuAl7	bal.	6,0-8,5	*	0,5
SAFRA CuAl9Fe	Cu 6180	CuAl10Fe	bal.	8,5-11,0	1,5	-
SAFRA CuAl8Ni2	Cu 6327	CuAl8Ni2Fe2Mn2	bal.	7,0-9,5	0,5-2,5	0,5-2,5
SAFRA CuAl8Ni6	Cu 6328	CuAl9Ni5Fe3Mn2	bal.	8,5-9,5	3,0-5,0	0,6-3,5
SAFRA CuMn13Al7	Cu 6338	CuMn13Al8Fe3Ni2	bal.	7,0-8,5	2,0-4,0	11,0-14,0

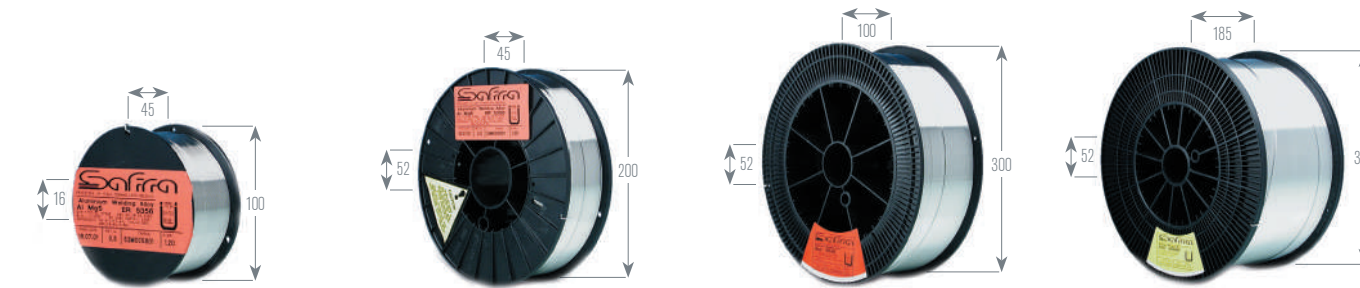
* and ** = the total of all other elements, including those for which the maximum value or an asterisk (*) is shown, shall not exceed the value specified in "Others total".

NOTE: single values shown in the table are maximum values, unless otherwise noted.

Al



Al



SPOOL D100
EN ISO 544:S100

ø wire	0.8 - 0.9 - 1.0 - 1.2 - 1.6 mm
weight	0.50Kg - 0.4632 Kg (1 Lbs)

SPOOL D200
EN ISO 544:S200

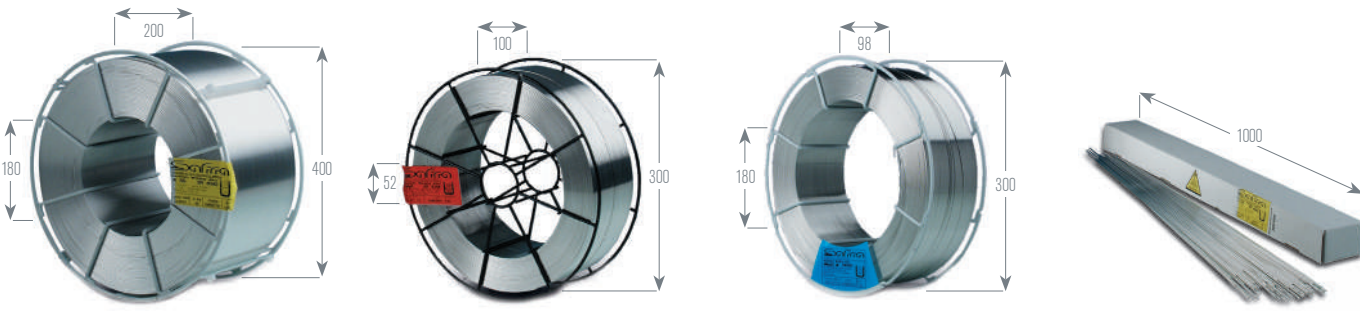
ø wire	0.8 - 0.9 - 1.0 - 1.2 - 1.6 mm
weight	2 Kg (4.4 Lbs)

