



FCAW-S (SELF-SHIELDED FLUX CORE)

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 E71T-11 (Fabshield® 21B)
 Shielding Gas: N/A
 Base Metal: 1/4 in. Cold Rolled Carbon Steel

Transfer Mode: FCAW/Spray
 Travel Direction: Backhand (Drag)
 Nozzle Diameter: N/A

190

A

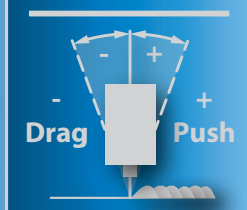
193



16



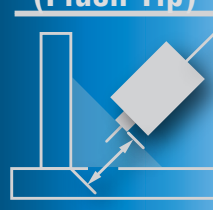
-25°



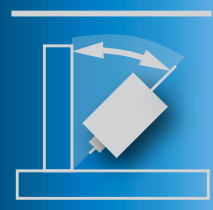
N/A



5/8" (Flush Tip)

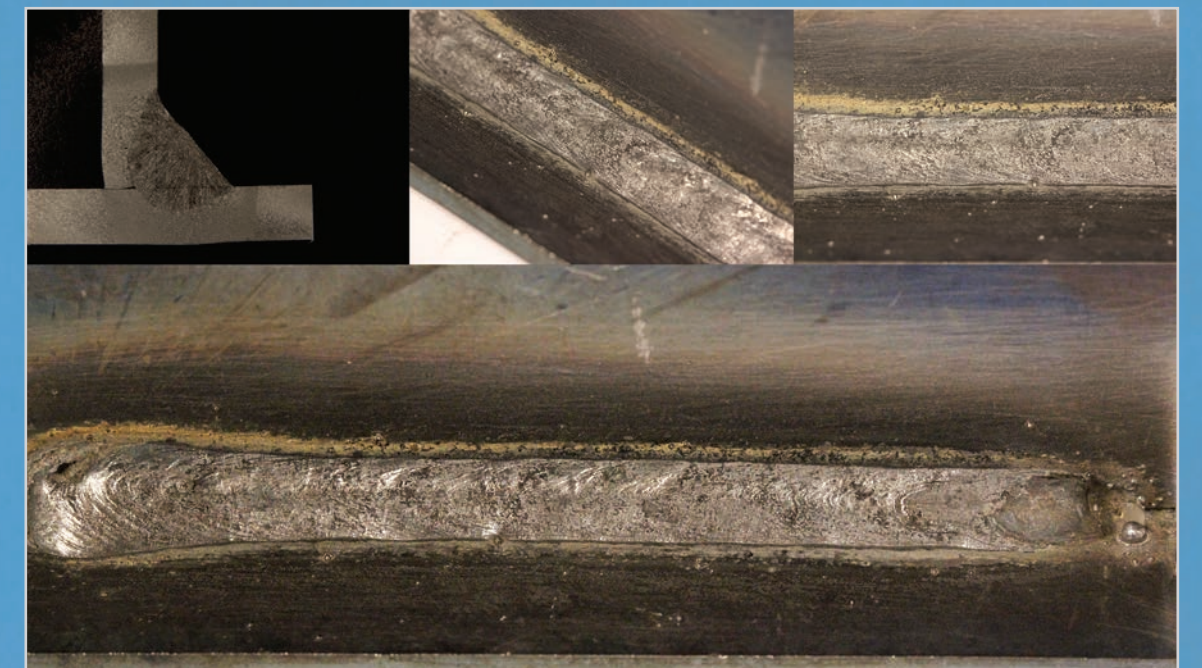


50°



19.6

V



Voltage

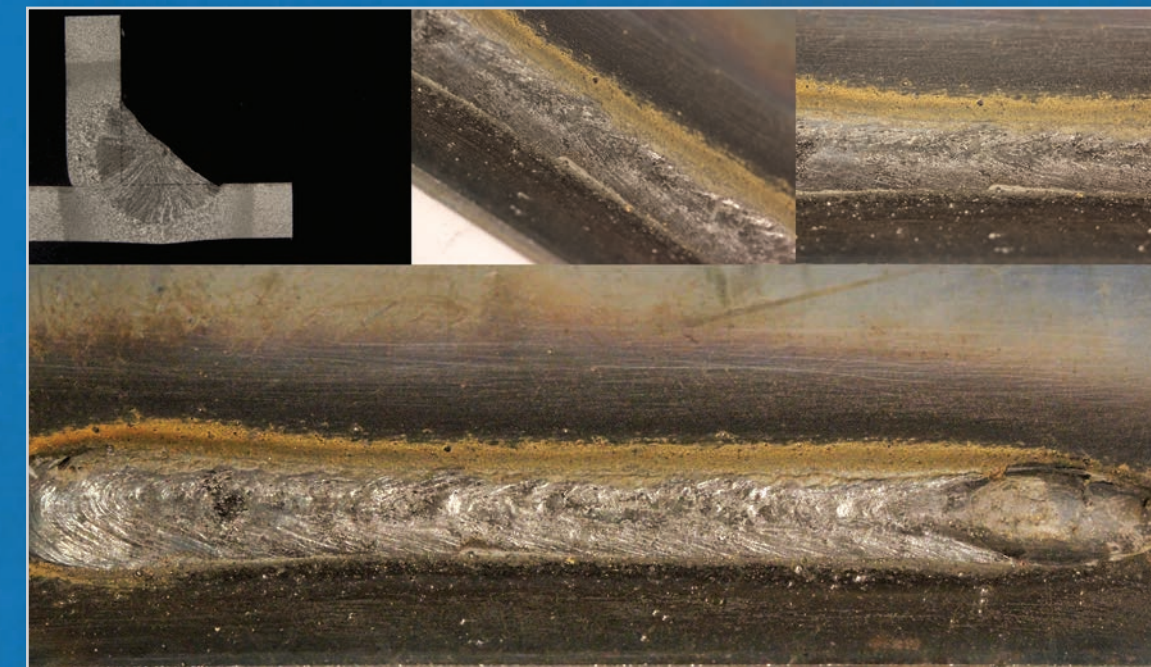
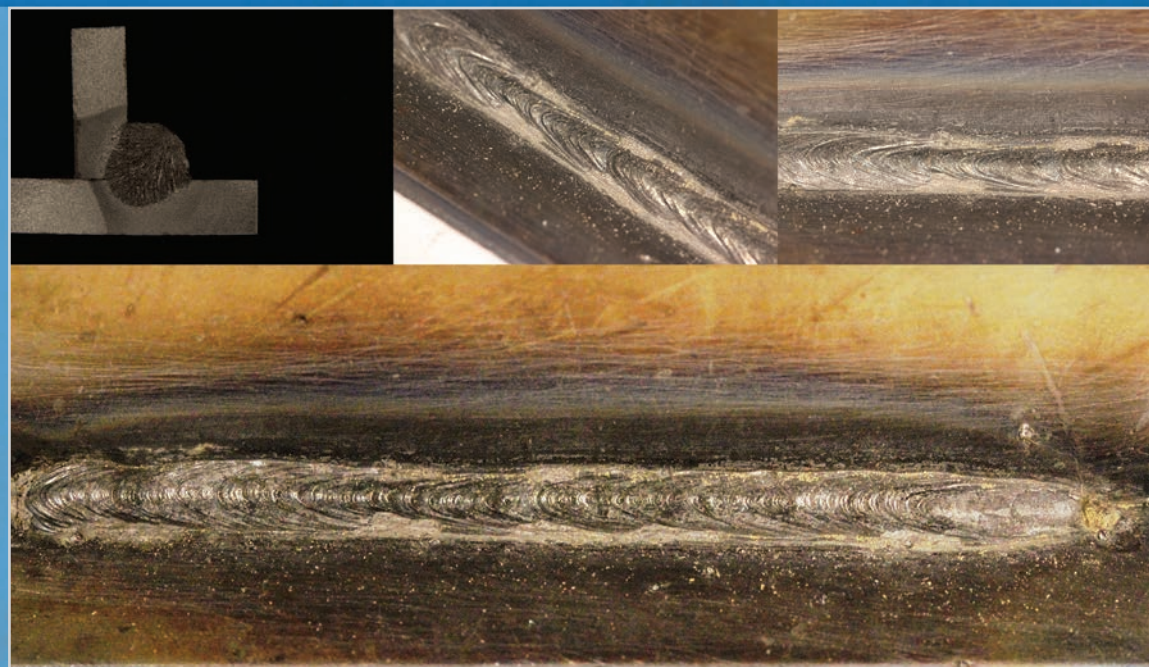
Decreased

