

Product Features:

- High welding performance for all positions.
- Good for impact and abrasion resistance.
- Available for workpiece subjected to metal-to-metal or metal-to-soil abrasion.

Applications:

- Suitable for pump axle sleeve, cement agitator, scouring cutter, digging knife top parts and agitating auger blades and agricultural shovel, etc.

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

C	Si	Mn	Cr	Mo
0.56	0.56	1.42	5.6	0.25

Typical characteristics of weld metal

Abrasion Resistance	Impact Resistance	Adhesive Abrasion Resistance	Machining	Welding layer	Hard facing stress crack	Hardness HRC
Good	Good	Good	Grind only	3	Non	57

Size & recommended welding parameters

Diameter	1.2mm	1.6mm
Polarity	DC+	DC+
Ampere	150~250	175~350
Voltage	22~26	24~28
Wire extension	15~25mm	15~25mm
Shield Gas	CO ₂	CO ₂

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



Product Features:

- Self-hardening martensite structure weld metal.
- Good for high stress abrasion, heat fatigue and sluggish abrasion resistance.
- Available for workpiece subjected to metal-to-metal or metal-to-soil abrasion.

Applications:

- Suitable for pump axle sleeve, cement agitator, scouring cutter, digging knife top parts and agitating auger blades and agricultural shovel, etc.

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

C	Si	Mn	Cr	Mo
0.6	1.5	1.6	6.6	0.7

Typical characteristics of weld metal

Abrasion Resistance	Impact Resistance	Welding layer	Hard facing stress crack	Hardness HRC
Good	Good	3	Non	55

Size & recommended welding parameters

Diameter	0.9mm	1.2mm	1.6mm
Polarity	DC+	DC+	DC+
Ampere	100~200	150~250	175~350
Voltage	18~22	22~26	24~28
Wire extension	10~20mm	15~25mm	15~25mm
Shield Gas	80%Ar + 20%CO ₂	80%Ar + 20%CO ₂	80%Ar + 20%CO ₂

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

Product Features:

- Self-hardening martensite structure weld metal.
- Self shield type hardfacing flux cored wire.
- Good for high stress abrasion, heat fatigue and sluggish abrasion resistance.
- Available for workpiece subjected to metal-to-metal or metal-to-soil abrasion.

Applications:

- Suitable for pump axle sleeve, cement agitator, scouring cutter, digging knife top parts and agitating auger blades, etc.

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

C	Si	Mn	Cr	Mo
0.5	0.24	1.43	6.4	0.59

Typical characteristics of weld metal

Abrasion Resistance	Impact Resistance	Welding layer	Hard facing stress crack	Hardness HRC
Good	Good	3	Non	56

Size & recommended welding parameters

Diameter	1.2mm	1.6mm	2.4mm
Polarity	DC+	DC+	DC+
Ampere	150~250	175~300	200~380
Voltage	22~30	24~32	30~35
Wire extension	20~30mm	20~35mm	25~40mm
Shield Gas	No need	No need	No need

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

MXW M7-G | —

Product Features:

- Weld metal composition similar to high speed tool steel.
- High hardening tendency, good for impact abrasion and high stress severe wear condition.
- Wear resistance at elevated high temperature $\leq 540^{\circ}\text{C}$.
- Martensite structure weld metal contains many different kinds of micro carbide.
- Repair welding of workpiece subjected to high stress condition.

Applications:

- Suitable for hardfacing repair welding of dies, cutters, scraper, drill parts, mill roller, extruding screw and agriculture tools, etc.

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

C	Si	Mn	Cr	Mo	V	W
0.95	0.73	0.42	4.08	8.43	0.90	1.94

Typical characteristics of weld metal

Abrasion Resistance	Impact Resistance	Adhesive Abrasion Resistance	Machining	Welding layer	Hardness HRC
Good	Good	Excellent	Grind only	3	62

Size & recommended welding parameters

Diameter	1.2mm	1.6mm
Polarity	DC+	DC+
Ampere	150~250	175~350
Voltage	22~26	24~30
Wire extension	15~25mm	15~25mm
Shield Gas	80%Ar + 20%CO ₂	80%Ar + 20%CO ₂

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

MXW D | —

Product Features:

- Self or gas shield type harfacing flux cored arc welding wire.
- Good for moderate impact and wear resistance.
- Available for workpiece subjected to metal-to-metal or metal-to-soil abrasion.
- High welding performance, available for all positions.

