

INERTFIL & INERTROD



STAINLESS STEEL MIG & TIG WIRES

Premium products
for highest performance and quality

www.cmc.pt

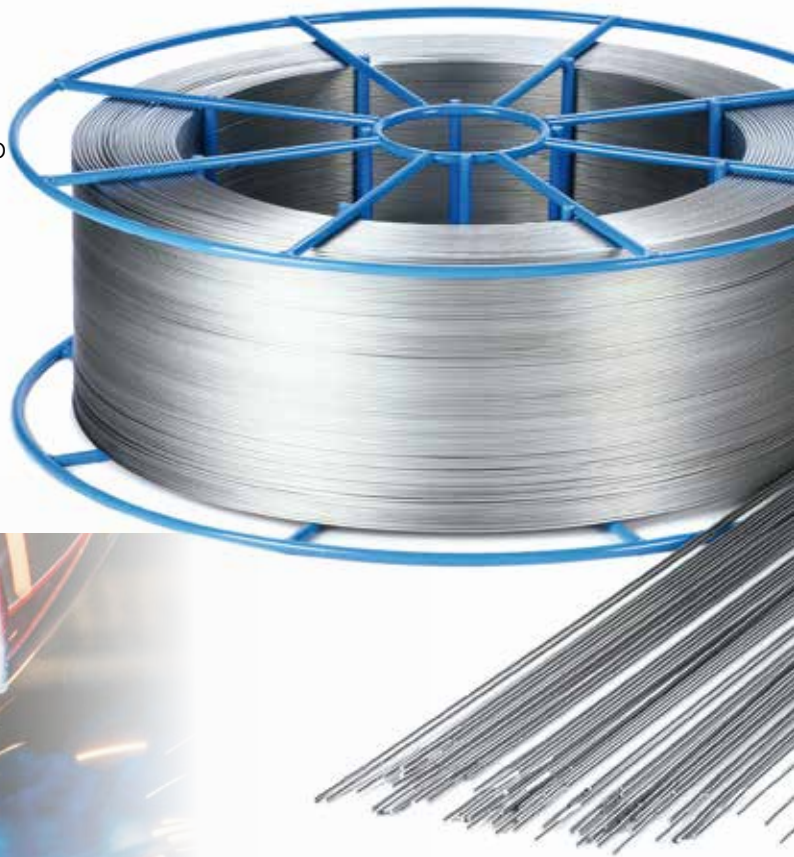


STAINLESS STEEL MIG & TIG WIRES

CUSTOMER REQUIREMENTS

Our customers are expecting the highest quality of products to satisfy their technical requirements in their respective segment / application. We are constantly innovating in order to bring you as a customer the highest added value according to your specific needs :

- › **Perfect feedability and arc stability**
- › **Consistent wire performance ensuring Spatter Free High Quality Welds 24/7**
- › **Total Process Productivity Solutions**



WE PRODUCE OUR STAINLESS STEEL SOLID WIRES

Our factory in Nijmegen in the Netherlands has over 70 years of experience producing world leading quality electrodes, cored and solid wires. We have invested in a state of the art fully automated production facility which manufactures best in class stainless steel MIG, TIG & SAW wires.

Narrow product specifications combined with the industries most extensive production and quality control guarantees the unparalleled welding performance and consistency of Oerlikon's unique stainless steel solid wires.

Made in Netherlands



HOW DO WE ENSURE THAT WE PRODUCE & DELIVER A WELDING WIRE THAT SUITS OUR CUSTOMERS NEEDS?



High performance process

TOPTIG

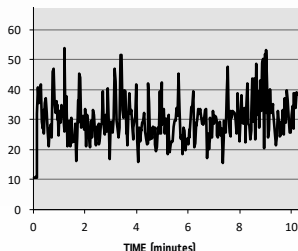
> CAREFUL SELECTION OF ROD-WIRE CHEMISTRY

The combination of Lincoln Electric vast experience, deep technical knowledge, and close partnership with the best steel manufactures allows Lincoln to optimise and tightly control 18 chemical elements in the rod wire. This tight control guarantees our customers a welding wire with the highest performance, quality and absolute consistency while also delivering optimal mechanical properties.

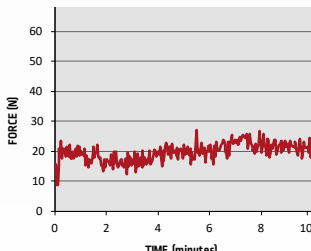
Wire Feedability Test*

The Oerlikon wire shows up to 60% reduction of instability versus an average wire on the market

Standard market MIG wire



Oerlikon MIG wire



*Test to define the variation of force needed to feed the wire.

> ULTRACLEAN WIRE SURFACE

Our unique production process gives a perfectly clean wire.

This ensures a superior welding performance which is required in certain critical **TIG** applications, reducing risk of micro-porosity due to impurities on the rod surface.

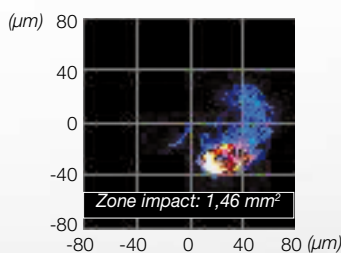
In **MIG** welding the ultraclean wire surface will guarantee **a superior wire feed stability**, which results in a perfect arc stability and excellent feedability in all welding positions.