15.7



177

A



Increased

23.6



200

A

Wire Feed Speed

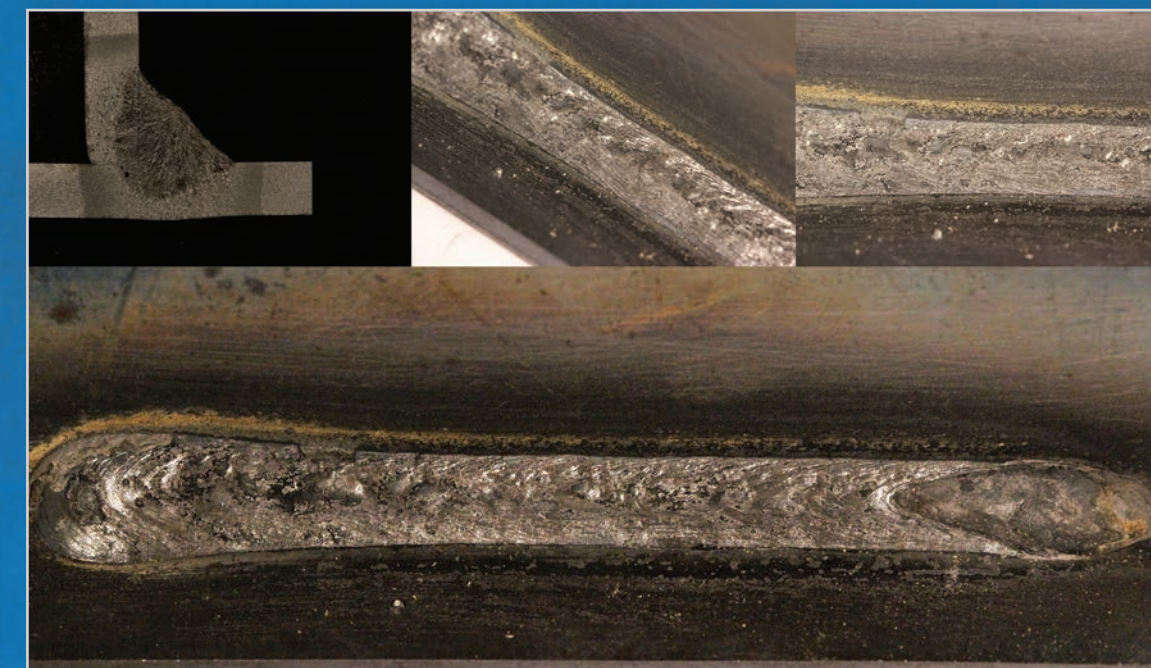
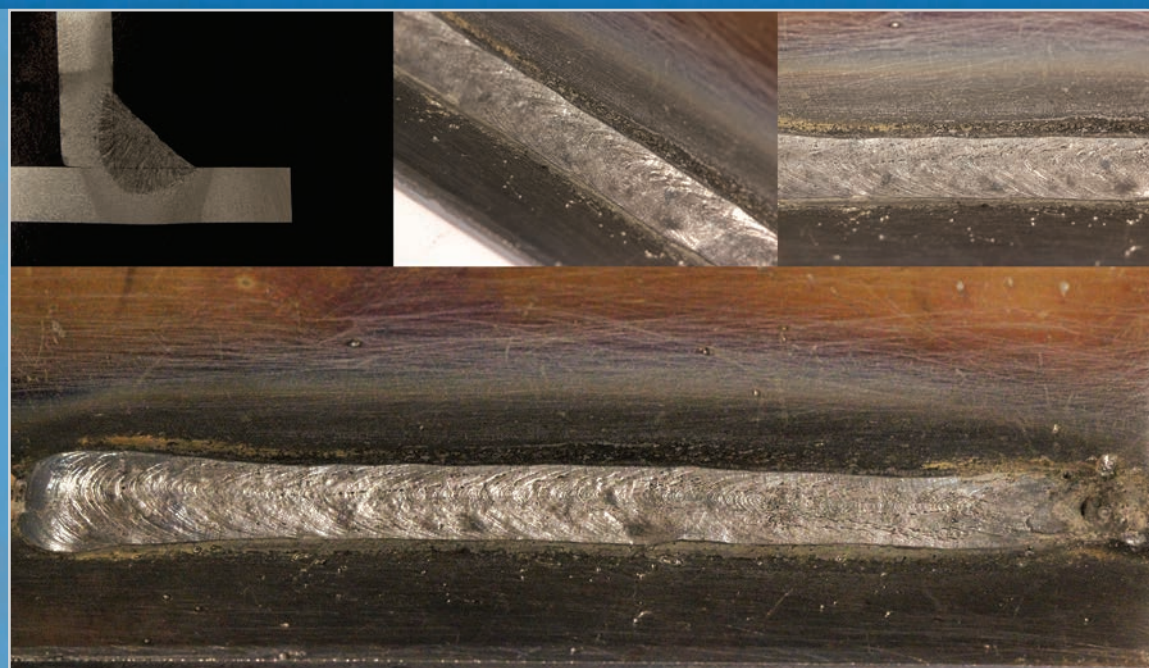
Decreased

