
Products Overview

- * Capacitor Discharge

125ADP, 300ADP, 1000ADP,

- * High Frequency Inverter

HF25/HF27

- * Middle Frequency Inverter

IS Series (IS-800CR, IS-1400CR)

- * Linear DC

DC29, UB29

- * Weld Monitoring

ADAM, MG3

Products Overview

- * **Welding Heads**

 - 80 / 180 series (Thinline Standard)

 - 300 series (Electro Magnetic)

 - 50 series (Light Force)

- * **Accessories**

 - Handpieces, Footpedal & Foot S/W

 - Optics & Illumination

 - Electrodes, Holders and Adaptors

- * **Thermocouple Welder**

 - TCW

Capacitor Discharge

- **Dual Pulse Function**
- **Built-in Monitor**
- **Upslope Function**
- **Polarity Programming by puls**
- **Four Selectable Pulse Widths**
- **High Resolution 6.5 inch Color Display**
- **High Repetition Rate**



125ADP
300ADP
1000ADP

High Frequency Invertor

HF25/HF27

- **25KHz closed-loop**
- **Built-in weld monitor with graphical display**
- **User defined limits and alarm**
- **128 different weld schedules**
- **10 different weld profiles**
- **Precise control of heat and time**



High Frequency Invertor

Weld Pre-Check



Monitor Screen – Shows 1st Pulse weld current exceeded limit.



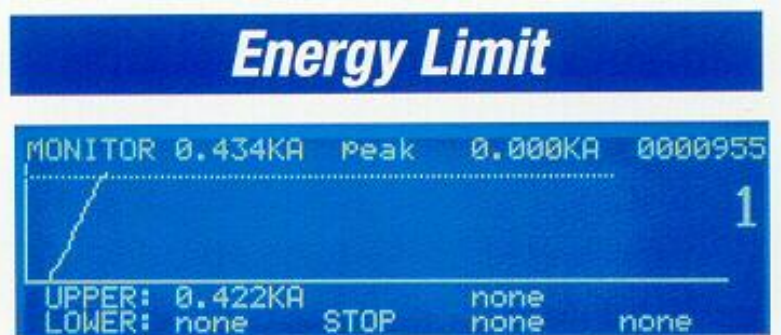
Run Screen – Shows that 2nd Pulse was inhibited from firing.

- Use WELD1 to test key electrical parameter against pre-set limits
- Inhibit WELD2 energy if WELD1 measurement is out of limits

Advantages

- Prevents unacceptable welds
- Prevents electrode damage
- Alerts operator to weld fault
- Relay outputs can signal automation

High Frequency Invertor



Monitor Screen – Shows weld current exceeding limit.



Run Screen – Shows termination of weld current during weld pulse

Terminates the weld energy when a pre-set current, voltage or power limits are exceeded.

Advantages

- Prevents explosions and part damage
- Prevents electrode damage
- Alerts operator to weld fault
- Relay outputs can signal automation

High Frequency Invertor

Active Part Conditioner (APC)



Run Screen – Constant power first pulse breaks through oxides.



Monitor Screen – First pulse time automatically compensates for varying levels of oxides.

Adjusts weld time on the first pulse to displace varying oxide levels

Advantages

- Consistent resistance for main welding pulse
- Prevents weld splash
- Increases process yield
- Helps minimize the impact of varying parts

Middle Frequency Inverter

IS-800CR / IS-1400CR

- **800 or 1,400 amp primary output**
- **Six feedback modes**
- **Built-in current, voltage, power, time and pulse monitor**
- **Pre-weld check process tool**
- **I/O check screen**
- **Cascade option : 5 and 7 way cascade**
- **RS232 or RS485 communication**
- **NEMA style enclosures**



Linear DC

DC29, UB29

- Micro spot welder
- Single phase input
- Compact size
- Dual pulse schedules
- Very fast rise time
- Precisely controlled repeatable waveform
- 4 control modes
 - Current, Voltage, Power, V-A(Voltage-Current)



Weld Monitoring

ADAM

- Advanced Data Analysis Monitor
- High Resolution Sensors
- Easy to program User-Interface
- TCP/IP Communications Enabled