Applications:

- Petroleum industry: oil rig tools, tool connectors and drill collars.
- Agriculture industry: scrapers, plows, hammers.
- Coal mining industry: drill stems, collars augers, hammer crushers, roll crusher, shovel buckets and shovel teeth, etc.
- ceramic industry: augers, feeder shoes, clay machine paddles and conveyor screw rod.
- Architecture: asphalt mixer, paddles, shovel buckets, shovel teeth and similar parts.

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

C	Si	Mn	Cr	Mo	others
2.0	1.0	0.2	8.0	0.4	0.6

Typical characteristics of weld metal

Abrasion Resistance	Impact Resistance	Adhesive Abrasion Resistance	Welding layer	Hard facing stress crack	Hardness HRC
Excellent	Medium	Grind Only	3	Yes	64

Size & recommended welding parameters

Diameter	0.9mm	1.2mm	1.6mm
Polarity	DC+	DC+	DC+
Ampere	100~200	150~250	175~350
Voltage	20~26	24~30	26~32
Wire extension	12~20mm	15~30mm	20~35mm
Shield Gas	Self Shield / CO ₂ or Mixed Gas	Self Shield / CO ₂ or Mixed Gas	Self Shield / CO ₂ or Mixed Gas

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

MXW R117 | –

Product Features:

- Self or gas shield type hardfacing flux cored arc welding wire.
- Good for impact and abrasion resistance.
- Small stress relieve crack on weld metal surface.

Applications:

- Suitable for repair welding of worn out machine parts such as coned crusher receivers, mantles, hammer crusher, cane knives and crusher rollers, etc.

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

C	Si	Mn	Cr	Mo
2.3	1.2	1.4	9.6	1.2

Typical characteristics of weld metal

Abrasion Resistance	Impact Resistance	Welding layer	Hardness HRC
Excellent	Excellent	3	45

Size & recommended welding parameters

Diameter	1.2mm	1.6mm
Polarity	DC+	DC+
Ampere	150~250	175~350
Voltage	24~30	26~32
Wire extension	20~30mm	20~35mm
Shield Gas	Self Shield (no gas shield) / CO ₂ or Mixed Gas	Self Shield (no gas shield) / CO ₂ or Mixed Gas

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

2.All values listed on the table obtained from non-gas shielded welding test.

MXW R100 | –

Product Features:

- Self or gas shield type hardfacing flux cored arc welding wire.
- High carbon and chromium content in weld metal.
- Good for mild to moderate impact severe abrasion resistance.
- Wear resistance at elevated high temperature $\leq 600^{\circ}\text{C}$.

Applications:

- Suitable for hardfacing repair welding of coal crushers, crusher rollers, agricultural, shovel teeth, augers, hot ash elbows and ventilator screw impellers, etc.

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

C	Si	Mn	Cr	Mo
4.8	1.5	1.5	26.5	1.0

Typical characteristics of weld metal

Abrasion Resistance	Impact Resistance	High Temperature Abrasion	Machining	Welding layer	Hard facing stress crack	Hardness HRC
Excellent	Low to Medium	600°C	Grind only	2	Yes	60

Size & recommended welding parameters

Diameter	1.6mm	2.4mm	2.8mm
Polarity	DC+	DC+	DC+
Ampere	200~350	230~380	300~450
Voltage	26~32	30~35	32~38
Wire extension	20~30mm	20~35mm	25~45mm
Shield Gas	Self Shield / CO ₂ or Mixed Gas	Self Shield / CO ₂ or Mixed Gas	Self Shield

© Note: 1. Recommend string bead and vertical downward technique, stress crack length 10~15mm to avoid peeling damage between base and weld metal.

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

3. All values listed on the table obtained from non-gas shielded welding test.

MXW R117 | —

Product Features:

- Self or gas shield type hardfacing flux cored arc welding wire.
- Good for impact and abrasion resistance.
- Small stress relieve crack on weld metal surface.

Applications:

- Suitable for repair welding of worn out machine parts such as coned crusher receivers, mantles, hammer crusher, cane knives and crusher rollers, etc.

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

C	Si	Mn	Cr	Mo
2.3	1.2	1.4	9.6	1.2

Typical characteristics of weld metal

Abrasion Resistance	Impact Resistance	Welding layer	Hardness HRC
Excellent	Excellent	3	45

Size & recommended welding parameters

Diameter	1.2mm	1.6mm
Polarity	DC+	DC+
Ampere	150~250	175~350
Voltage	24~30	26~32
Wire extension	20~30mm	20~35mm
Shield Gas	Self Shield (no gas shield) / CO ₂ or Mixed Gas	Self Shield (no gas shield) / CO ₂ or Mixed Gas

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

2.All values listed on the table obtained from non-gas shielded welding test.