150



161

A



Increased

233



219

A

Travel Speed

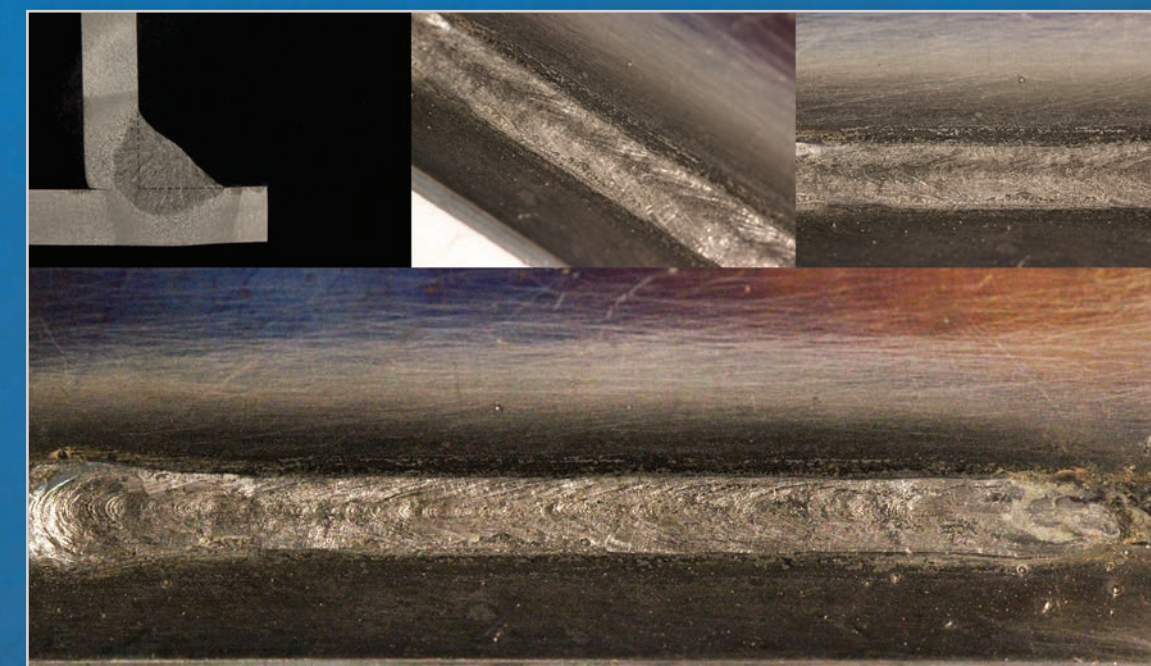
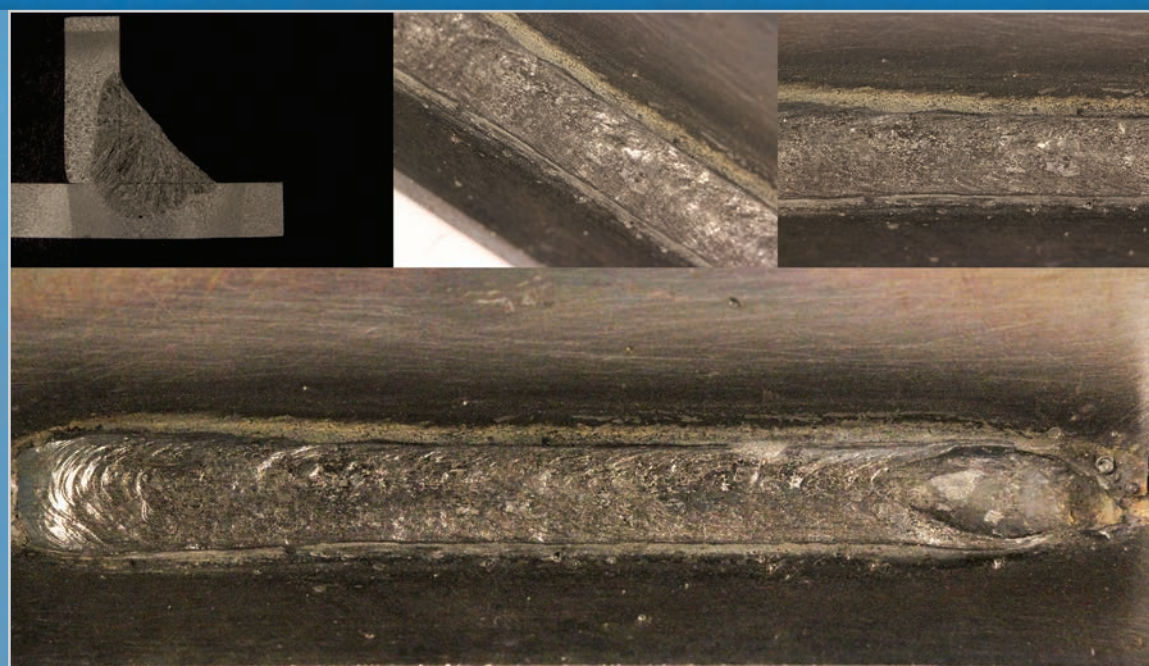
Decreased