MG3

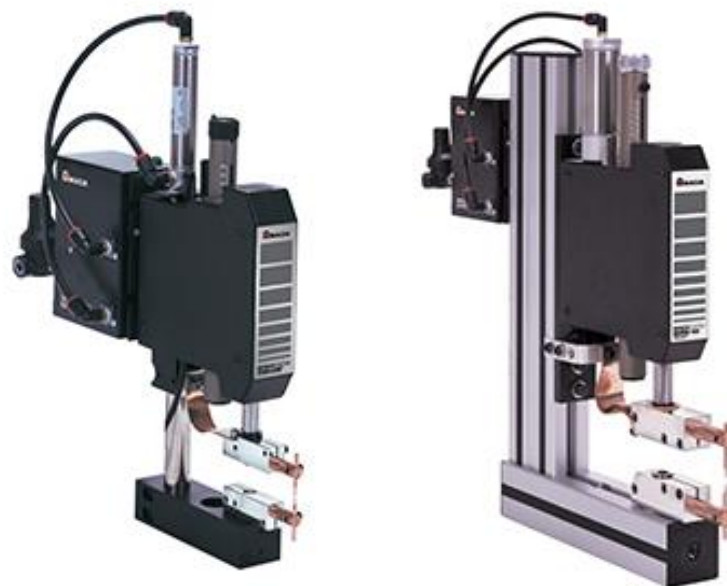
- Two Independent Measurement Channels
- Oscilloscope Functions with Zoom and Cursor Modes
- Full On-screen SPC Capability



Welding Heads

80 / 180 Series

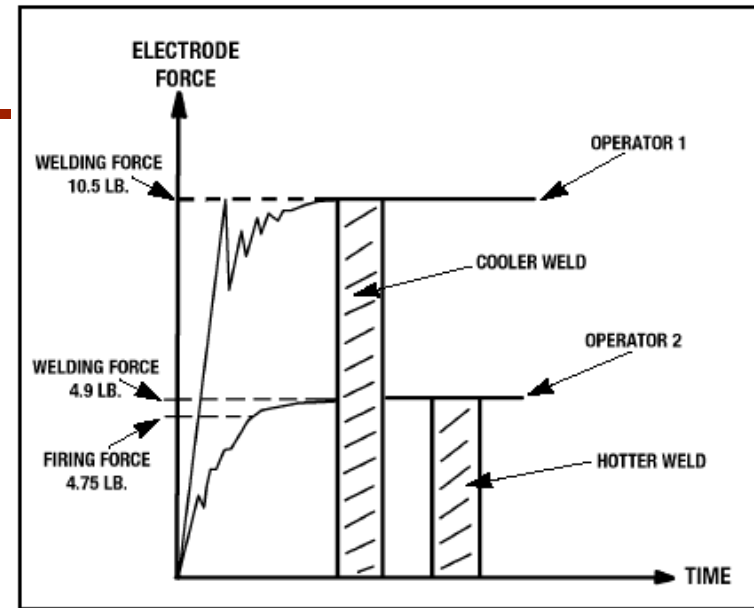
