# **UPP® INSTALLATION TOOLS**

The UPP® product line features a complete range of tools to ensure safe and efficient installation. At the heart of the electrofusion welding process is the handheld UPP® 230 V EF1 electrofusion welder (cased 110 V electrofusion welder also available). Robust construction, water and dust resistant features and easy-to-read graphic display of the electrofusion process provide installers with a durable, reliable, and simple means of installation. The handheld EF1 electrofusion welder automatically recognizes a fitting when connected with the welding cable and also checks the ambient temperature using a sensor positioned in the housing and adjusts the energy level to balance with the surrounding environment. It then applies the correct amount of energy necessary to achieve a successful weld. One welder can handle every type of UPP® electrofusion welding coupler, fitting, or entry boot and comes complete with welding leads in a lightweight carrying bag (230 V model) or robust case (110 V model). All installation tools are available separately or included in a rugged tool box, which contains every tool necessary for a full UPP® pipework installation.

#### WELDING UNIT SPECIFICATIONS

	230 V Model	110 V model
Model number	EF1-230 V	EF1-110 V
Operating voltage	230 V AC supply	110 V AC supply
Operating frequency	45 to	65 Hz
Operating temperature	5 °F to 113 °F	
	Color	Pin Size/Length
Single wall (primary) welding cable	Red	4mm/18'
Double wall (secondary) welding cable	Green	2mm/18'
Jumper welding cable*	Red	4mm/18'
Power supply cable	Black	13'

<sup>\*</sup>Used to weld a series of single wall (primary) fittings.

#### 230 V EF1 HANDHELD ELECTROFUSION WELDER

Model	Description
EF1-230V	230 V EF1 handheld electrofusion welder
EF1-PC 4mm	Spare single wall (primary) welding cable (orange)
EF1-SC 2mm	Spare double wall (secondary) welding cable (green)
EF1-BC 4mm*	Spare jumper welding cable (red)
EF1-PC 2mm-10	10 amp weld lead

<sup>\*</sup>Used to weld a series of single wall (primary) fittings.

#### 110 V EF1 ELECTROFUSION WELDER

Model	Description
EFI-110V-A	110 V EF1 electrofusion welder
EF1-PC 4mm	Spare single wall (primary) welding cable (orange)
EF1-SC 2mm	Spare double wall (secondary) welding cable (green)
EF1-BC 4mm*	Spare jumper welding cable (red)
EF1-PC 2mm-10	10 amp weld lead

<sup>\*</sup>Used to weld a series of single wall (primary) fittings.





#### UPP® INSTALLATION TOOLS

# PIPE CUTTER

Model	Description
P.CUT	1½" to 5" pipe cutter - medium
P.CUT MED	4" to 6" pipe cutter - large



Model	Description
SCR-025-125	1" to 5" pipe adjustable rotary scraper
SCR-090-225	3" to 9" pipe adjustable rotary scraper
SCR-BLADE-025-225	Spare blades for adjustable rotary scraper
RS-63	63 mm (2" primary or 1.5" secondary) pipe scraper tool
RS-75	75 mm (2" primary) pipe scraper tool



### HANDHELD SCRAPER

Model	Description
SCR.HAR	Handheld scraper
SCR.HAR(B)	Spare blades for handheld scraper



### WOODEN MALLET

Model		Description
MAI 1	Wooden mallet	



#### PIPE CLAMPS

Model	Description
CLAMP (S)	Straight clamp for straight joints (1" to 4" pipe)
CLAMP (A)	Angled clamp for straight and elbow joints (1" to 4" pipe)



### **ELECTROFUSIOM ENTRY BOOT CLAMPS**

Model	Description
302-CLAMP	Clamp for 302 electrofusion entry boot (orange)
303-CLAMP-1	Clamp for 303 electrofusion entry boot (blue)
304-CLAMP	Clamp for 304-110-090 electrofusion entry booth (yellow)



# HOLE SAWS

Model	Description
MAN1	Mandrel (fits all hole saws)
HS3	4" hole saw for 303-063 and 303-075 electrofusion entry boots
HS3-58	3-5/8" (92mm) hole saw for FEB-075-M fiberglass entry boot
HS5	5½" hole saw for FEB-D-110-1 fiberglass entry boots
HS6	5-5/16" hole saw for 305 electrofusion entry boots
F.Driver	Driver tool
CW1	Cutting wheel



#### **ANCILLARY ITEMS**

Model	Description
LDT60-1	Leak Detection (Nylon) Tube Kit (60 cm)

### 90 SERIES WRENCHES

Model	Description
91-050-TOOL	PLT Spanner 50A/F 91-050
92-050-TOOL	PLT Spanner 55A/F 92-050
91-063-TOOL	PLT Spanner 62A/F 91-063
92-063-TOOL	PLT Spanner 67A/F 92-063

### TOWING HEAD FOR PIPE RETROFIT INSTALLATIONS.

Model	Description
TH50-SDR8	1½" single wall pipe towing head
TH63SC-SDR8	1½" double wall pipe towing head
TH75SC	2" double wall pipe towing head



Model	Description
E32-2014-50	Epoxy cartridge (50ml)
E32 GUN	Epoxy cartridge (6 - 50ml tubs)
EMERY	Emery cloth for fiberglass entry booth sump surface preparation (sold in 1' lengths)
FIBERGLASS-KIT	Kit includes matte, resin, putty, catalyst, roller, gloves, stir sticks, squeegee, mixing containers, paint brush

<sup>\*</sup>Two tools required for tightening.

### **CONSUMABLES KIT**

Model	Description
408005901	UPP® consumables include: (1) pound of lint-free rags, (2) markers, (2) one quart spray bottles, (1) box of Nitrile gloves, (2) silver markers, (1) sheet emery cloth, (2) paint scrapers

# STEP UPTRANSFORMER

Model	Description
408032001	Step up transformer

#### UPP® ESSENTIALS TOOL KIT

Model	Description
408033901	UPP® essentials tool kit includes: (1) angled clamp, (1) straight clamp, (4) 303 entry boot clamps, (1) consumables kit, (1) pipe cutter, (1) rotary scraper, (1) EF1-230 V handheld welder, (1) step up transformer









