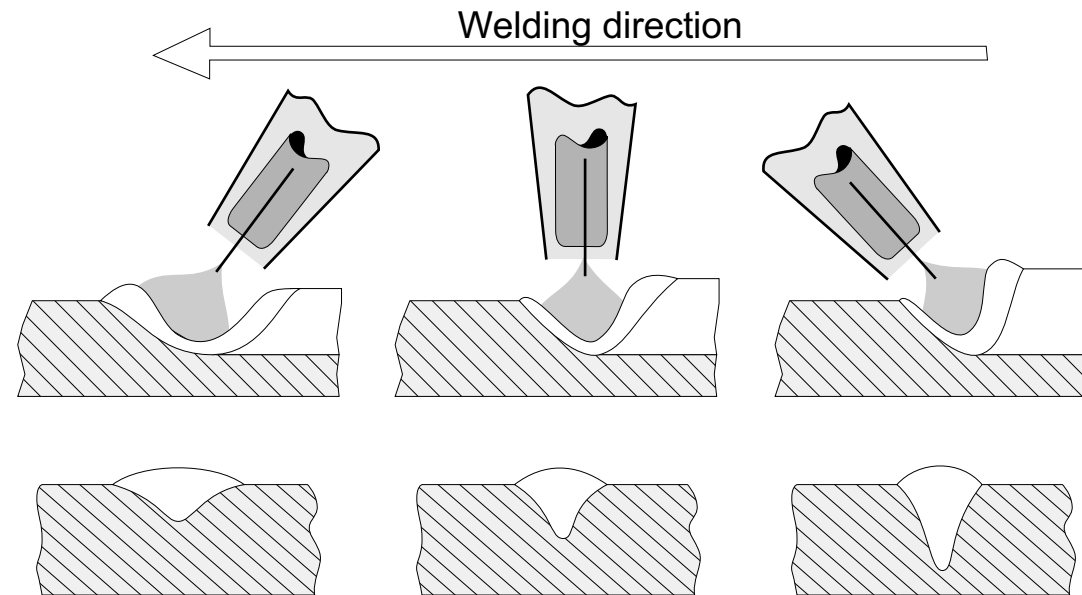
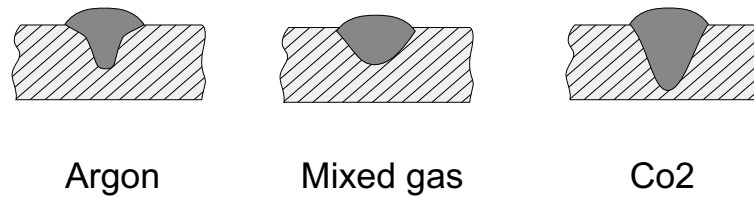


Effect of the torch position on penetration with unchanged device adjustment

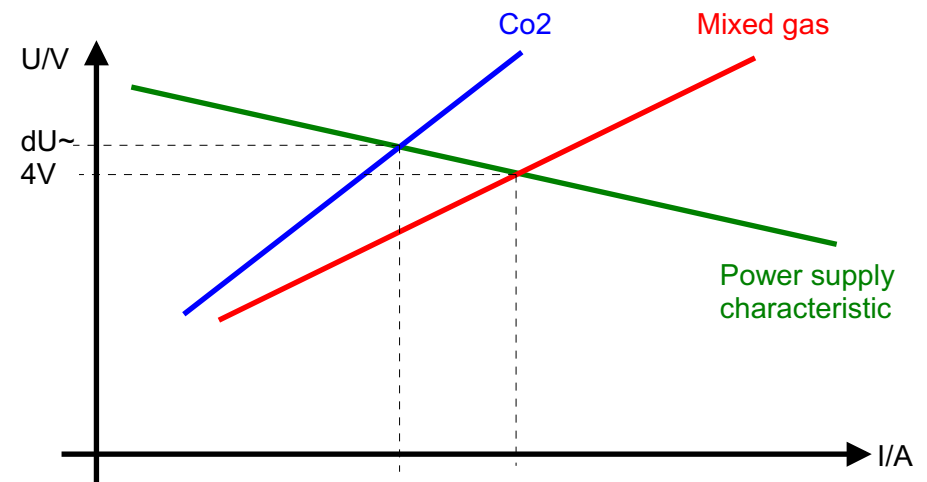


Torch position	piercing	vertical	dragging
Penetration	shallower	average	deeper
Weld width	wider	average	tighter

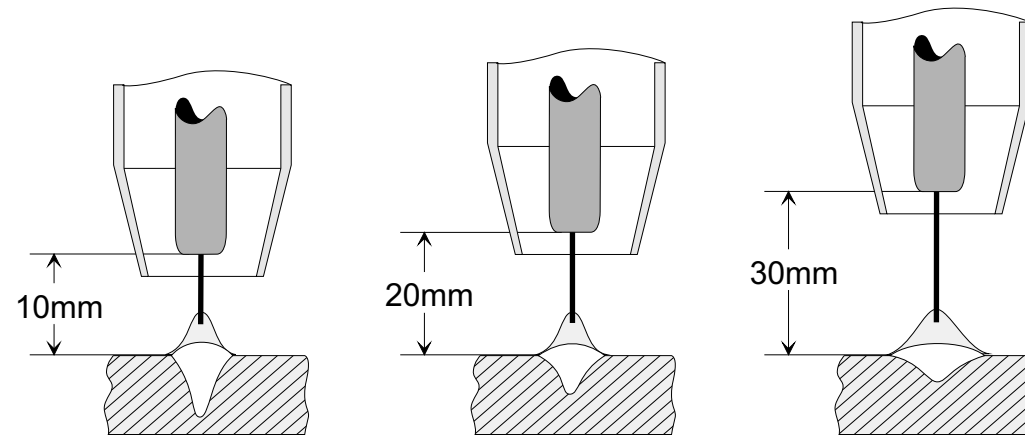
Penetration of steel with different shield gases



