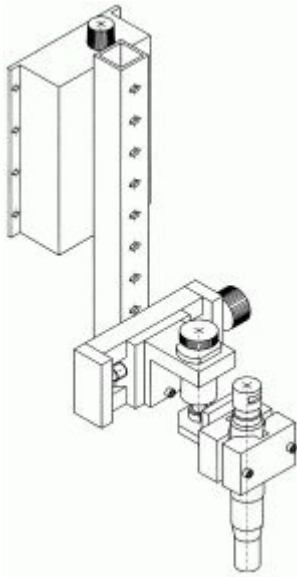


# AVC ARC VOLTAGE CONTROL

## AVC module

- positioning of the welding torch for the ignition distance (touch-retract)
- positioning for the welding distance
- arc voltage control for TIG welding processes
- automatic welding current detection
- HF security
- 4 quadrant motor control
- precision lengths control
- voltage sensor for the AVC arc length monitoring
- motor operated adjustable slide with 66 mm operating distance
- X axis with two limit switches as safety device and torch holding device



- Manually operated slide 50 mm
- Bearing joint with torch holder



- Motor driven slide, 66 mm or 100 mm travel length  
motor with tacho feedback  
limit switches, torch holder

**AVP d.o.o.**      **Welding automation**

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AVP

## ***LASER PROBE***



### ***...Improving productivity.....***

Automating a welding process can dramatically improve productivity and reduce scrap and rework. Some means of seam tracking is normally required to fully realise these improvements, traditionally this has been mechanical probe or through arc sensing systems.

In practice these types of tracking systems require manual input and operators cannot be redeployed to productive tasks elsewhere. Mechanical probes have severe limitations such as welding thin sheet, tight butt welds and coping with tack welds. In addition they are prone to damage often resulting in scrap and rework. Laser Probe is the latest generation laser vision product from Meta Vision Systems and offers a unique combination of ease of use with sophisticated capability and high performance to fully automate welding processes.

Laser Probe is a non-contact seam tracking system based on well proven laser vision technology used in previous generation Laser Probe systems. In the last two years over 300 systems have been successfully installed on new and existing welding.



#### **The features of the Laser Probe are:**

- Suitable for TIG, MIG/MAG, sub arc, plasma and laser welding
- Operated by a simple pendant
- Capable of process speeds of up to 8m/min
- Easily interfaced to welding machine controllers
- Available with Laser Probe Tools software package for complex joints and applications

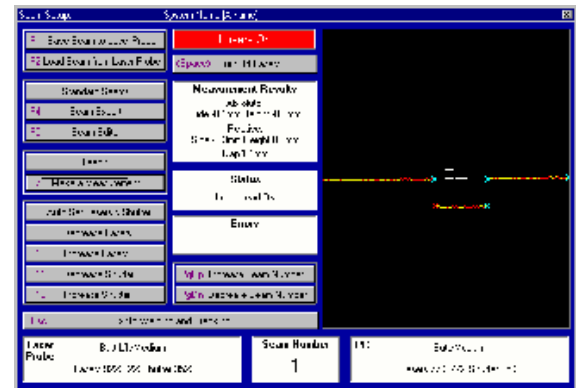
By overcoming limitations of alternative tracking system, Laser Probe helps the welding manufacturing costs and improve product quality.



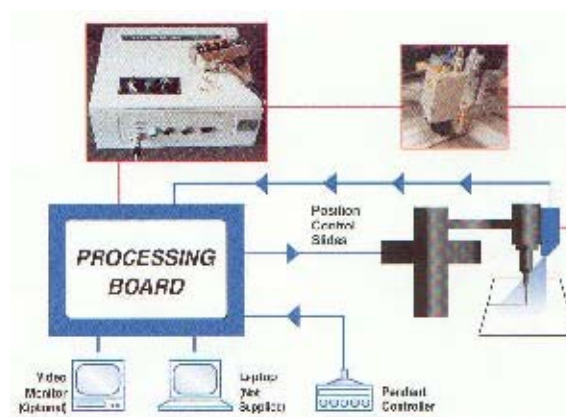
# ***LASER PROBE***

**Laser Probe is a complete laser seam finding and tracking system. Each system can be configured depending on user requirements and consists of:**

- Robust laser sensor head with a choice of 5, 10, 15, 30, 45 or 60 mm field of view.
- Sensor mounting plate ( water cooled mount is optional )
- Camera cable connecting the sensor and the control box (10 m standard, up to 50m optional)
- Small control box with panel mounted on/off switch
- Video monitor (optional)
- Laser Probe Tools programming software and hand held pendan
- DC motorised cross slides 25-3,000mm length (optional)



The Laser Probe control system uses a single processing board instead of a PC. All software required for system operation resides on a flash memory device. Programming the Laser Probe is made simple by a Windows based software package called Laser Probe Tools. Laser Probe Tools is provided on a CD and is used on a lap top or PC connected to the Laser Probe system with a serial lead. After system installation and when programming is complete, settings are saved onto the processing board and Laser Probe Tools are disconnected. This protects settings during system operation.



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