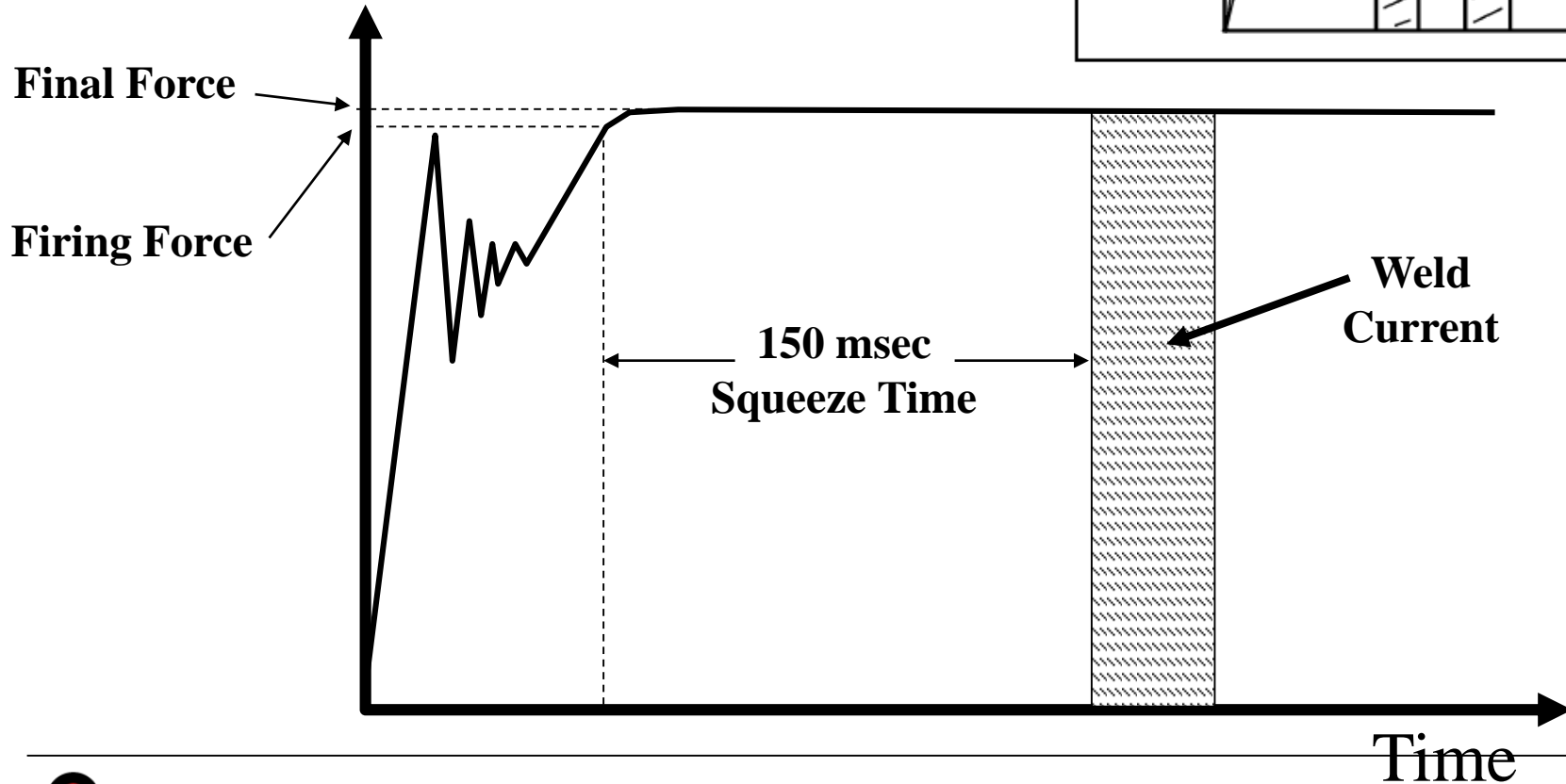
- **Adjustable Force-Firing**
- **Air Actuation**
- **Adjustable Tare Spring**
- **Up to 38mm stroke**
- **Up and Down Stops**
- **Rugged Design**
- **EZ-Air Technology**



