

Friction Stir Welding Head for CNC machine



FSW head: solution designed by FSW expert

Welding of low melting point materials (Al, Mg, Cu)

Bi material welding & aeronautical grades

Highly repeatable welds

Machining & welding in the same machine

Very easy installation in an existing CNC machine

Assembly or disassembly in 15 minutes



CNC MACHINE 3 TO 5 AXES

Protection of the machine spindle against charges & vibrations of the FSW process

Force control along the tool axis - forging force

Tool cooling

Forging force recording to ensure quality control

SOLID STATE WELDING

No cracking (aluminium 2xxx, 6xxx, 7xxx)

Minimal distortion, no porosity (casted Al-Si)

No preparation of the parts before welding

High mechanical strength



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FSW Stirweld tools: universal solution at low investment cost

QUICK TOOL CHANGE

Whistle Notch system
Accurate location guaranteed

LOW-PRICE TOOLS

Few consumables (1 tool = 1 500m of welding)
No filler material - No gas



LOW INVESTEMENT COST SOLUTION

Universal fit on different CNC machines
No hardware or software modifications
Increase the flexibility of your machine park



EASY-TO-USE SOLUTION










Temperature monitoring for safe use
Self-lubricated: no maintenance
Small footprint for using in complex tooling

TECHNICAL DATA

Force control from 1 to 18 kN
Welding capacity up to 15 mm
Air & water cooling



FSW APPLICATIONS

- | | | |
|---|--|---|
|  Liquid Cold Plate |  Hydrogen tank |  Cu Copper welding |
|  Casted Parts |  5G Antenna |  Fe Al/Fe welding |
|  Rigid panels |  Riveting replacement |  Metal working |