

WELD MODE ROOT



Experience the Benefits of ROOT

The Warrior® Edge 500 DX welding system features a specialized ROOT WeldMode designed for welding root passes. ROOT is optimized for welding passes no matter the welding position. This mode excels at gap bridging, ensuring consistent fusion while minimizing spatter.

The ROOT WeldMode uses an enhanced short circuit transfer process with a novel type of adaptive control that delivers consistent and smooth metal transfer for a more stable weld puddle. Improved stability gives the operator better control even when welding at faster travel speeds, plus it suppresses the conditions that lead to the formation of spatter. Even though this WeldMode produces lower heat input for reduced distortion, its gap-bridging ability promotes consistent fusion without excessive reinforcement on the backside of the joint. In addition, there is no need for a voltage sense cable which simplifies set-up and reduces the risk for mistakes.

The ROOT WeldMode helps improve your root welding with these key benefits:

- Easy overbridging of gaps
- Excellent control in all positions
- Smooth arc for total control during weaving
- Adaptive process providing out of the box performance, reducing need of adjustments.
- Great performance with no need for arc voltage reference cable

With easy to use, advanced WeldModes like ROOT on Warrior Edge DX, manufacturers and fabricators benefit from optimized productivity, improved quality, and simplified training.

FEATURES

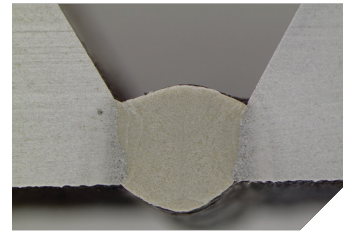
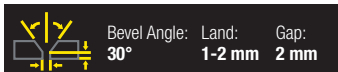
ROOT VS SHORT ARC



SMOOTH
AND STABLE
ARC GIVES
EXCELLENT
CONTROL
IN ALL
WELDING
POSITIONS

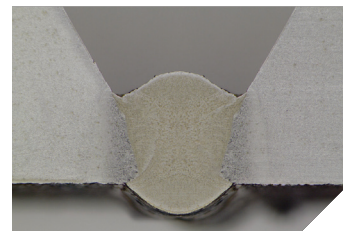
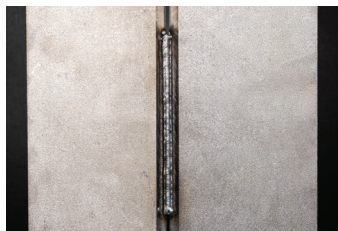
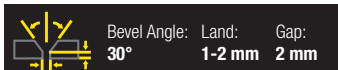
APPLICATION

WELD MODE: **ROOT**
JOINT: **BUTT JOINT**



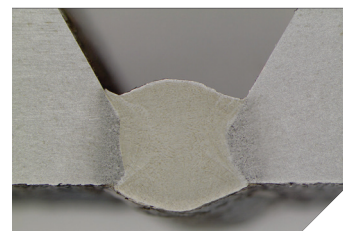
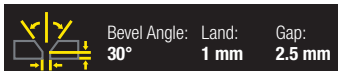
Position	Plate Thickness	Wire Type	Wire Diameter	Gas Type	Gas Flow	CTWD	WFS	Voltage	Current	Arc Length Trim	Travel Speed	Torch Angle	Travel Angle	Weaving	Heat Input
PA	12.0 mm	Fe ER70S	1.0 mm	Ar + 15-25% CO ₂	15 L/min	10 mm	3.5 m/min	15.0 V	96 A	+0,4	17.1 cm/min	0°	45° drag	~1 mm	0.507 kJ/mm

WELD MODE: **ROOT**
JOINT: **BUTT JOINT**



Position	Plate Thickness	Wire Type	Wire Diameter	Gas Type	Gas Flow	CTWD	WFS	Voltage	Current	Arc Length Trim	Travel Speed	Torch Angle	Travel Angle	Weaving	Heat Input
PF	12.0 mm	Fe ER70S	1.0 mm	Ar + 15-25% CO ₂	15 L/min	10 mm	3.3 m/min	14.8 V	93 A	+0,6	17.4 cm/min	0°	10° -15° push	~1 mm	0.475 kJ/mm

WELD MODE: **ROOT**
JOINT: **BUTT JOINT**



Position	Plate Thickness	Wire Type	Wire Diameter	Gas Type	Gas Flow	CTWD	WFS	Voltage	Current	Arc Length Trim	Travel Speed	Torch Angle	Travel Angle	Weaving	Heat Input
PC	12.0 mm	Fe ER70S	1.0 mm	Ar + 15-25% CO ₂	15 L/min	10 mm	3.6 m/min	14.0 V	114 A	+0,4	19.0 cm/min	10°	10° -15° push	NO	0.503 kJ/mm

RECOMMENDED EQUIPMENT

POWER SOURCE

Warrior Edge 500 DX

WIRE FEEDER

RobustFeed Edge BX / CX

TORCH

- EXEOR 4.0² W, Conical 14 mm gas nozzle: 0458465882, Contact tip protruding 7mm: 0700025856
- Exeor 3.0G-S air cooled torch optimized for root pass welds

FILLER METAL

OK Aristorod 12.50, 1.0 mm
Purus 42 CF, 1.0 mm



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