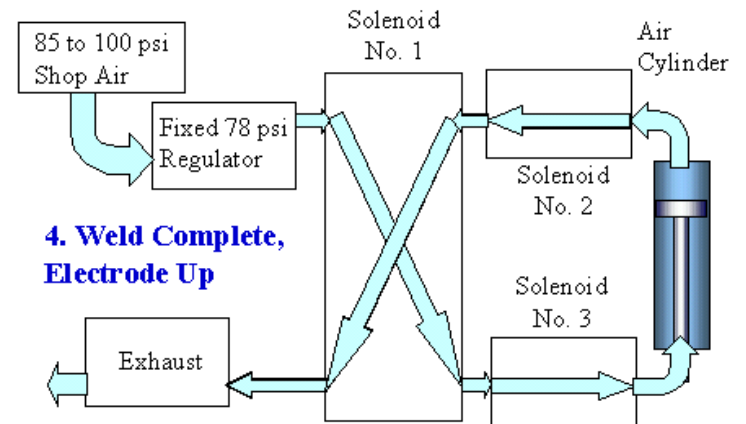
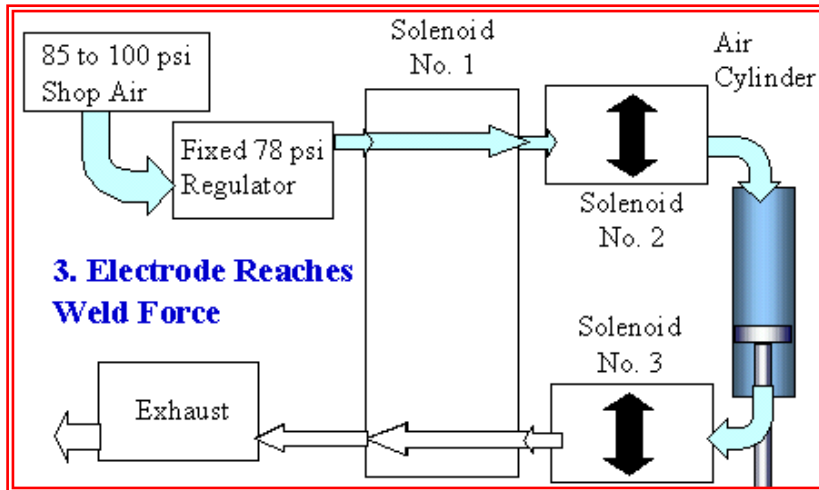
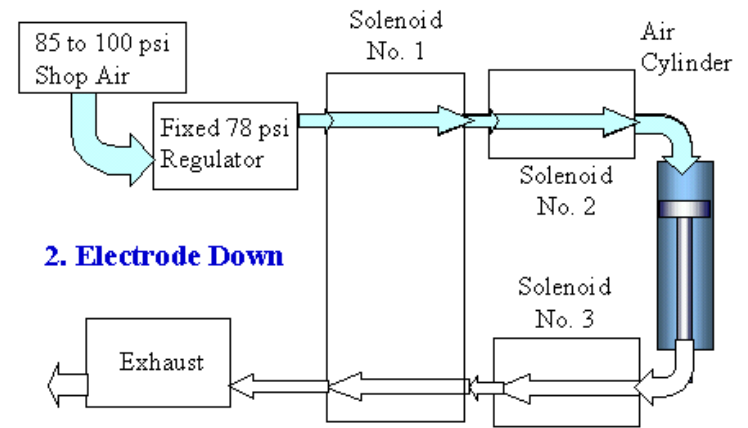
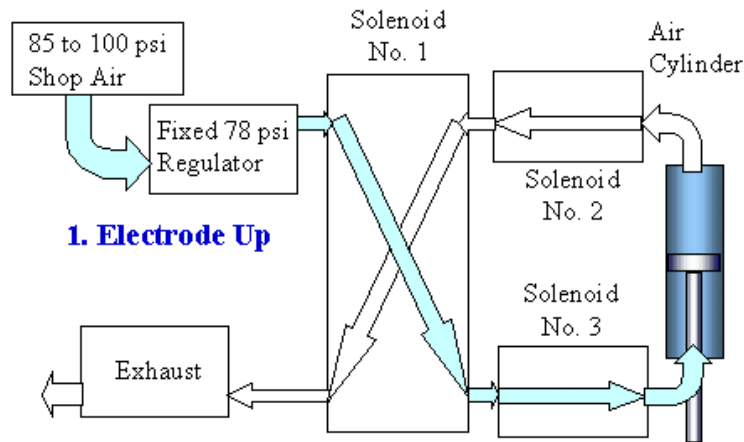
Welding Heads