SPOOL D300
EN ISO 544:S300

ø wire	0.8 - 0.9 - 1.0 - 1.2 - 1.6 - 2.0 - 2.4 mm
weight	5 Kg (11.03 Lbs) 6 Kg (13 Lbs) - 7Kg (15.4 Lbs)

SPOOL D350
EN ISO 544:S350

ø wire	1.2-1.6-2.4 mm
weight	20 Kg (44 Lbs)



SPOOL K400

ø wire	1.2 - 1.6 - 2.4 mm
weight	40 Kg (88 Lbs)

SPOOL KS300
EN ISO 544:BS300

ø wire	0.8 - 0.9 - 1.0 - 1.2 - 1.6 - 2.0 - 2.4 mm
weight	5 Kg (11.03 Lbs) 6 Kg (13 Lbs) - 7 Kg (15.4 Lbs) 9 Kg (19.85 Lbs)

BASKET K300
EN ISO 544:B300

ø wire	0.8 - 0.9 - 1.0 - 1.2 - 1.6 - 2.0 - 2.4 mm
weight	5 Kg (11.03 Lbs) 6 Kg (13 Lbs) - 7 Kg (15.4 Lbs)

RODS

ø wire	1.6 - 2.0 - 2.4 - 3.2 - 4.0 - 5.0 mm
weight	10 Kg (22 Lbs)



ECO DRUM*
PAK65BA

ø wire	1.0 - 1.2 - 1.6 mm
weight	100 Kg (220.50 Lbs)

ECO DRUM*
PAK75BA

ø wire	1.0 - 1.2 - 1.6 mm
weight	100 Kg (220.50 Lbs)

ECO DRUM*
PAK

ø wire	1.0 - 1.2 - 1.6 mm
weight	80 Kg (176.40 Lbs)

ECO DRUM*
PAK65

ø wire	1.0 - 1.2 - 1.6 mm
weight	200 Kg (441 Lbs)

ECO DRUM*
PAK75

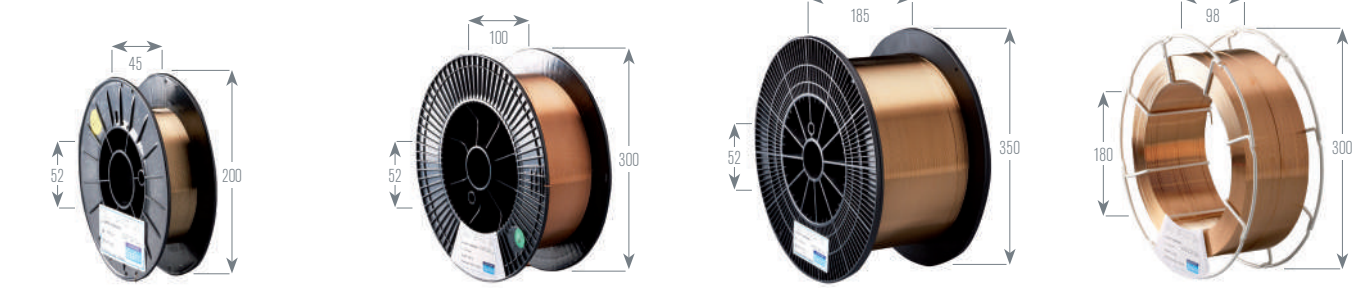
ø wire	1.0 - 1.2 - 1.6 mm
weight	250 Kg (551.25 Lbs)

* Special format on request. | Drums accessories available on request. | Other diameters on request.

Cu



Cu



SPOOL D200
EN ISO 544:S200

ø wire	0.8 - 0.9 - 1.0 - 1.2 - 1.6 mm
weight	2 Kg (4.4 Lbs) 5 Kg (11 Lbs)

