

# High strength Flux Cored Wire for SR Designation

## TRUSTARC™ DW-A61LSR (Ni<1.0%)

# KOBELCO

## TECHNICAL FLASH

**NEW**

### TRUSTARC™

## DW-A61LSR

EN ISO 17632-A-T 50 5 Z1Ni P M21 1 H5  
AWS A5.29 E91T1-GM

OFFSHORE CONSTRUCTIONS

PRESSURE VESSELS

PIPELINES

WINDMILL TOWERS &  
SUBSTRUCTURES

### Features of the TRUSTARC™ DW-A61LSR

Our newly developed TRUSTARC™ DW-A61LSR for 500MPa yield strength steel is now available from one of our professional welding distributors close to you. TRUSTARC™ DW-A61LSR is an all position gas shielded rutile flux cored wire for welding with M21 gas.

TRUSTARC™ DW-A61LSR is a rutile flux cored wire that was specially formulated to meet the demands for matching S500 structural steel and P500 PV-steel. It has good toughness down to -46°C after stress relief annealing (SR) and fulfills Sour Service / NACE-requirement of Ni < 1,0% in weld metal.

The fast freezing slag promotes easy and very productive positional welding with slag removing easily to reveal a weld bead of smooth appearance. Typical applications are offshore constructions including S500-grades, often combined with S420- and S460-grades.

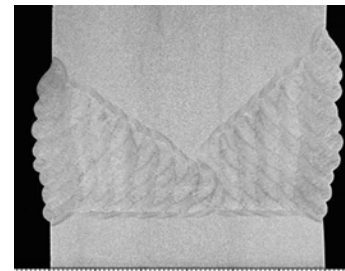
The tensile properties of TRUSTARC™ DW-A61LSR make it applicable for the welding of L450 / X65 and L485 / X70-pipes, including overmatching yield strength.

If you still haven't tested our TRUSTARC™ DW-A61LSR, it is time to see for yourself what a KOBELCO welding consumables can do for you in your application. KOBELCO can provide consistent high quality from batch to batch, achieved when flux cored wire is manufactured under strict control.

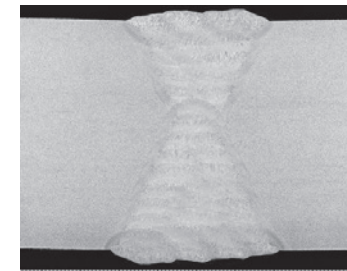
As the leading expert and manufacturer in flux cored wires, KOBELCO have the products and solutions, for you and the challenges you are facing daily. Implement KOBELCO products in your welding applications, and see for yourself how the world-renowned KOBELCO quality flux cored wire can improve your productivity, your quality, and finally your profit.

If you have any further questions don't hesitate to contact us at [marketing@kobelcowelding.nl](mailto:marketing@kobelcowelding.nl)

### Excellent Weldability of TRUSTARC™ DW-A61LSR



Horizontal (PC)

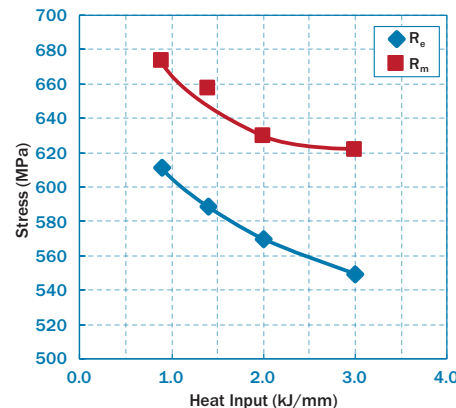


Vertical Upward (PF)

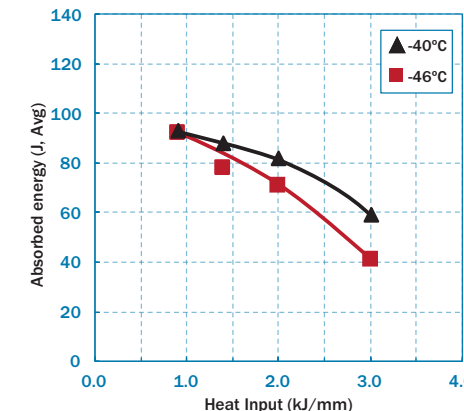


Vertical-Up Position (PF)  
Slag Removability

### Excellent Mechanical Properties After SR



Relation Between Heat Input and Tensile Properties  
SR Condition: 620°C x 4hrs



Relation Between Heat Input and Notch Toughness  
SR Condition: 620°C x 4hrs

### Typical All Weld Metal Properties

#### Typical Chemical Analysis (wt. %)

C	Si	Mn	P	S	Ni	Cr	Mo
0.05	0.16	1.31	0.006	0.006	0.92	-	0.29

#### Typical Mechanical Properties

	R <sub>e</sub> (MPa)	R <sub>m</sub> (MPa)	A <sub>5</sub> (%)	CV(J)-40°C	CV(J)-46°C	CV(J)-50°C
As Welded	575	641	25	104	93	87
620°Cx2hrs(SR)	586	649	24	92	71	-
620°Cx4hrs(SR)	588	657	25	88	78	-
Guarantee (As welded)	min.540	620~720	min.18	min. 47*	-	min.47

\*SR condition: 620°C x 4hrs

Example of Diffusible hydrogen content: 2.2 [ml/100g]