EZ-Air Force

Electrode Force



Welding Heads



Welding Heads

EZ-Air Force Kit

Benefits

Elimination of over force

Reduced force adjustment time

Greater process control

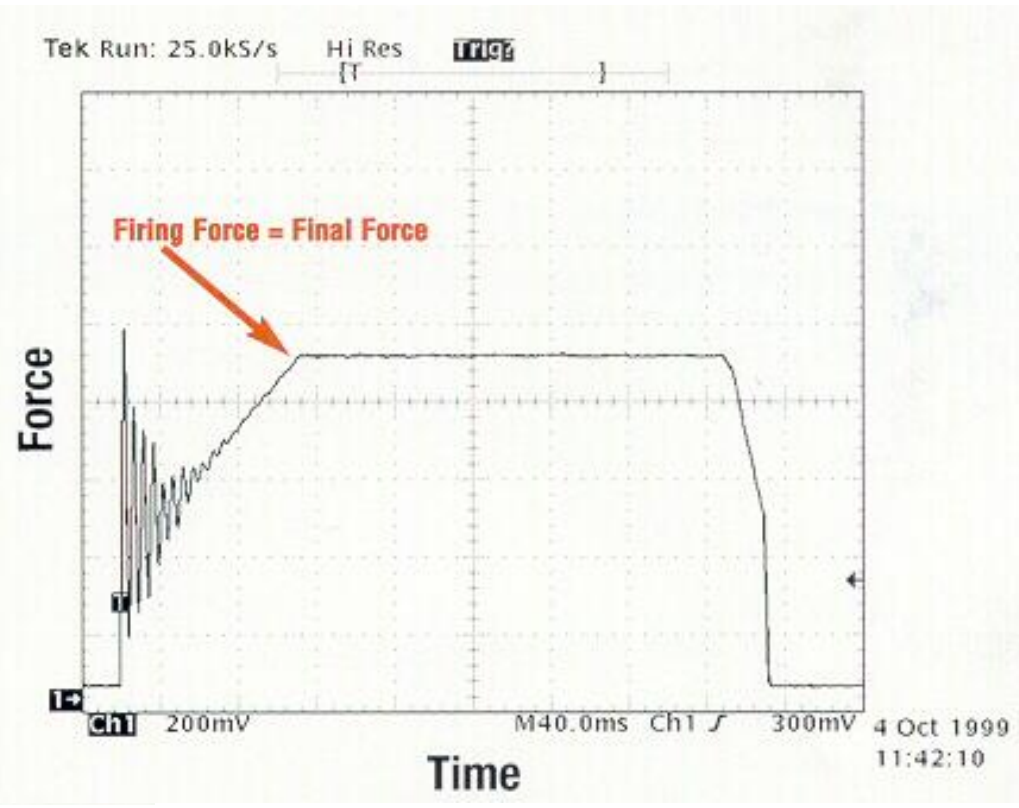
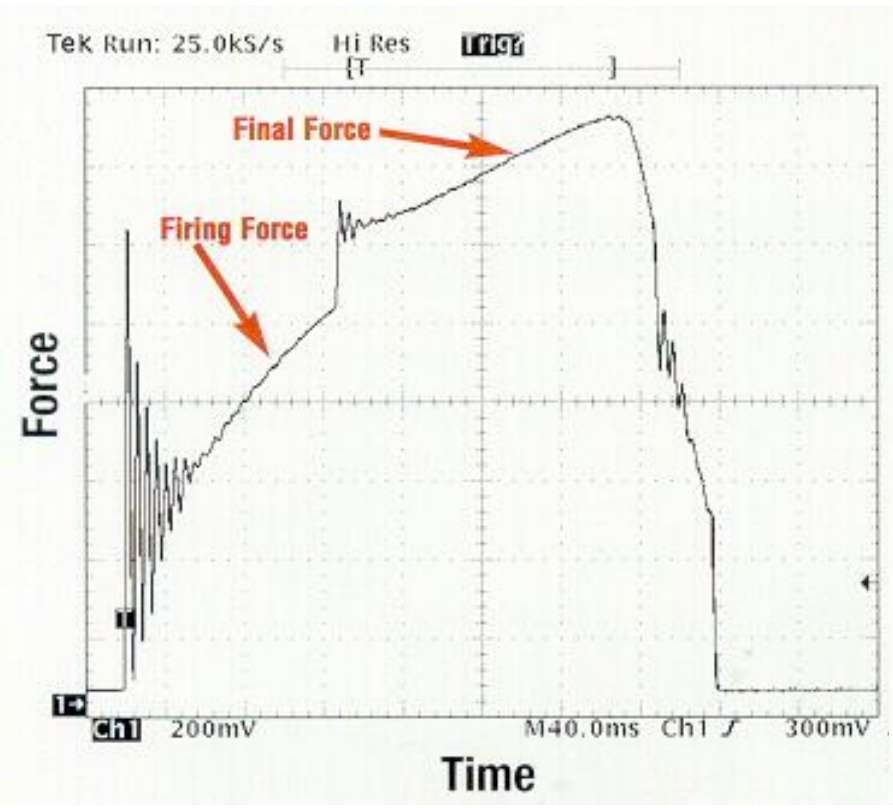
Higher yields

Features and Advantages

- Simple “one knob” force set up
- No need to synchronize air pressure with force spring adjustment
- No need for constant force verification