SPOOL D300
EN ISO 544:S300

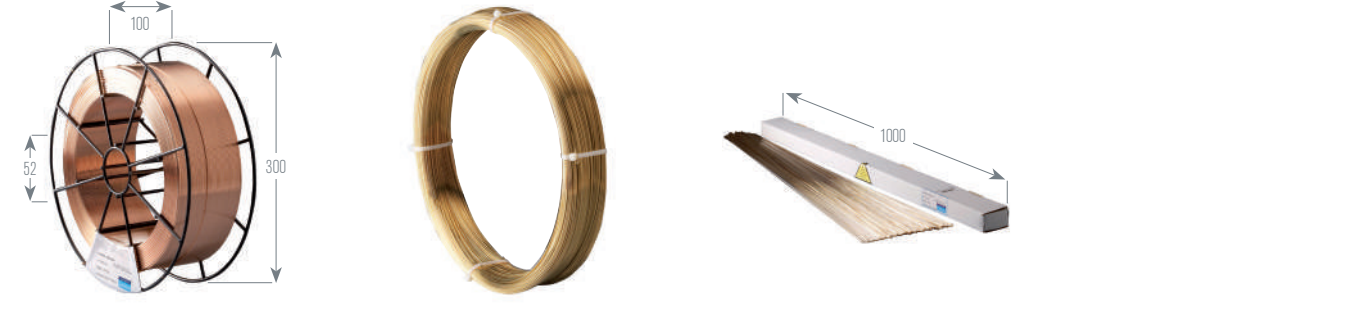
ø wire	0.8 - 0.9 - 1.0 - 1.2 - 1.6 - 2.4 mm
weight	12.5 Kg (27 Lbs) 15 Kg (33 Lbs)

SPOOL D350
EN ISO 544:S350

ø wire	1.0 - 1.2 - 1.6 - 2.4 mm
weight	40 Kg (88 Lbs)

SPOOL K300
EN ISO 544:B300

ø wire	0.8 - 0.9 - 1.0 - 1.2 - 1.6 - 2.4 mm
weight	12.5 Kg (27 Lbs) 15 Kg (33 Lbs)



SPOOL KS300
EN ISO 544:BS300

ø wire	0.8 - 0.9 - 1.0 - 1.2 - 1.6 - 2.4 mm
weight	12.5kg (27 Lbs) 15 Kg (33 Lbs)

COILS

ø wire	2.4 - 3.2 mm
weight	20 Kg (44 Lbs)

RODS

ø wire	1.6 - 2.0 - 2.4 - 3.2 - 4.0 mm
weight	10 Kg



ECO DRUM
PAK65BA

ø wire	0.8 - 0.9 - 1.0 - 1.2 - 1.6 mm
weight	200 Kg (441 Lbs) 250 Kg (551 Lbs)

ECO DRUM
PAK75BA

ø wire	0.8 - 0.9 - 1.0 - 1.2 - 1.6 mm
weight	200 Kg (441 Lbs) 250 Kg (551 Lbs)

ECO DRUM
PAK

ø wire	0.8 - 0.9 - 1.0 - 1.2 - 1.6 mm
weight	200 Kg (441 Lbs)

ECO DRUM
PAK65

ø wire	0.8 - 0.9 - 1.0 - 1.2 - 1.6 mm
weight	400 Kg (882 Lbs)

* Special format on request. | Drums accessories available on request. | Other diameters on request.

ALUMINIUM ALLOYS

Superior quality MIG wires & TIG rods from a Global quality Aluminium Welding Wire manufacturer

End customers in Aluminium welding fabrication around the world, appreciate the consistent high quality, high productivity and high reliability of SAFRA's Aluminium welding wires and rods, because of the following **BENEFITS**:

- Trouble-free wire feeding || X-Ray quality weld capability || Robust attractive convenient packaging
- Automation precision/productivity products || Consistent uniform welding parameters || Tightly controlled wire chemistries || The right product mix for local market needs || Readily accessible technical support || Unrivaled customer satisfaction

End customers who are using Safra's trouble-free Aluminium welding wires and rods for their production increase their profit from the beginning on.

COPPER ALLOYS

Superior quality MIG wires & TIG rods from a Global quality Copper Welding & Brazing wire manufacturer

End customers in Copper brazing fabrication around the world, appreciate the consistent high quality, high productivity and high reliability of SAFRA's Copper brazing wires and rods, because of the following **BENEFITS**:

- Fully integrated production from casting to wire || Tailor made chemistry depends on customer needs
- Trouble-free wire feeding || No porosity quality brazing capability || Robust attractive convenient packaging || Automation precision/productivity products || Consistent uniform brazing parameters || Tightly controlled wire chemistries || The right product mix for local market needs || Readily accessible technical support || Unrivaled customer satisfaction

End customers who are using Safra's trouble-free Copper brazing wires and rods for their production increase their profit from the beginning on.