

Compact. Controlled. Relentless.

The S-50 and S-65 are built for the tight spaces and fine tolerances where precision matters most. Compact enough for cleanroom work, tough enough for the field, these heads deliver the same repeatable, contamination-free welds that define the AutonoWeld™ name.

Both share a sealed, water-cooled design and solid, balanced construction, built to run all day without compromise. The S-50 excels in micro and thin-wall tubing, while the S-65 adds power and range for larger, high-spec assemblies. Together, they bring big-machine performance to small-diameter work.



Industries:

- **Pharma & Biotech**
- **Semiconductor & Electronics**
- **Food & Beverage**
- **Aerospace & Defense**
- **Nuclear & Energy**
- **Chemical & Petrochemical**
- **Industrial Fabrication**

S-50 Micro Weld Head

Compact, water-cooled, and optimized for high-purity work, the **S-50** excels in field or shop environments where space is tight and precision matters most.

- Designed for **small-diameter stainless steel, titanium, and nickel alloy tubing** under 0.5" OD.
- **Removable inserts** support multiple joint configurations—**tube-to-tube, elbows, tees, and flanges**.
- Ideal for **pharmaceutical, semiconductor, and bioprocess systems** requiring contamination-free welds and consistent quality.

S-65 Micro Weld Head

The **S-65** expands the AutonoWeld micro line for technicians working with larger process and instrumentation systems.

- **Mid-range closed orbital head** with capacity for tubing up to 0.625" OD.
- **Clamp cabin inserts** with typical insert diameter of 0.625" and thickness of 0.665".
- Purpose-built for **process, instrument, and light industrial tubing systems** requiring precision and repeatability in demanding field conditions.

Quick Specs		S-50	S-65
Tube / Pipe OD Range		0.25"- 0.5"	0.125" – 0.625"
Head Weight		8.8 lb	13.2 lb
Rotation Speed		0.6 – 9 RPM	
Cable Length		26.2 ft	
Cooling Method	Water-cooled (closed-circuit)	Water-cooled (dual-circuit)	

*compatible with the AutonoWeldAW-215PS power supply



OD Range/ Dimensions

Model No.	Tube / Pipe OD Range	Wall Thickness Range	Tungsten Electrode Diameter	Length	Width	Height
S-50	0.25"- 0.5"	0.020 – 0.065"	0.078"	10"	2.6"	1.14"
S-65	0.125 – 0.625"	0.020 – 0.065"	0.094"	6.65"	2.9"	6.6"

Standard Features:

Weld Process:

GTAW (TIG)

Compatibility:

AW-215 Orbital Power Supply

Cooling:

Standard quick-connect water lines with integrated flow monitoring

Operation:

0-360° all-position orbital welding

Shield Gas:

Argon (99.99% purity recommended)

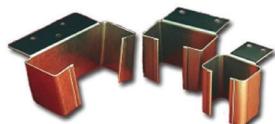
Safety Systems:

Water flow, argon flow, and over-temperature sensors

Optional Accessories



Clamp Insert



Bench Mount Brackets