Wire:
DIN 1736: UP-NiCr21Mo9Nb
EN ISO18274:2004: S Ni 6625 (NiCr22Mo9Nb)
AWS 5.14-97: ERNiCrMo-3
Flux:
DIN EN760:1996: SA-FB 2 AC

BÖHLER NIBAS 625-UP/BB 444

SAW wire / flux-combination nickel base

Description

For SAW wire and flux combination, suitable for welding of the 6 % Mo superaustenitic grades S31254, N 08926, N 08367 and the matching alloy 625. Weld metal meet highest quality and corrosion requirements. Extremely resistant to stress corrosion cracking and pitting. The pitting resistance equivalent is >52. BB 444 is an agglomerated fluoride basic welding flux with high basic slag characteristics.

Typical Composition of Solid Wire and All-weld Metal

	C	Si	Mn	Cr	Mo	Ni	Nb	Fe
SAW wire wt-%	**0.010**	**0.10**	**0.2**	**22.0**	**9.0**	**bal.**	**3.6**	**<1.5**
All-weld metal %	**0.015**	**0.25**	**0.2**	**21.5**	**8.5**	**bal.**	**3.3**	**0.4**

Mechanical Properties of All-weld Metal

(*)		u
yield strength R_e N/mm²:		**450**
tensile strength R_m N/mm²:		**720**
elongation A (L_0=5d_0) %:		**40**
impact work ISO-V KV J	+20 °C:	**130**
	-196 °C:	**70**

(*) *u untreated, as-welded*

Operating Data

Redrying of sub arc flux: **ø mm**
400-450 °C/2 h 2.4
Preheat and interpass temp. as required by the base metal

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Base Materials

2.4856 NiCr 22 Mo 9 Nb, 2.4858 NiCr 21 Mo, 2.4816 NiCr 15 Fe, 1.4583 X10CrNiMoNb18-12, 1.4876 X 10 NiCrAlTi 32 20 H, 1.4876 X 10 NiCrAlTi 32 20, 1.4529 X1NiCrMoCuN25-20-7, X 2 CrNiMoCuN 20 18 6, 2.4641 NiCr 21 Mo 6 Cu;
joint welds of listed materials with non alloy and low alloy steels, e.g P265GH, P285NH, P295GH, 16Mo3, S355N, X8Ni9, ASTM A 553 Gr.1, B443,B446, UNS N06625
Alloy 600, Alloy 625, Alloy 800, 9 % Ni-steels

Approvals and Certificates

TÜV-D (applied)

Same Alloy Filler Metals

SMAW:	FOX NIBAS 625	GMAW solid wire:	NIBAS 625-IG
GTAW rod:	NIBAS 625-IG	GMAW flux cored wire:	NIBAS 625-FD