Effect of shield gases on the deposition efficiency

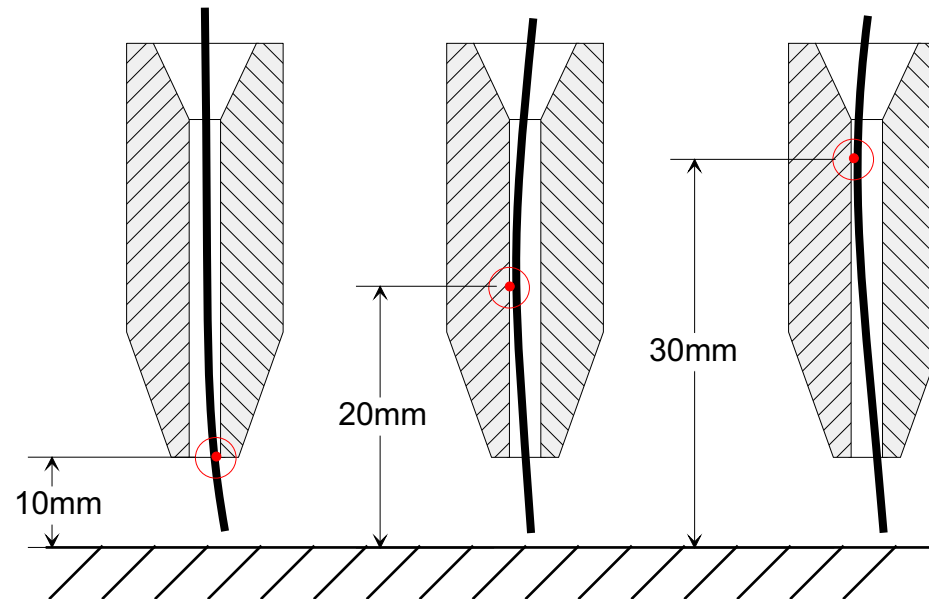


Effect of the contact tube distance on penetration with unchanged device adjustment

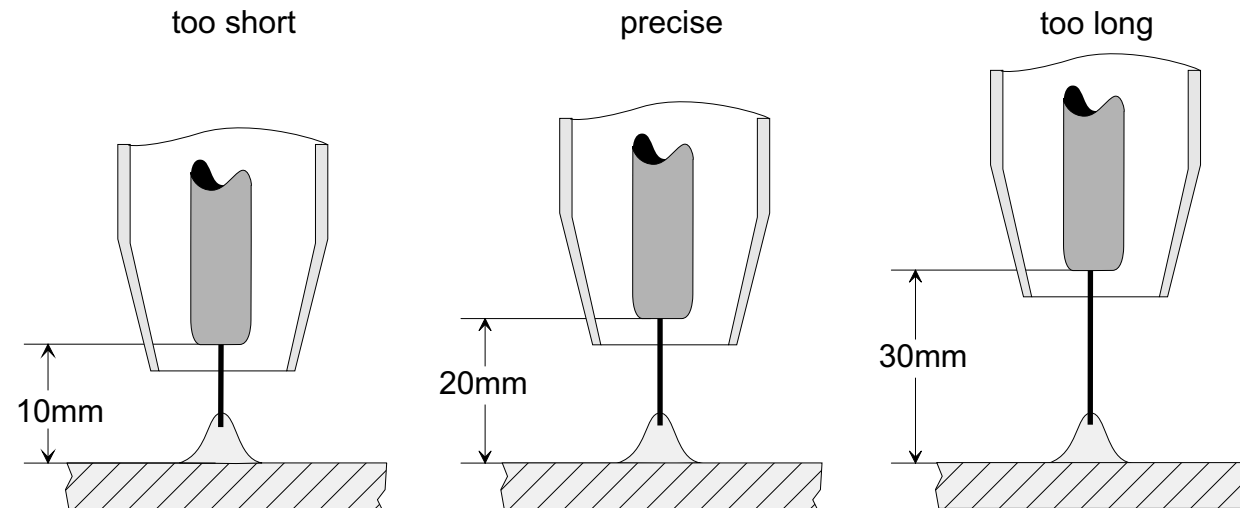


Contact tube distance	smaller	average	larger
Resistance heating	lower	average	higher
Arc performance	higher	average	lower
Penetration	deeper	average	shallower

Effect of induction within the contact tip on stickout length



Effect of the contact tube distance on welding current with unchanged device adjustment



Welding current

ca. 330 A

ca. 280 A

ca. 240 A

Welding voltage: 29 V

Wire feed: 8,8 m/min.

Electrode diameter: 1,2 mm

Welding speed: 58 cm/min

MAG short arc

