ALUMINIUM WELDING WIRE
FOR STABLE CONNECTIONS.

PRECISE, HIGH-QUALITY, DURABLE.

Aluminium welding wire is significant when it comes to stable, clean and long-lasting welded joints. Our welding wire meets individual requirements. Our commitment to the highest and consistent quality guarantees you a smooth process and the best results in your application. The continuous monitoring of our production by TÜV, DB and international shipping companies underpins this commitment to quality.

A particular advantage is our joint venture with Esal Rod Alloys, S.A. for the production of wire rod, our raw material. This strategic partnership gives us direct access to influence production and thus the quality of the materials.

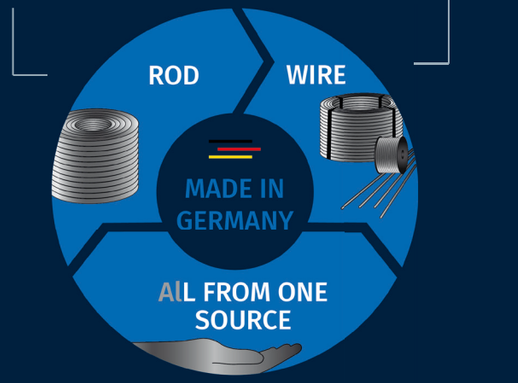
Having our own source of raw materials allows us maximum flexibility and individuality.

FROM RAW MATERIALS TO FINISHED WIRE –
EVERYTHING FROM A SINGLE SOURCE.

ALL FROM ONE SOURCE.

ALLOY DEVELOPMENT & INDEPENDENCE

HIGHEST QUALITY & INDIVIDUAL SERVICE



DEVELOPMENT PARTNER &
MAXIMUM SAFETY OF SUPPLY

DRAHTWERK ELISENTAL.

UNITED IN WIRE.

YOUR SPECIALIST FOR ALUMINIUM.
BECAUSE IT'S MORE THAN WIRE.



SINCE 1919.

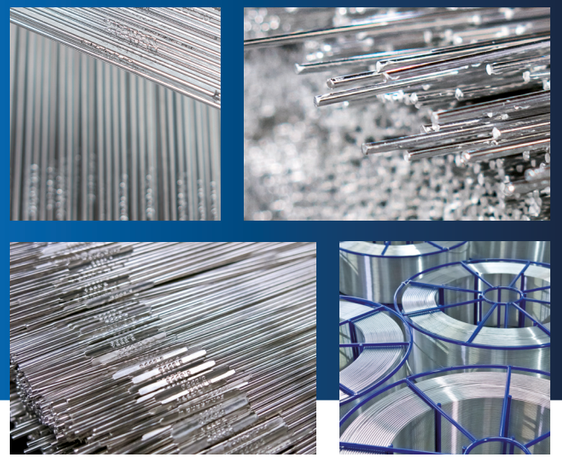
DRAHTWERK ELISENTAL W. ERDMANN GMBH
Werdohler Straße 40 // 58809 Neuenrade // Germany
Tel. +49 2392 697-0 // info@elisental.de // www.elisental.de

ISO 9001
ISO 14001
ISO 50001
EN 13479
TÜVV 1153

ELISENTAL UNITED IN WIRE.

ALUMINIUM WELDING WIRE – SECURELY CONNECTED

Welding wire and rods –
for stable connections.



// www.elisental.de

CONNECTIONS THAT CREATE THE FUTURE

STRONGER TOGETHER. SMARTER FOREVER.

Aluminium plays a role wherever precise and resilient welded joints are required. Our aluminium welding wire ensures optimum results in MIG and TIG welding processes, brazing, metal spraying or WAAM processes – tailored to the alloy, process and your requirements.

Typical areas of application are:

- Automotive: from chassis and body construction to electric mobility
- Security and defence industry
- Aerospace industry
- Rail industry: wagon construction
- Construction industry
- Shipbuilding
- Wind energy plants
- Tank and container construction

What if your requirements deviate from the standard? We also develop individual wire solutions that are precisely tailored to your needs. With ELISENTAL.concept, we accompany you from the initial contact to deep into your production process.
Sound advice, smart processes, strong results.

ELISENTAL concept

// E.discover – Strong together. // E.rethink – Future needs Aluminium. // E.sync – Together at eye level. // E.create – Innovation is teamwork. // E.perform – More than just a supplier. // E.optimise – Thinking quality further. // E.skill – Multiplying expertise.

