



DAIKOSTRIP 430



FERRITIC - MARTENSITIC STAINLESS
STEEL
430

DESCRIPTION

Ferritic 17%Cr strip designed for multi-layers cladding of the 410 family alloys.

It can be used in SAW or ESW process to obtain alloy 410 NiMo. The strip is used mainly for repair and maintenance applications. In combination with DAIKOFLUX is giving a weld metal with 14Cr-4Ni-1Mo and a hardness of 370-420 HB. Mainly used for continuous casting rolls, milling rolls, hardfacing applications in steelworks and similar.

SPECIFICATIONS

ISO 14343-B	BS430	AWS A5.9	EQ430
DIN	-	Werkstoff Number	-
Certifications	-	Shielding	DAIKOFLUX 940, 942AS, 944
Positions	PA	Current	DC+

ASME QUALIFICATIONS

F-No (QW432)	FERRITE	PREN	HARDNESS
6	-	16.6	220HB - 250HB
A-No (QW442)			
7			

CHEM. COMP. %

DEFAULT

C	0.015
Mn	0.3
Cr	16.6
P	0.025
S	0.005
Si	0.35

MECHANICAL PROPERTIES

MIN

VARIANT

Tensile strength R_m MPa	450	530
Yield strength $R_{p0.2}$ MPa	300	410
Elongation A ($L_0=5d_0$) %	15	25
Impact Charpy ISO-V	-	-
Impact Charpy ISO-V	-	-

ANTI-WEAR CHARACTERISTICS

Adhesive wear	▲ ▲ ▲ ▲ ▲
Abrasive wear	▲ ▲ ▲ ▲ ▲
Impact	▲ ▲ ▲ ▲ ▲
Corrosion	▲ ▲ ▲ ▲ ▲
Heat	▲ ▲ ▲ ▲ ▲

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The information in this datasheet is the result of detailed research and is considered accurate as of the publication date. However, we cannot guarantee its complete accuracy, and it is subject to change without notice. Actual results may vary due to many factors like welding procedures, material composition, temperature conditions, bevel configuration, and specific manufacturing techniques. We accept no liability for any errors or omissions in this datasheet. For the most current information, please visit www.daikowelding.com.





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APPLICATION

This is a ferritic stainless steel exhibiting good ductility in the heat-treated condition. Applications include welding similar parent metal, weld overlay, and thermal spraying, with a primary use in surfacing sealing faces of gas, water, and steam valves to achieve stainless and wear-resistant overlays. Welding with this filler metal typically necessitates preheating, normally 150°C, and postweld heat treatment for optimal mechanical properties and corrosion resistance. The balanced composition ensures sufficient chromium for corrosion resistance in usual applications while retaining ample ductility in the heat-treated state. Additionally, there are stabilized versions with Niobium and/or Titanium designed for the automotive industry, particularly in exhaust system production, requiring similar preheating and postweld heat treatment.

ALLOY TYPE

Ferritic stainless steels.

MICROSTRUCTURE

Ferrite.

MATERIALS

Surfacing can be performed on all weldable base materials, unalloyed and low-alloyed. Welding of corrosion resistant chromium steels as well as other similar-alloyed steels with C-contents up to 0.20% (repair welding).

EN W.Nr.: 1.4001 (X7Cr14), 1.4006 (X12Cr13), 1.4057 (X17CrNi16-2), 1.4000 (X6Cr13), 1.4002 (X6CrAl13), 1.4016 (X6Cr17), 1.4059 (X17CrNi16-2), 1.4509 (X2CrTiNb18), 1.4510 (X3CrTi17), 1.4511 (X3CrNb17), 1.4512 (X2CrTi12), 1.4520 (X2CrTi17), 1.4712 (X10CrSi6), 1.4713 (X10CrAlSi7), 1.4724 (X10CrAlSi13), 1.4742 (X10CrAlSi18).

ASTM: 403, 405, 409, 410, 429, 430, 430Cb, 430Ti, 439, 431, 442.

UNS: S40300, S40500, S40900, S41000, S42900, S43000, S43035, S43036, S43100, S44200.

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