Welding Heads

EZ-Air Force Kit



Welding Heads

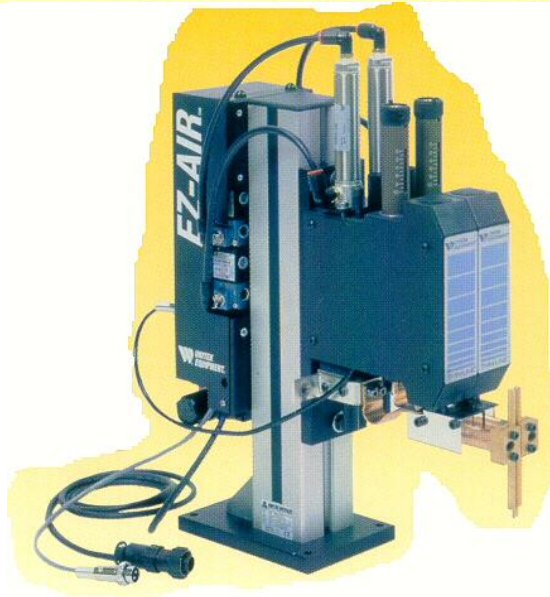
EZ-Air Force Kit



EZ/DAK Dual Air Kit

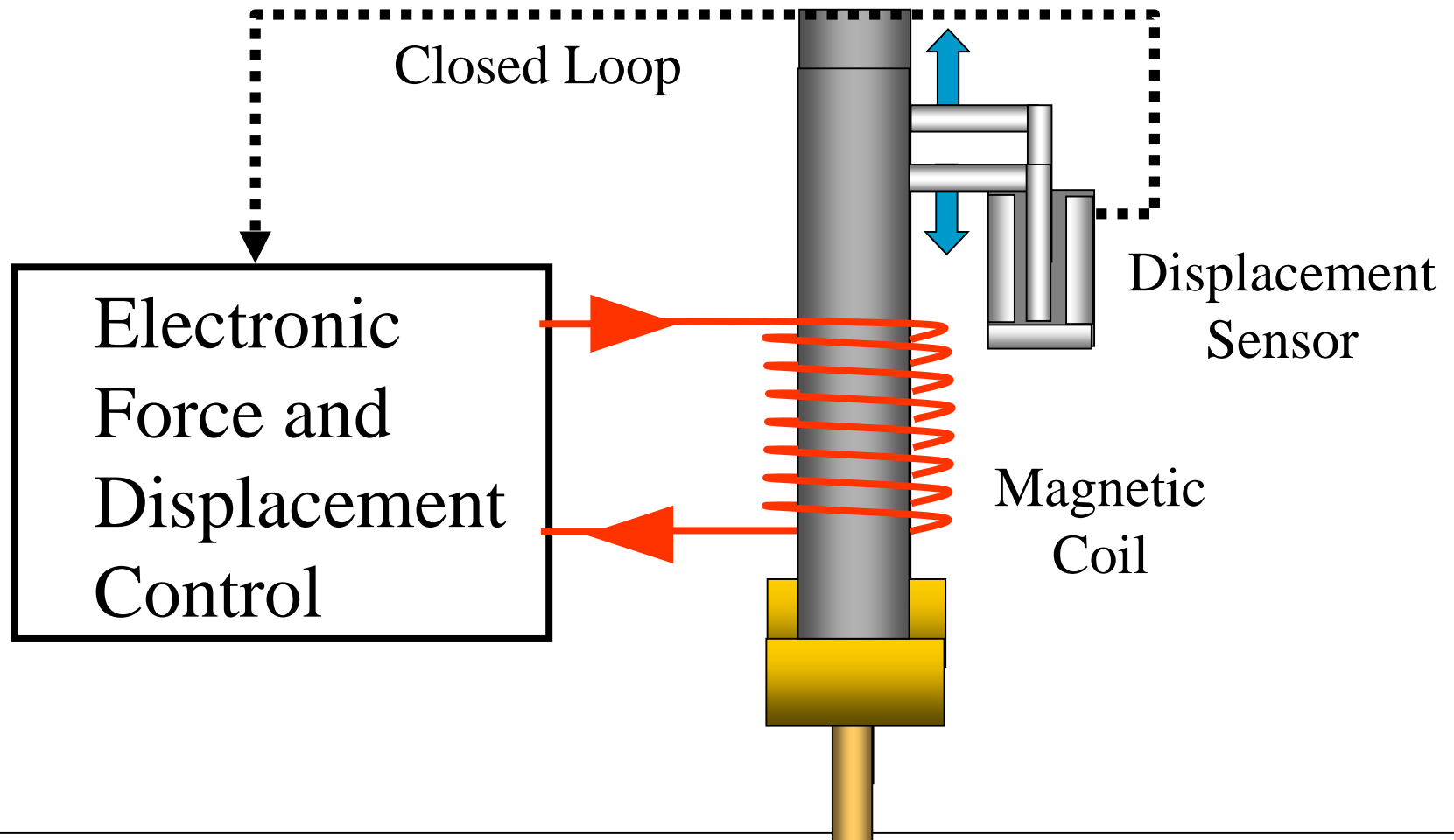


EZ/SAK Single Air Kit



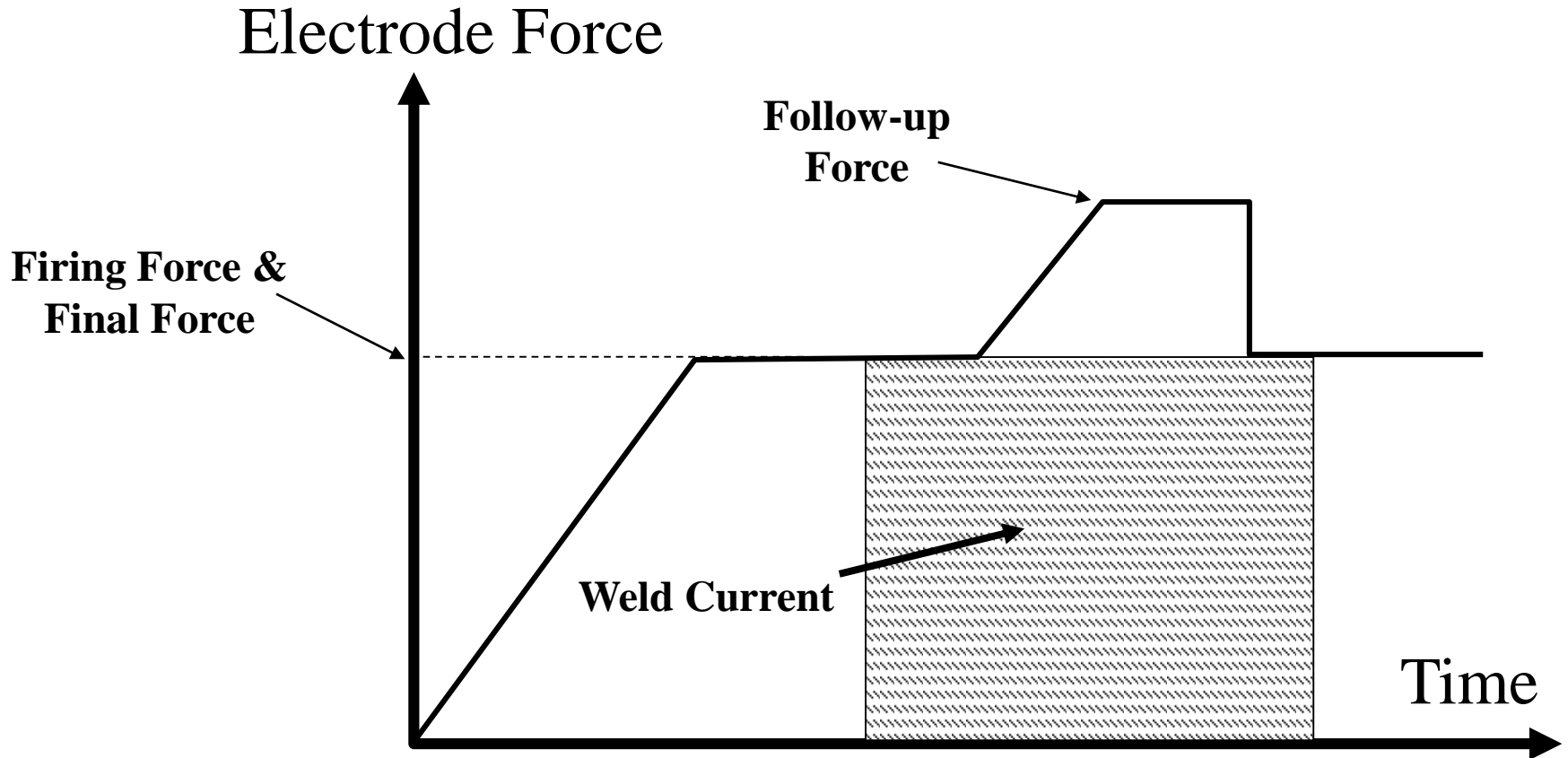
Welding Heads

300 series (Electro Magnetic)