Curious?
Then find out more about
ELISENTAL.concept here:

ALUMINIUM WELDING WIRE

ALLOYS

ISO 9001 | ISO 14001 | ISO 50001 | EN13479 | TÜVV 1153

Our product range includes both welding wire and welding rods, according to DIN EN ISO 18273.

BRAND NAME	NUMERIC DESIGNATION	CHEMICAL DESIGNATION	APPROVALS
DE50	S Al 1098 *	Al99,98	TÜV
DE51	S Al 1080 A *	Al99,8(A)	TÜV, DB
DE53	S Al 1450 *	Al99,5 Ti	TÜV, DB
DE71	S Al 2319 *	AlCu6MnZrTi	-
DE54	S Al 3103	AlMn1	-
DE68	S Al 4018	AlSi7Mg	TÜV, DB
DE33	S Al 4020	AlSi3Mn1	TÜV, DB
DE59	S Al 4043 A	AlSi5(A)	TÜV, DB
DE61	S Al 4046	AlSi10Mg	-
DE60	S Al 4047 A	AlSi12(A)	TÜV, DB
DE57	S Al 5249 *	AlMg2Mn0,8Zr	TÜV, DB
DE65	S Al 5554	AlMg2,7Mn	TÜV, DB
DE56	S Al 5754	AlMg3	TÜV, DB
DE58	S Al 5356	AlMg5Cr(A)	LR, TÜV, DB
DE70	S Al 5556 A	AlMg5Mn1(A)	-
DE63	S Al 5183	AlMg4,5Mn0,7(A)	LR, TÜV, DB, BWB
DE64	S Al 5087	AlMg4,5MnZr(A)	LR, TÜV, DB, BWB
Hartlot	S Al 112 DIN EN ISO 17672	B-Al88Si-575/585 (DIN EN ISO 3677)	-

More information about the exact composition is available on our website www.elisental.de.

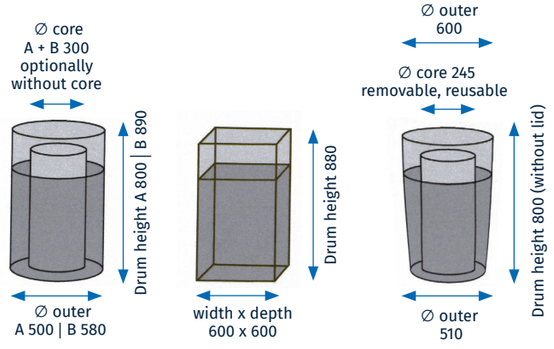
* Material on request

WIRE ARC ADDITIVE MANUFACTURING:
These and other alloys are also suitable for your WAAM components.

FORMS OF SUPPLY

DRUMS

Dimensions in mm



Other drum types on request.

ACCESSORIES



Drum hoods, square



Drum hoods, round



Pay-off tools for drums



Orbital arm

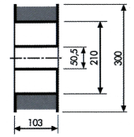
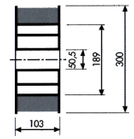
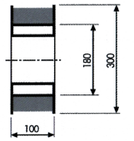
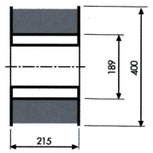
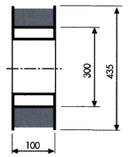
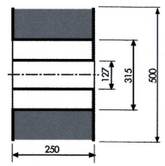
TIG RODS

TIG rods in a carton



Standard:
1,000 mm length,
10 kg
Also available:
5 + 2.5 kg

Other lengths and weights on request.

SPOOL TYPE	DIMENSIONS (MM)	NET WEIGHT (KG)
 MANDREL-MOUNTED REEL S 300 DIN EN ISO 544		max. 6.0
 BASKET SPOOL BS 300 DIN EN ISO 544		max. 7.0
 BASKET RING SPOOL B 300 DIN EN ISO 544		max. 7.0
 BASKET RING SPOOL B 400 DIN EN ISO 544		max. 40.0
 BASKET RING SPOOL B 435 DIN EN ISO 544		max. 14.0
 LARGE SPOOL K 500 not standardised		max. 40.0

All details are given in nominal dimensions. Alternative spool types and other packaging dimensions upon request.

Standard delivery dimensions

Tolerances according to DIN EN ISO 544

FORMS OF SUPPLY	∅ (MM)
Spools	1.00 | 1.20 | 1.60
Drums	1.20 | 1.60
Rods	1.60 | 2.00 | 2.40 | 3.20