



GMAW-P (Pulsed Mig)

A baseline weld was made using automated welding equipment. Voltage, Wire Feed Speed, Travel Speed and Contact-Tip-to-Work Distance were then adjusted individually from baseline weld settings to illustrate how each parameter affects a fillet weld when raised and lowered. Icons in grey indicate the specific parameter adjusted; in the case of amperage, the icon represents the value measured.

Baseline Weld Variables

Wire Type: 0.045 ER70S-6 (Quantum Arc 6) | Transfer Mode: Pulsed Spray
 Shielding Gas: 90% Argon / 10% Carbon Dioxide | Travel Direction: Forehand (Push)
 Base Metal: 1/8 in. Cold Rolled Carbon Steel | Nozzle Diameter: 5/8 in.

260

A

400
IPM

20
IPM

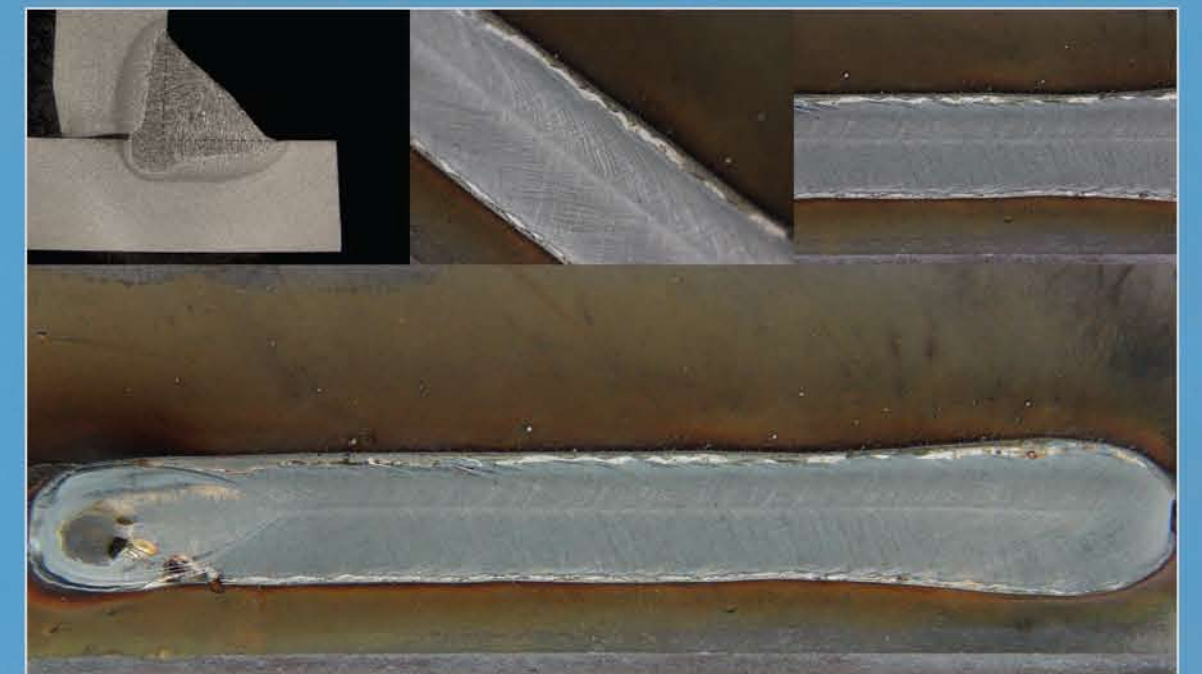
+10°
Drag Push

35
CFH

3/4"
(Flush Tip)

