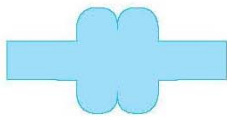


BUTT WELDING PROBLEMS AND POSSIBLE CAUSES

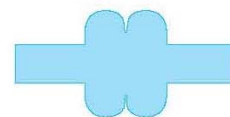
BEADS ARE TOO WIDE	OVERHEATING, OVER (ALIGNING) PRESSURE
GAP LENGTH BETWEEN BEADS IS TOO LARGE	OVER JOINING PRESSURE, INSUFFICIENT HEATING
	APPLYING PRESSURE DURING HEATING
BEADS'S UPPER SIDE IS TOO STRAIGHT	OVER JOINING PRESSURE, OVER HEATING
NOT UNIFORM BEAD AROUND THE PIPE	MISALIGNING, DEFECTED HEATER PLATE
BEADS ARE TOO SMALL	INSUFFICIENT HEATING, INSUFFICIENT JOINING PRESSURE
BEADS DO NOT OVERLAP ON THE PIPE'S OUTER SURFACE	GAP HEIGHT IS LOW; INSUFFICIENT HEATING AN INSUFFICIENT JOINING PRESSURE GAP HEIGHT IS HIGH; INSUFFICIENT HEATING AND OVER JOINING PRESSURE
BEADS ARE TOO LARGE	OVER HEATING
BEAD OUTER EDGE IS SQUARE	PRESSURE APPLIED DURING HEATING
ROUGH BEAD SURFACE	HYDROCARBON (SOIL) CONTAMINATION



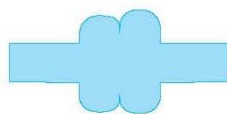
Proper welding



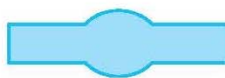
Over pressure and narrow bead width



Split on the welding surface, low heating or long changing time



Different heating time and/or different heating temperature



Low pressure and low bead height