

GMX410NiMo

AWS A5.22 E410NiMoT1-1
JIS Z 3323 TS410NiMo-FC1

Product Features:

- Gas shield type hardfacing flux cored arc welding wire.
- Martensite structure weld metal.
- Good crack resistance, high compressive abrasion resistance and good thermal fatigue resistance.

Applications:

- Hardfacing repair welding of caster guide roller.
- Build-up repair for various guide rollers.

Typical chemical composition of all-weld metal (wt%)

C	Si	Mn	Ni	Cr	Mo
0.04	0.40	0.50	4.4	11.8	0.6

Typical characteristics of weld metal

Abrasion Resistance	Thermal fatigue Resistance	Crack Resistance	Tensile Strength N / mm ²	Elongation %	Hardness HRC (As Welded)
Excellent	Excellent	Excellent	923	18	42

Size & recommended welding parameters

Diameter	1.2mm	1.6mm
Polarity	DC+	DC+
Ampere	150~250	200~300
Voltage	22~28	24~30
Wire extension	15~25mm	15~25mm
Shield Gas	CO ₂ or Mixed Gas	CO ₂ or Mixed Gas

- © Note: 1. Refer to page D6 welding notes (table 1) for preheat and inter pass temperature control.
2. All values listed on the table obtained from CO₂ shielding gas for welding test.

MXW K410NiMo-S

Product Features:

- Composite type hardfacing submerged arc welding wire, martensitic structure weld metal.
- Combined with neutral flux.
- Good for crack resistance and easy slag removal.
- Good thermal fatigue, corrosion and abrasion resistance.

Applications:

- Hardfacing repair welding of steel mill roller, heat resistant valve seat and turbine blade.

Typical chemical composition of all-weld metal (wt%)

C	Si	Mn	Ni	Cr	Mo
0.04	0.5	1.0	4.1	12.5	0.55

Typical characteristics of weld metal

Abrasion Resistance	Thermal fatigue Resistance	Machining	Welding layer	Hard facing stress crack	Hardness HRC
Excellent	Good	Tungsten Carbide tools available	3	Non	43

Size & recommended welding parameters

Diameter	3.2mm
Polarity	DC+
Ampere	320~400
Voltage	30~36
Wire extension	25~40mm
Flux	Neutral Flux

- © Note: Refer to page D6 welding notes (table 1) for preheat and inter pass temperature control.

MXW K420-S | —

Product Features:

- Composite type hardfacing submerged arc welding wire, martensite structure weld metal.
- Combined with neutral flux.
- Good thermal fatigue, corrosion and abrasion resistance.

Applications:

- Hardfacing repair welding of steel mill roller and fly wheel.

Typical chemical composition of all-weld metal (wt%)

C	Si	Mn	Cr
0.18	0.50	1.2	12.8

Typical characteristics of weld metal

Abrasion Resistance	Thermal fatigue Resistance	Machining	Welding layer	Hard facing stress crack	Hardness HRC
Good	Excellent	Tungsten Carbide tools can be used	3	Non	50

Size & recommended welding parameters

Diameter	3.2mm
Polarity	DC+
Ampere	320~400
Voltage	30~36
Wire extension	25~40mm
Flux	Neutral Flux

© Note: Refer to page D6 welding notes (table 1) for preheat and inter pass temperature control.

MXW K423-S | —

Product Features:

- Composite type hardfacing submerged arc welding wire, martensite structure weld metal.
- Combined with neutral flux.
- Good thermal fatigue, corrosion and abrasion resistance.
- Adequate alloy elements contained in weld metal to improve crack and abrasion resistance.

Applications:

- Hardfacing repair welding of steel mill roller, heat resistant valve seat and turbine blade.

Typical chemical composition of all-weld metal (wt%)

C	Si	Mn	Ni	Cr	Mo
0.11	0.40	1.1	2.3	13.5	1.2

Typical characteristics of weld metal

Abrasion Resistance	Thermal fatigue Resistance	Machining	Welding layer	Hard facing stress crack	Hardness HRC
Good	Good	Tungsten Carbide tools can be used	3	Non	45

Size & recommended welding parameters

Diameter	3.2mm
Polarity	DC+
Ampere	320~400
Voltage	30~36
Wire extension	25~40mm
Flux	Neutral Flux

© Note: Refer to page D6 welding notes (table 1) for preheat and inter pass temperature control.