45°

45
IPM

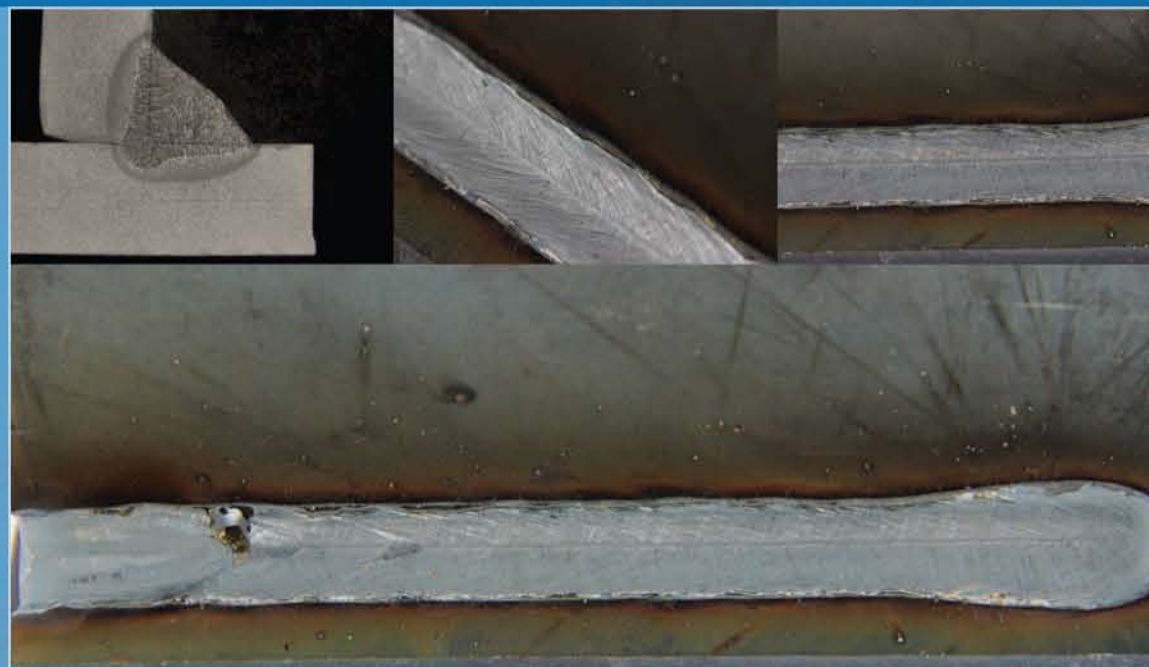


Voltage

Decreased

38
IPM

249
A



Increased

52
IPM

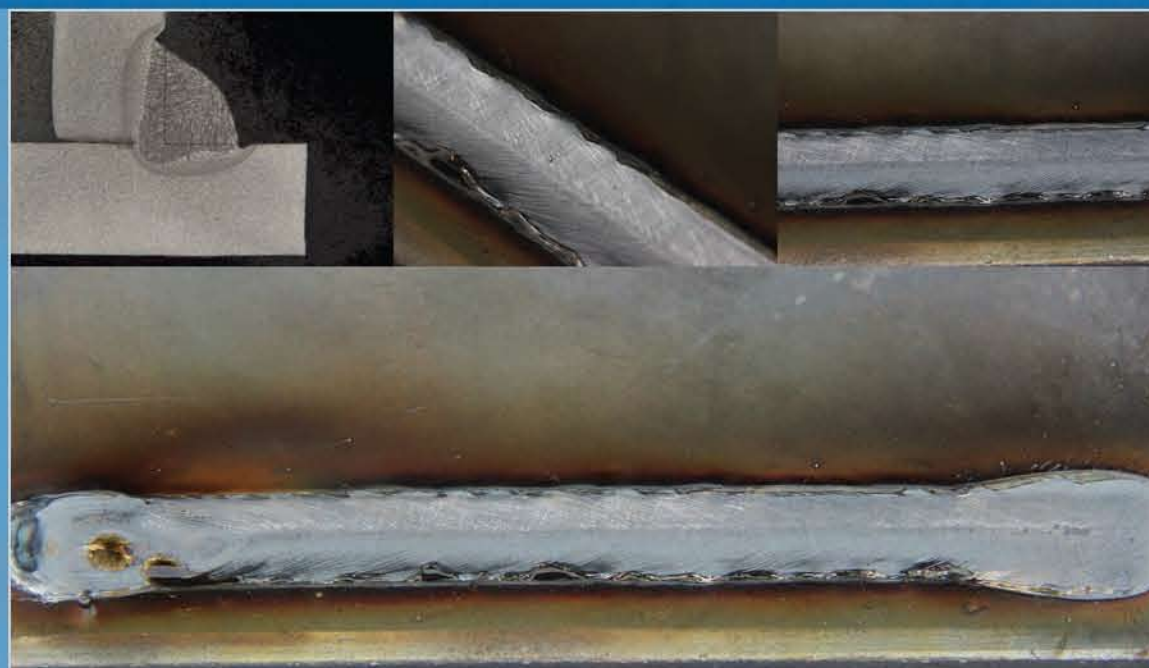
278
A

Wire Feed Speed

Decreased

340
IPM

221
A



Increased

460
IPM

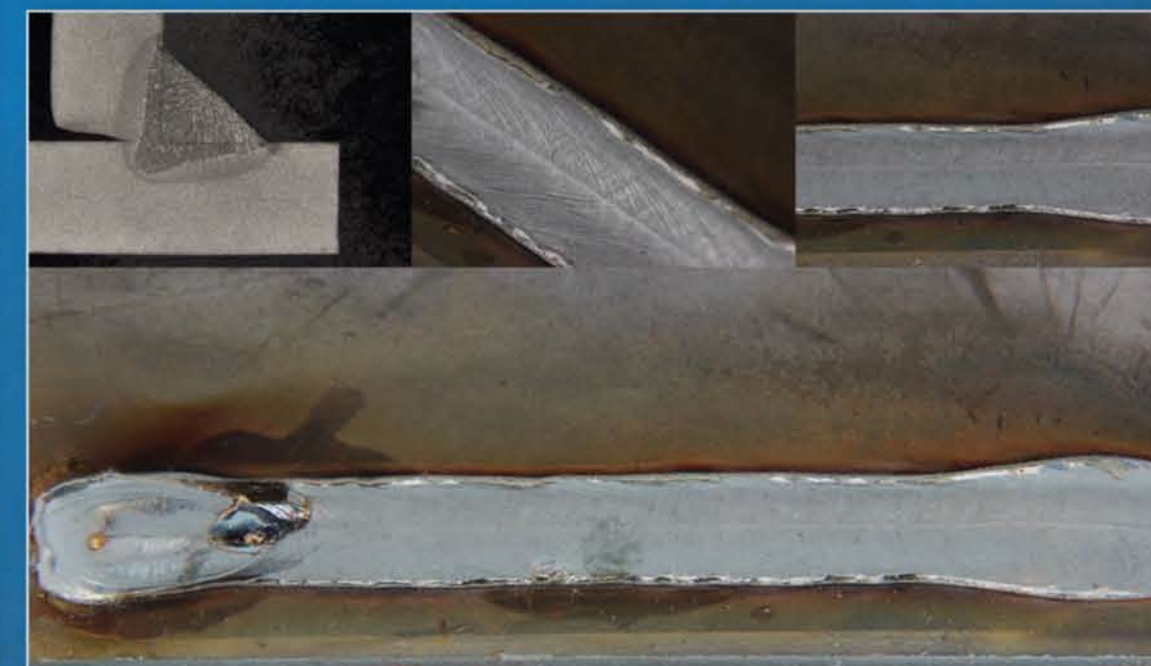
