

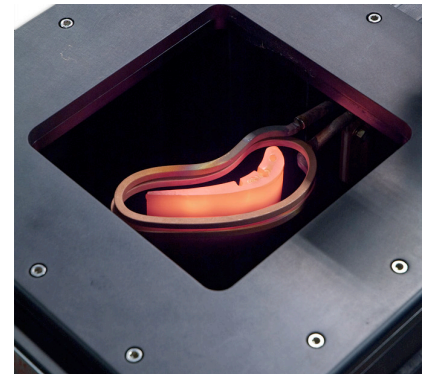
Induction Heating for weld repair

SWET System

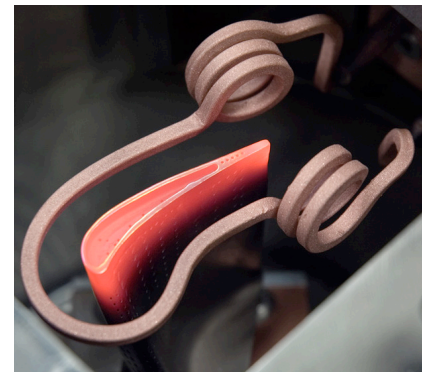
GH SWET System is designed to heat superalloys for welding at elevated temperatures. The system uses an argon purge chamber which removes oxygen from work area to avoid oxidation



For both HPT
aerospace blades
and land based
blades
Argon atmosphere



Land based blade



HPT aerospace blade

ADVANTAGES

TEMPERATURE UNIFORMITY

- Coils are specifically designed to guarantee temperature uniformity along the surface of the part.

REDUCED ARGON USAGE

- Low cost of operation: optimized gas consumption & increased energy efficiency
- The excellent laminar flow of the chamber helps reducing argon usage.

ERGONOMICS DESIGN

- GH SWET System is designed under ergonomics principles and following ISO/TC 159.

FULL PROCESS CONTROL

- Different heating patterns can be set in the control system. Temperature and argon flow are controlled and adjusted during the process.



GHCOM15003.0

Ergonomics design

GH SWET system has a working area ergonomically designed to guarantee operator comfort. The equipment can be adjusted in height and the armrest can also be adjusted in angle. All the process parameters indicators are located in the front panel so the operator can easily control them.



Coil design

The Specifically designed coil provides the proper heating pattern to the part and maximizes the efficiency of the induction heating power supply, while still allowing easy insertion and removal of the part.



Parts loading system

A two-hand control device is used as safety protection to lower and raise the chamber base.

HPT blade dovetail is secured by a stainless steel fixture for precise blade location.



Process parameters control

The system offers full process control:

- Programmed time delay for chamber purging.
- Ramp up, Hold, Ramp down temperature control.
- Closed loop temperature control via infrared pyrometer.
- Control holds constant power during welding process.



Technical data

Specification	SWET System
Power supply	10KW
Dimensions; W x D x H (mm) // (in)	915" x 1750" x 1830" // 36" x 69" x 72"
Work height regulation (mm) // (in)	810" to 1020" adjustable // 32" to 40" adjustable
Arm rest angle regulation	0-30 °
Chamber size	Designed depending on the parts to optimize argon usage
Argon rapid purge (l/min) // (gl/min)	40" // 8.8"
Argon standard purge (l/min) // (gl/min)	25" // 5.5"
Water required (l/min) // (gl/min)	15 // 3.3 @ 3 bar differential
Max.water/air temperature (°C) // (°F)	33C/ 40C // 91.5 /105
Control	Unitronics HMI/PLC
Safety /interlocking system	E-stop relay, water flow, max and feedback part temperature

