

Table 7-2 — Adjustments in Welding Parameters & Techniques

WELDING VARIABLES TO CHANGE	DESIRED CHANGES							
	PENETRA- TION		DEPOSITION RATE		BEAD SIZE		BEAD WIDTH	
	↑	↓	↑	↓	↑	↓	↑	↓
CURRENT & WIRE FEED SPEED	↑	↓	↑	↓	↑	↓	*	*
VOLTAGE	+	+	*	*	*	*	↑	↓
TRAVEL SPEED	+	+	*	*	↓	↑	↑	↓
STICKOUT	↓	↑	↑	↓	↑	↓	↓	↑
WIRE DIAM.	↓	↑	↓	↑	*	*	*	*
SHIELD GAS % CO ₂	↑	↓	*	*	*	*	↑	↓
TORCH ANGLE	BACK HAND TO 25°	FORE HAND	*	*	*	*	BACK HAND	FORE HAND

* NO EFFECT

+ LITTLE EFFECT

PULL ↑ INCREASE ↓ DECREASE PULL PUSH

Torch Manipulations

No discussion of welding techniques would be complete without some reference to the methods of torch manipulation. The recommendations which follow are only to serve as a guide to be used during welder training. As the individual welders become more proficient with the Mig process, they will adapt their torch manipulations to best suit the job at hand.

FLAT POSITION

Recommended weaving patterns, torch positions and bead sequence are shown in Figure 7-15. For the single-pass, butted joint, a slight back-stepping motion is used. Gapped root passes are made