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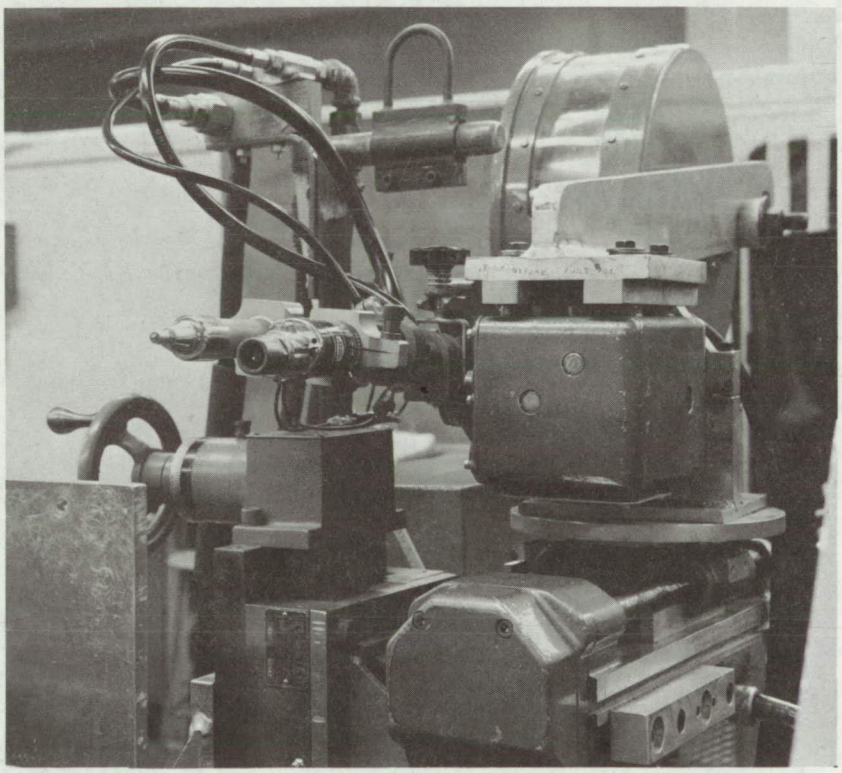
NASA TECH BRIEF

Gas Metal Arc (GMA) Weld Torch Proximity Control



An adjustable transducer probe is attached to a welding torch and maintains a preset torch-to-work distance. When welding an irregular surface the electro-mechanical probe sends an error signal to the weld head drive motor that adjusts the torch distance automatically. The figure illustrates the probe and torch in working position. This innovation has the following advantages over existing systems: 1) Accurate following of irregular surfaces; 2) Less sensitivity to heat; 3) Insensitivity to static interference; and 4) More positive response because of electro-mechanical control.

Note:

No further documentation is available. Inquiries may be directed to:

Technology Utilization Officer
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Reference: B69-10533

(continued overleaf)

Patent status:

Inquiries about obtaining rights for the commercial use of this invention may be made to NASA, Code GP, Washington, D.C. 20546.

Source: Eugene D. Hawkes of
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(MFS-16327)