> BEST IN CLASS WIRE PLACEMENT

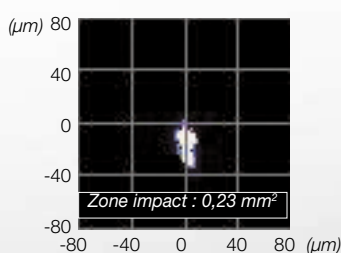
Our innovative production process combined with the superior performance of our wire and our MIDPAC drum provides unparalleled **wire placement**; delivering better productivity and **higher first pass welding quality** in robotic applications.

Wire Placement Accuracy Test*

Standard market MIG wire



Oerlikon MIG wire



*Test measuring the wire placement area during 10 min of welding.

85% reduction
of wire deviation
with Oerlikon wire



OVERVIEW OF THE RANGE

MIG CLASS	EN ISO 14343-A	AWS A 5.9	TIG	EN ISO 14343-A	AWS A 5.9
INERTFIL 308LSi	G 19 9 L Si	ER 308LSi	INERTROD 308L	W 19 9 L	ER 308L
INERTFIL 309LSi	G 23 12 L Si	ER 309LSi	INERTROD 309L	W 23 12 L	ER 309L
INERTFIL 316LSi	G 19 12 3 L Si	ER 316LSi	INERTROD 316L	W 19 12 3L	ER 316L
INERTFIL 307	G 18 8 Mn	ER 307	INERTROD 307	W 18 8 Mn	ER 307

MIG CLASS	Mechanical Properties (typical values) All Weld Metal				Approvals							
	Yield Strength	Tensile Strength	Elongation	Impact ISO-V								
	(N/mm ²)	(N/mm ²)	(%)	(J)	CE	DB	TUV	ABS	CWB	DNV	LR	BV
INERTFIL 308LSi	≥350	≥520	≥35	≥32 (-120°)	4	4	4	4	4	4	4	4
INERTFIL 309LSi	≥350	≥520	≥30	≥32 (-120°)	4	4	4	4	4	4	4	4
INERTFIL 316LSi	≥350	≥510	≥30	>32 (-120°)	4	4	4	4	4	4	4	4
INERTFIL 307	≥420	≥590	≥40	>32 (-120°)	4	4	4	-	-	-	-	-

TIG CLASS	Mechanical Properties (typical values) All Weld Metal				Approvals							
	Yield Strength	Tensile Strength	Elongation	Impact ISO-V								
	(N/mm ²)	(N/mm ²)	(%)	(J)	CE	DB	TUV	ABS	CWB	DNV	LR	BV
INERTROD 308L	≥350	≥520	≥35	≥40 (-196°)	4	4	4	4	4	4	4	4
INERTROD 309L	≥350	≥520	≥30	≥32 (-120°)	4	4	4	4	4	4	4	4
INERTROD 316L	≥350	≥510	≥30	≥32 (-196°)	4	4	4	4	4	4	4	4
INERTROD 307	≥420	≥590	≥40	≥32 (-120°)	4	4	4	-	-	-	-	-

- › You will find a much broader range of specialty stainless steel wires within the **OERLIKON** brand.

Visit our dedicated website:
www.oerlikon-welding.com



- › Our global solutions for welding stainless steel includes complete robotic installations as well as our unique **TOPTIG** process.

For more information, visit
www.cmc.pt

CUSTOMER TESTAMONIAL

« I have visited several of key account customers including Tier 1 manufacturers who have tested our new stainless steel wire under the most demanding conditions. They are all impressed by the excellent welding performance, consistency and quality that our products demonstrated from spool to spool and drum to drum. Our high performance wire combined with our Accutrak (drum) is providing these customers the increased efficiency and deposit quality that they have been look for.»

Patrick Wahlen

Vice President, Consumables



**BEST WIRE
PLACEMENT**



**MADE IN
NETHERLANDS**



**STAINLESS STEEL
MIG & TIG WIRES**

MIG & TIG

**CLEAN SURFACE
WITH SMOOTH
FEEDABILITY**



**ADAPTED
PACKAGING**



**EXCELLENT ARC
STABILITY**





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CUSTOMER ASSISTANCE POLICY

The business of Lincoln Electric is manufacturing and selling high quality welding equipment, consumables, and cutting equipment. Our challenge is to meet the needs of our customers and to exceed their expectations. On occasion, purchasers may ask Lincoln Electric for information or advice about their use of our products. Our employees respond to inquiries to the best of their ability based on information provided to them by the customers and the knowledge they may have concerning the application. Our employees, however, are not in a position to verify the information provided or to evaluate the engineering requirements for the particular weldment. Accordingly, Lincoln Electric does not warrant or guarantee or assume any liability with respect to such information or advice. Moreover, the provision of such information or advice does not create, expand, or alter any warranty on our products. Any express or implied warranty that might arise from the information or advice, including any implied warranty of merchantability or any warranty of fitness for any customers' particular purpose is specifically disclaimed.

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