Bimeks Çelik
RODASTEEL CORPORATION®

v.1

TECHNICAL DATASHEET - WELDING CONSUMABLE

AWS Code: (ER318)

Product Code: RW 318SI

Werkstoff No.: 1.4576

MIG Certification: TUV (0,8-1,6 mm) - CE - DB

TIG Certification: TUV (1,0-4,0 mm) - CE - DB

EQUIVALENT OF OTHER STANDARD

EN ISO 14343-A:2017 Nominal Composition	AWS A5.9:2017 Alloy Designation	EN ISO 14343-B:2017 Alloy Type	AWS A5.9:2017 Composition Designation
19 12 3 Nb Si	(ER318)	-	(ER318)

DESCRIPTION AND APPLICATIONS

RW 318SI is intended for chemical-industry applications requiring high corrosion resistance up to 400°C. Si content improves weldability and weld-pool fluidity. RW 318SI uses a Nb-bearing composition for chemical-industry applications. Used where corrosion resistance is the main priority in stainless welding applications.

EXPECTED MINIMUM MECHANICAL PROPERTIES AS WELDED

	MIG	TIG	SAW
Rp0,2 [MPa]	500	550	-
Rp1 [MPa]	540	590	-
Rm [MPa]	680	720	-
A [%]	31	30	-
Z [%]	50	56	-
Impact Energy, ISO-V 20°C	99	88	-
Impact Energy, ISO-V -20°C	-	-	-
Impact Energy, ISO-V -60°C	69	-	-
Impact Energy, ISO-V -110°C	-	-	-
Impact Energy, ISO-V -120°C	64	-	-
Impact Energy, ISO-V -196°C	-	-	-

TYPICAL CHEMICAL COMPOSITION (%)

	Min.	Max.
C	-	0,08
Mn	1,00	2,50
Si	0,65	1,00
S	-	0,020
P	-	0,030
Cr	18,0	20,0
Ni	11,0	14,0
Mo	2,50	3,00
Cu	-	0,30
N	-	-
Nb	10xC	1,00
Ti	-	-

DIAMETER

MIG sizes 0,8 | 0,9 | 1,0 | 1,14 | 1,2 | 1,6

TIG sizes 0,8 | 0,9 | 1,0 | 1,2 | 1,6 | 2,0 | 2,4 | 3,2 | 4,0

SAW sizes 1,6 | 2,0 | 2,4 | 3,2 | 4,0

PACKAGING

MIG Blue Metallic Wire Basket BS300: 15 Kg.
Plastic Spool D300: 15 Kg.
Plastic Spool D200: 5 Kg.
Wooden/Metallic Bulk Spool: 250 Kg.
Drum: 250-400 Kg.

TIG Carton Boxes/Tubes: 5 Kg. (1000 mm Rod Length)

SAW Metallic Wire Basket K415
Wooden/Metallic Bulk Spool: 250 Kg.
Drum: 300 Kg.

Note: Safety Data Sheet is available on request.