

AMV 4000



Choose the AMV 4000 for:

- Fast data acquisition
- Flexible monitoring
- Decision making elements
- Data analysis

The AMV 4000 is a fast data logger with additional software specifically designed for arc welding applications.

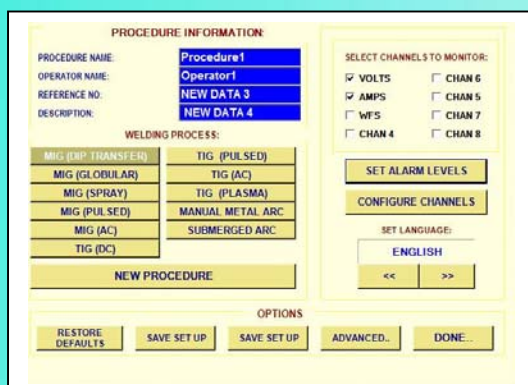
The Data Logger

The AMV 4000 is a data logger capable of acquiring data at 100 kHz per channel. There are 8 channels on the standard AMV 4000 that can be configured by the user. By default the AMV is set to the following:

Channel	Description	Max value	Unit	Accuracy
1	Current	1000	A	1%
2	Voltage	100	V	1%
3	Wire Speed Feed	30	M/min	2%
4	Not set			
5	Not set			
6	Not set			
7	Not set			
8	Not set			

However, all channels can be renamed and values changed. Details of the electrical input requirements are available on request.

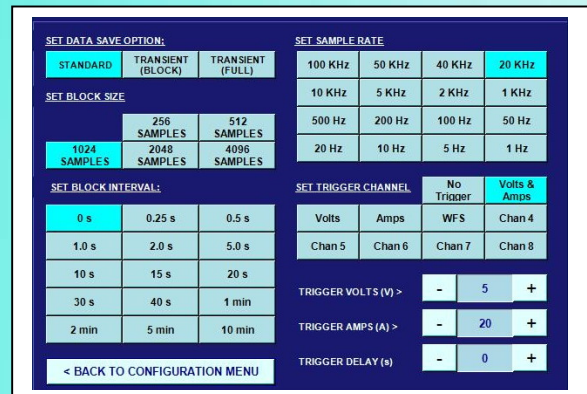
Analytical Tools



The AMV 4000 is intended to give specific welding parameters so welding engineers can understand the process. To help with this there are a number of preset options in the software.

From this list the welding processes are further divided into the process variants such as pulse TIG or globular MIG.

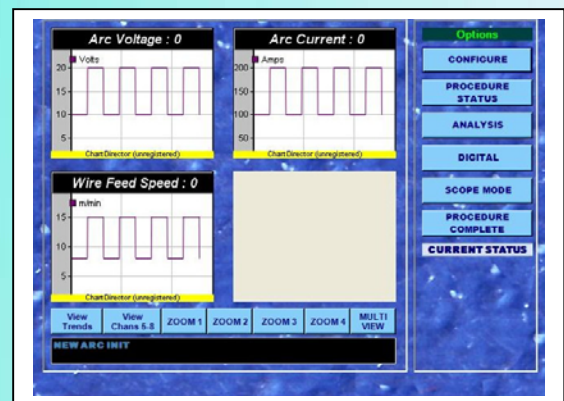
By choosing the correct process option the monitor assumes a data collection routine compatible with the process. For instance; with a short circuiting or dip transfer MIG the dip cycles are around 100 to 500 Hz so to monitor this successfully the AMV 4000 chooses a data collection frequency of 5,000 Hz with a continuous sampling routine. Similary, for pulse MIG the pulses could be as fast as 1,000 Hz, so if this options is selected the AMV 4000 defaults to a data collection frequency of 10,000 Hz. All these parameters can be set individually should that be required.



Apart from selecting the data collection routine, selecting the process also determines the statistical routine and waveform analysis. Each process can be described by a set of points. For pulse MIG and dip MIG the appropriate points are listed below.

