

## STAINLESS STEEL MIG & TIG WIRES

### **OUSTOMER REQUIREMENTS**

Our customers are expecting the highest quality of products to satisfy their technical requirements in their respective segment / application. Lincoln Electric is 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



# > 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 Lincoln Electric's unique stainless steel solid wires.

Made in Netherlands



# THAT WE PRODUCE & DELIVER A WELDING WIRE THAT SUITS OUR CUSTOMERS NEEDS?



High performance process TOPTIG

# CAREFUI The combitechnical manufact chemical our custo quality ar mechanic Wire Feedability Test\* The Lincoln wire shows up to 60% reduction of instability versus an average wire on the market. Standard market MIG wire Lincoln Electric MIG wire

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

### 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.

### > ULTRACLEAN WIRE SURFACE

Our unique production process gives a perfectly clean wire.

feedability in all welding positions.

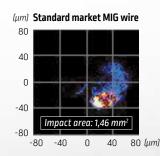
This ensures a superior welding performance which is required in certain critical **TIG** applications, reducing risk of micro-porosity due to impurities on the rod surface.

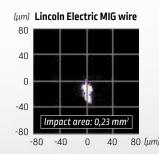
In **MIG** welding the ultraclean wire surface will guarantee a **superior wire feed stability**, which results in a perfect arc stability and excellent

### > BEST IN CLASS WIRE POSITIONING

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

### Wire Placement Accuracy Test\*





**85% reduction** of wire deviation with Lincoln Electric wire



<sup>\*</sup>Test measuring the wire placement area during 10 min of welding.

### **OVERVIEW OF THE RANGE**

MIG Class	EN ISO 14343-A	AWS A 5.9				
LNM 304LSi	G 19 9 L Si	ER 308LSi				
LNM 309LSi	G 23 12 L Si	ER 309LSi				
LNM316LSi	G 19 12 3 L Si	ER 316LSi				
LNM 307	G 18 8 Mn	ER 307				

<b>TIG</b> Class	EN ISO 14343-A	AWS A 5.9
LNT 304LSi	W 19 9 L Si	ER 308LSi
LNT 309LSi	W 23 12 L Si	ER 309LSi
LNT 316LSi	W 19 12 3 L Si	ER 316LSi
LNT 307	W 18 8 Mn	ER 307

	Mechanical Properties (typical values) All Weld Metal				Annrovals							
MIG Class	Yield Strength	Tensile Strength	Elongation	Impact ISO-V	Approvals							
	(N/mm²)	(N/mm²)	[%]	(J)	CE	DB	TUV	ABS	CWB	DNV	LR	BV
LNM 304LSi	394	568	40	41 (-196°)	/	1	1	1	1	1	1	1
LNM 309LSi	436	582	37	80 (-20°)	1	1	1	1	1	1	1	1
LNM316LSi	452	580	30	44 (-196°)	/	1	1	1	1	/	/	1
LNM 307	400	630	40	80 (+20°)	1	1	1	-	-	-	-	-

	Mechanical Properties (typical values) All Weld Metal				Anneovale					
<b>TIG</b> Class	Yield Strength	Tensile Strength	Elongation	Impact ISO-V	Approvals					
	(N/mm²)	(N/mm²)	[%]	(J)	CE	DB	TUV	DNV	CWB	ABS
LNT 304LSi*	467	622	37	67 (-196°)	✓	1	✓	1	1	✓
LNT 309LSi*	400	600	35	65 (-120°)	✓	-	✓	1	/	✓
LNT 316LSi*	484	624	32	82 (-196°)	1	✓	1	/	<b>\</b>	✓
LNT 307	400	650	35	80 (-120°)	-	1	1	-	-	-

<sup>\*</sup>Also exist in LNT 304L, LNT 309L, LNT 316L

You will find a much broader range of specialty stainless steel wires within the **SPECIAL ALLOYS™** brand



Visit our dedicated website: www.specialalloys.eu





robotic installations as well as our unique **TOPTIG** process.

For more information, visit www.lincolnelectriceurope.com

### **OUSTOMER TESTIMONIAL**

«I have visited several of key account customers including Tier1 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. »



Vice President, Consumables





### **BEING PRESENT LOCALLY**

### MAKES US MORE AWARE GLOBALLY



### **CUSTOMER ASSISTANCE POLICY**

The business of The Lincoln Electric Company® 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.

Lincoln Electric is a responsive manufacturer, but the selection and use of specific products sold by Lincoln Electric is solely within the control of, and remains the sole responsibility of the customer. Many variables beyond the control of Lincoln Electric affect the results obtained in applying these types of fabrication methods and service requirements.

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