



AMA 414N-F

DIN 8555
EN 14700

UP 5-GF-40-C
T Fe7

Application/properties:

AMA 414N-F is nitrogen-containing martensitic stainless steel weld deposit optimised for corrosion resistance. The weld metal has a small amount of ferrite. Addition of nitrogen provides good resistance to metal-metal wear, thermal fatigue and pitting corrosion.

The addition of vanadium reduces the formation of chromium carbide at grain boundaries and thus prevents the occurrence of intergranular corrosion. AMA AP721 submerged welding flux is suitable for welding. The weld has a smooth and uniform appearance in oscillation and linear welding. Also, slag detachability at high temperature is easy.

Weld metal analysis (Wt.%):

(3-Layer deposit on 1-layer EB2)

Flux	C	Mn	Si	Cr	Ni	Mo	V	N
AMA AP721	0.08	1.2	0.6	12.5-14	3-3.50	1-1.20	< 0.20	< 0.10

Mechanical properties:

(3-Layer deposit on 1-layer EB2)

Hardness	As welded	PWHT (3h - 520°C)
HRC	42-45	40-45

Recommended welding Parameters:

Wire diameter (mm)	Stick-out (mm)	Voltage (V)	Amperage (A)
2.40	30	26-28	275-400
3.20	30	27-30	400-500

Delivery:

Wire diameter (mm)	Weight (mm)
2.40	25
3.20	25

Note: other weight & sizes are produced upon customers request.

Field of use:

Continuous casting rollers.