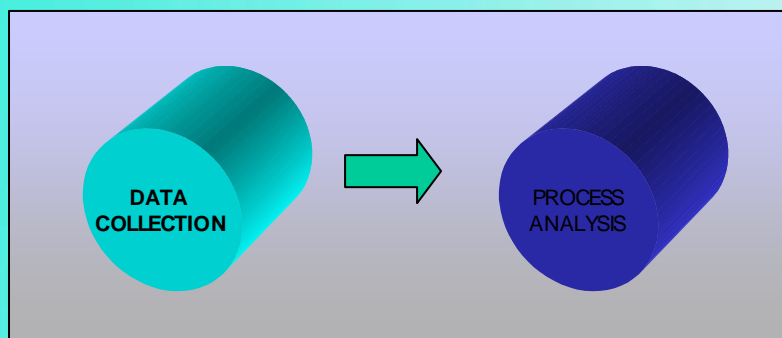
SUMMARY STATUS OF WELDING SO FAR						
PROCEDURE NAME: Procedure1			OPERATOR NAME: Operator1			
DATE STARTED:			TIME STARTED:			
ARC COUNT:			DURATION: 63.6			
CHANGE VIEW:	INDIVIDUAL ARC PULSE PARAMETERS		ARC NUMBER:	PREV	1	NEXT
AVERAGES:	PEAK LEVEL	BGND LEVEL	PEAK TIME	DKGD TIME	FAILURES:	
VOLTS:	15	19.9	10	55.8	63.8	0
AMPS:	150	110	55	60	64	0
WFS:	11.52	78.09	39.21	61.14	63.8	0
CH 4:	OFF	OFF	OFF	OFF	OFF	0
CH 5:	OFF	OFF	OFF	OFF	OFF	0
CH 6:	OFF	OFF	OFF	OFF	OFF	0
CH 7:	OFF	OFF	OFF	OFF	OFF	0
CH 8:	OFF	OFF	OFF	OFF	OFF	0

Buttons: RETURN TO LOGGING MENU, VIEW ANALYSIS MENU, SAVE OPTIONS

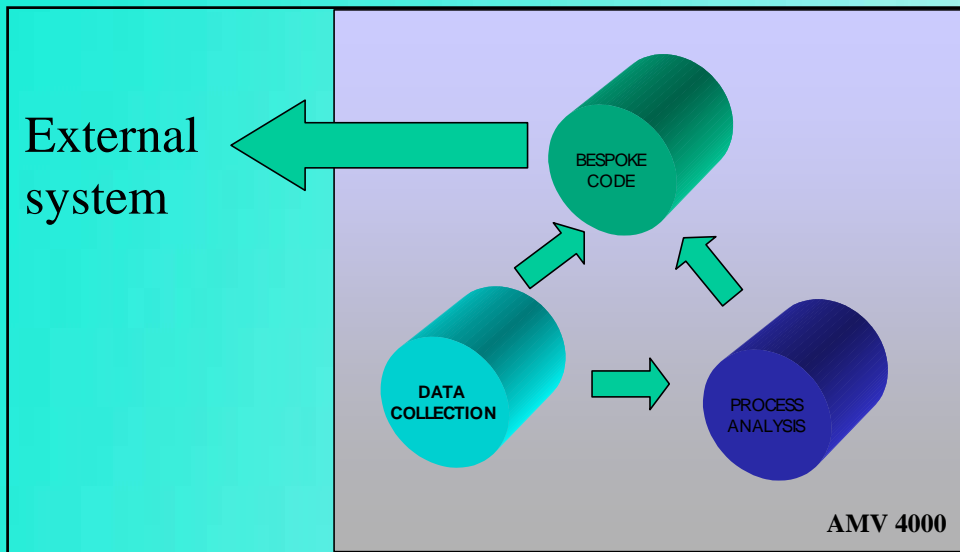


Modular Programming

Because the AMV 4000 is an advanced data collection tool running in a Windows environment it is easy to write decision making code for process control. For standard operation the AMV 4000 passes large amounts of data from the data collection code into the process analysis code. The analysis module is selected depending on the process.



As the code is all modular it is possible to build your own code to take information from either or both modules. It can then be used for process control.



Connectivity

The AMV 4000 comes complete with the following communications options:

- 2 serial ports
- 2 USB ports
- Ethernet adaptor 10/100
- 10 programmable outputs

With these communications it is possible to:

- quickly add memory – for instance a USB hard drive
- connect to a network – full windows operation
- send external control signals - either through the serial ports or the individual outputs
- even connect a PC compatible printer.



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