Welding Heads

300 series (Electro Magnetic)



Welding Heads

300 series (Electro Magnetic)

- **Precisely controlled, programmable weld and follow up force profile**
- **Minimal impact force and ringing**
- **Electronic Control of all Weld Head Functions**
- **Displacement monitor, SPC data output**
- **Input/Output for integration**



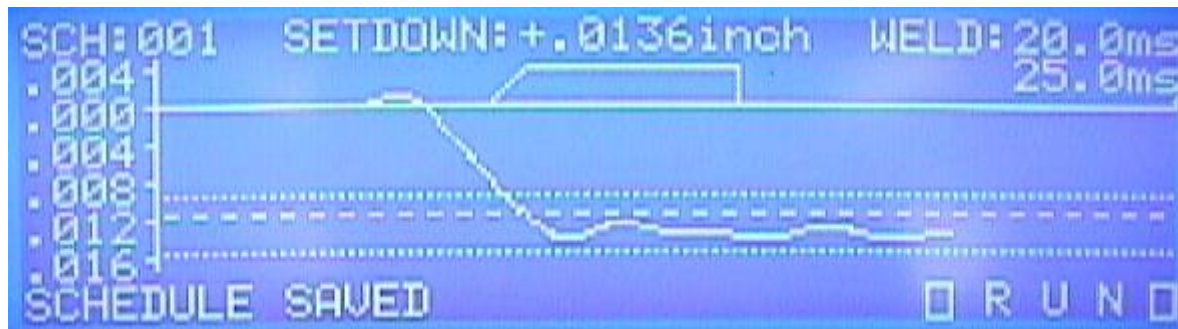
Welding Heads

300 series (Electro Magnetic)

Programmable Force Profile



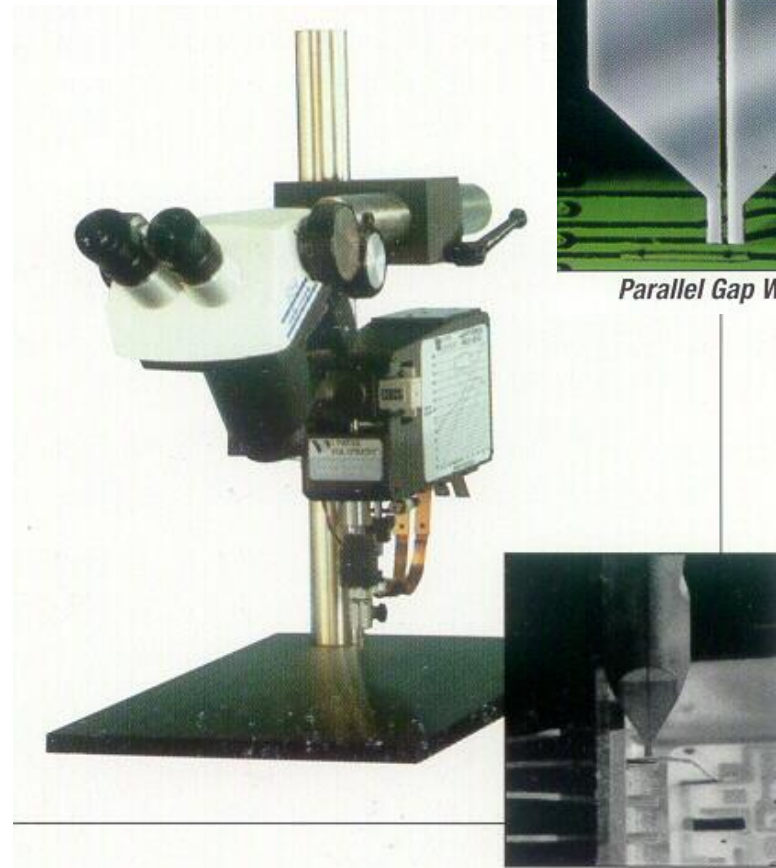
Weld to Displacement/Set Limits



Welding Head

50 Series Light Force Head

- 40 - 1000 gram-force,
- Continuously adjustable
- No over-force
- 1.9cm Stroke
- Force adjustment :
 - Large force control knob with digital readout
- Air or Foot actuation
- Electrode : Unitip, Unibond



Parallel Gap Weld

Weld Accessories

- Handpieces
- Footpedal & Foot SW
- Optics & Illumination
- Electrodes
- Holders and Adaptors
- Others

