



Optimal thick-plate process for high deposition, high speed, and low spatter

High-Current Pulse Welding System

Examples of applications



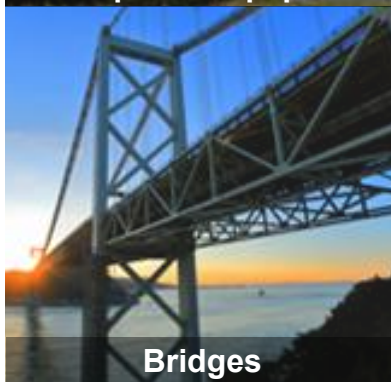
Wind power equipment



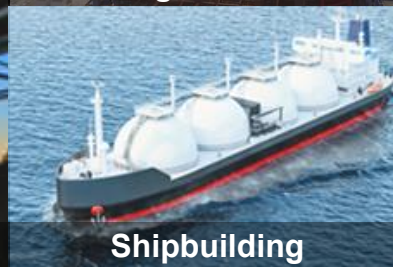
Pressure vessels



Building steel frames



Bridges



Shipbuilding

Welding time

Numerous process steps and **long working hours**

Multi-pass welding

Multiple passes required to ensure strength/quality

Post processing

Additional work required to remove spatter





**High deposition improves work efficiency
by 50% or more.**

Increased deposition per pass
to reduce the number of passes in multi-pass welding

Examples of applications

Target workpiece	Conventional	High-current pulse
Construction machinery (arm)	7 passes	3 passes

57%
reduction

Target workpiece	Conventional	High-current pulse
HVAC equipment (pipe + flange)	3 passes	1 pass

66%
reduction

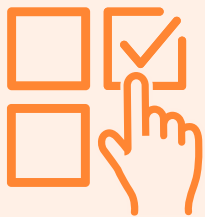


Dramatically reduced post-processing requirements

Minimal spatter and clean bead appearance

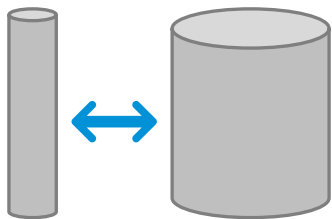
Reduced cleaning and grinding times





A single welding unit for planes of various thicknesses

Improves efficiency of thick-plate welding!



Small to large
diameters

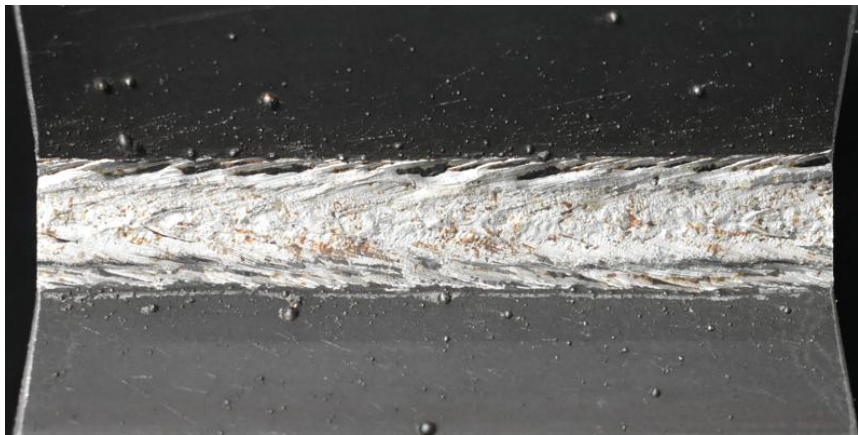
Offers numerous modes, including high-efficiency pulse and DC mode.

Allows selection of optimal conditions to suit **material**, **plate thickness**, and **joint**.

Supports wire diameters **from 0.8 mm to 1.6 mm**.

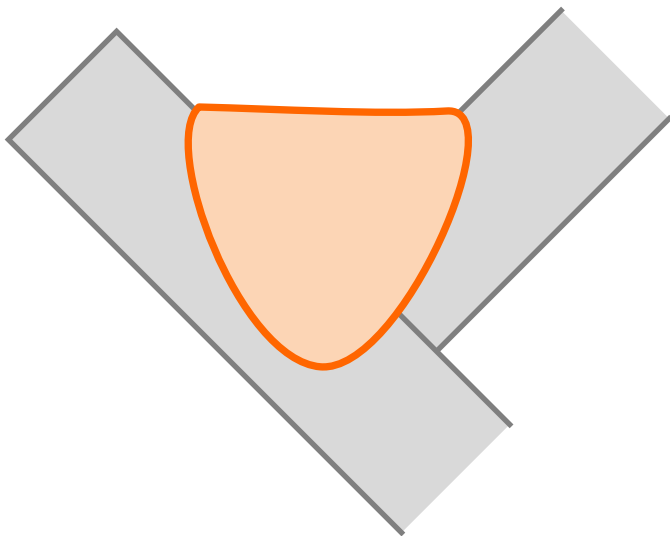
Approx. 50% increased deposition improves efficiency compared to conventional welding.

Conventional DC welding
500 A, 30 cm/min



High-efficiency pulse
650 A, 30 cm/min





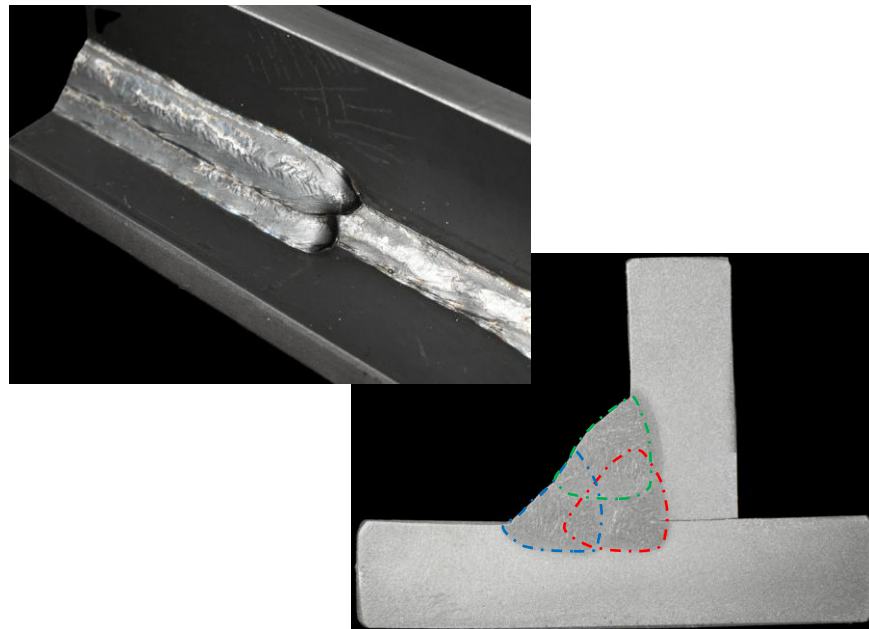
Demonstration conditions

Current setting	650 A
Voltage setting	45.0 V
Welding speed	35 cm/min
Plate thickness	16.0 mm
Welding mode	High-efficiency pulse
Joint shape	Flat position V groove

Single-pass welding



Multi-pass welding



**The High-Current Pulse Welding System
sets a new standard for the thick-plate
welding industry.**

DAIHEN