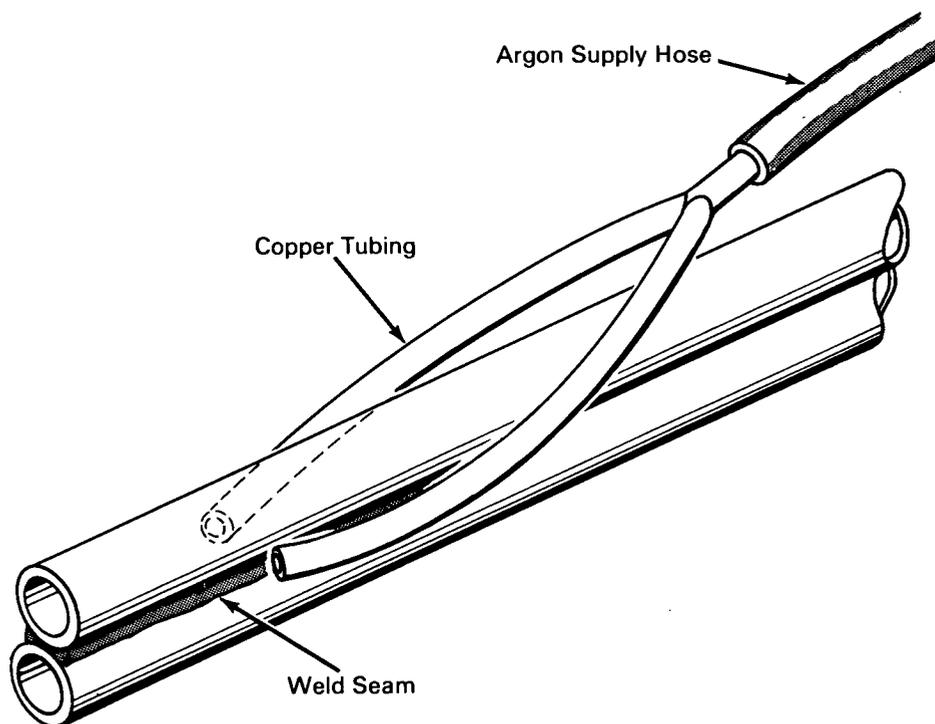


NASA TECH BRIEF



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Simple Device Facilitates Inert-Gas Welding of Tubes



The problem:

To provide a simple device that will maintain an argon, or other inert-gas, atmosphere over the weld areas on two tubes being joined along a line on their outer peripheries. Separate supply hoses which have been used to provide an argon atmosphere over both sides of a weld seam formed along contiguous tubes are awkward to handle.

The solution:

A metal Y-tube that simultaneously directs streams

of argon from a single supply hose over the weld areas on both sides of the workpieces.

How it's done:

Three pieces of pliable metal tubing (e.g., 3/16-inch copper tubing) are soldered or brazed in a Y-configuration. The stem of the Y is inserted into the argon supply hose, and the other two branches are bent so that the outlet tips will be in contact with the junction of the tubes being welded. The device is advanced along the junction in step with the welding operation.

(continued overleaf)

Note:

Inquiries concerning this innovation may be directed to:

Technology Utilization Officer
Marshall Space Flight Center
Huntsville, Alabama, 35812
Reference: B66-10155

Patent Status:

No patent action is contemplated by NASA.

Source: W. B. Kelley and K. V. Carrithers
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