290
A

Travel Speed

Decreased

16
IPM

266
A



Increased

24
IPM

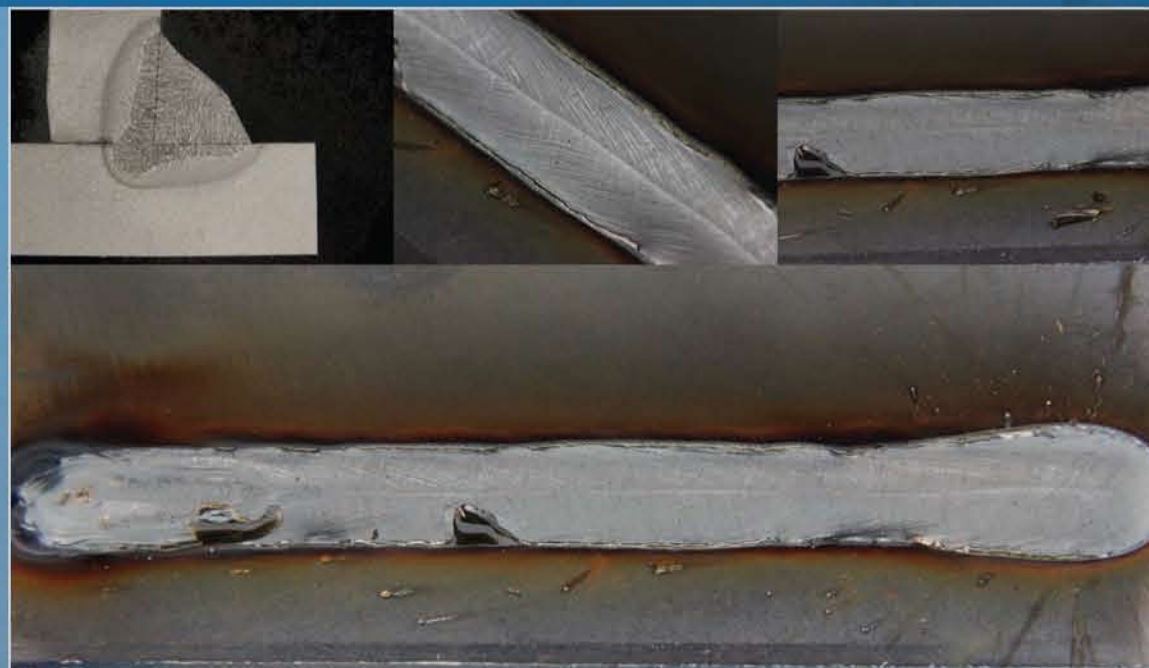
270
A

Contact Tip To Work

Decreased

3/8"
(FLUSH TIP RECESS)

298
A



Increased

1-7/8"
IPM

216
A

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