13



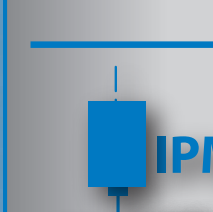
193

A



Increased

19



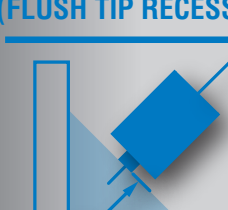
182

A

Contact Tip To Work

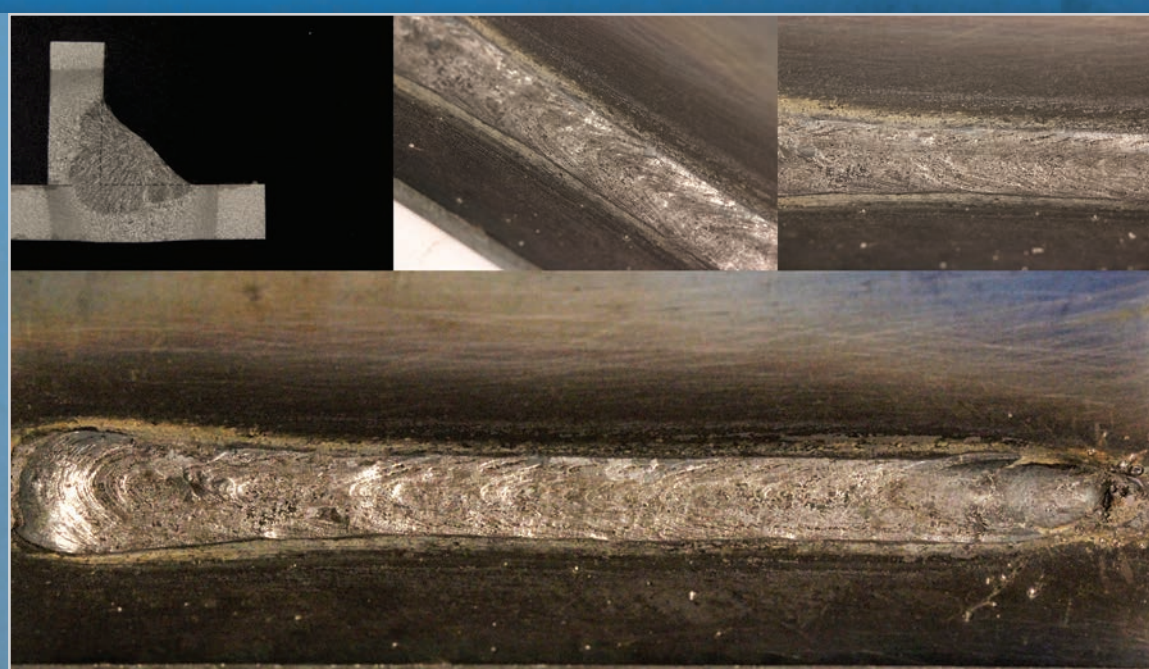
Decreased

3/8" (FLUSH TIP RECESS)



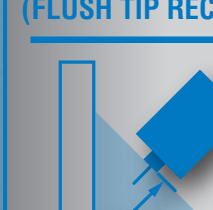
202

A



Increased

3/4" (FLUSH TIP RECESS)



181

A



The Power of Blue®