

# UPP® SEMI-RIGID PIPEWORK SYSTEM

Since its introduction as the world's first electrofusion pipework system for fuel applications over thirty years ago, UPP® semi-rigid pipework has become known globally as the standard for liquid tight pipework systems. UPP® pipework utilizes the advanced electrofusion welding process to effectively bond system components together into one, leak proof system.



## TECHNICAL ADVANTAGES

- The highly efficient electrofusion welding process that connects pipe, fittings, boots, and containment to create a seamless direct burial pipework system.
- The UPP® electrofusion welding process is safe and simple to complete in any climate and virtually any weather condition. An installer simply preps the components, fits them together attaching welder leads to the fitting, and then presses a single button on the welding unit to initiate the process.
- The welder unit itself calculates the exact settings required to complete the weld, regardless of the pipework diameter or temperature, leaving no settings for the installer to input.
- UPP® double wall semi-rigid pipe is flexible enough to coil and bend like flexible pipe, while UPP® single wall pipe is also rigid enough to be used in place of fiberglass pipe for vapor or vent lines.
- Available in both coils and straight sticks, UPP® pipe can accommodate the sweeping bends of a “loop” pipework system while the straight sticks make installation between dispenser sumps simple by providing a square pipe entry into containment.
- The flexibility of UPP® double wall semi-rigid pipe allows for easy installation through existing ducting.
- As a vital component to the UPP® pipework system, patented UPP® electrofusion entry boots weld directly to the wall of any polyethylene sump creating a watertight seal between the pipework system and containment spaces.

## SPECIFICATIONS

- Pipe outer layer: PE100
- Pipe liner layer: Ethylene vinyl alcohol (EVOH) resin liner
- Pipe intermediate layer: Tie-layer which permanently bonds HDPE outer layer to EVOH resin liner layer
- Temperature rating: -22 °F to 122 °F
- Primary pipe pressure rating: 90 psi
- Secondary pipe pressure rating: 58 psi
- 1½" and 2" double wall pipe bend radius: 3'3"
- 3" and 4" double wall pipe bend radius: 13'2"
- 2" single wall vent/vapor pipe bend radius: 3'3"
- 3" single wall vent/vapor pipe bend radius: 9'10"

## Approvals

- UL-971 approved for fuels including:
  - Motor vehicle fuels typically found in consumer dispensing facilities like gasoline or diesel including blended fuels with maximum 15% MTBE, 15% Methanol or 30% Ethanol.
  - Concentrated fuels such as alternate unblended fuels containing up to 100% concentrations of Toluene, Methanol or Ethanol.
  - High blend fuels with higher than normal gasoline blends with maximum 50% Methanol or 50% Ethanol.
  - Aviation and marine specialty fuels containing up to 100% kerosene or leaded gasoline.
- Michigan, Wisconsin, and Florida EQ-816.

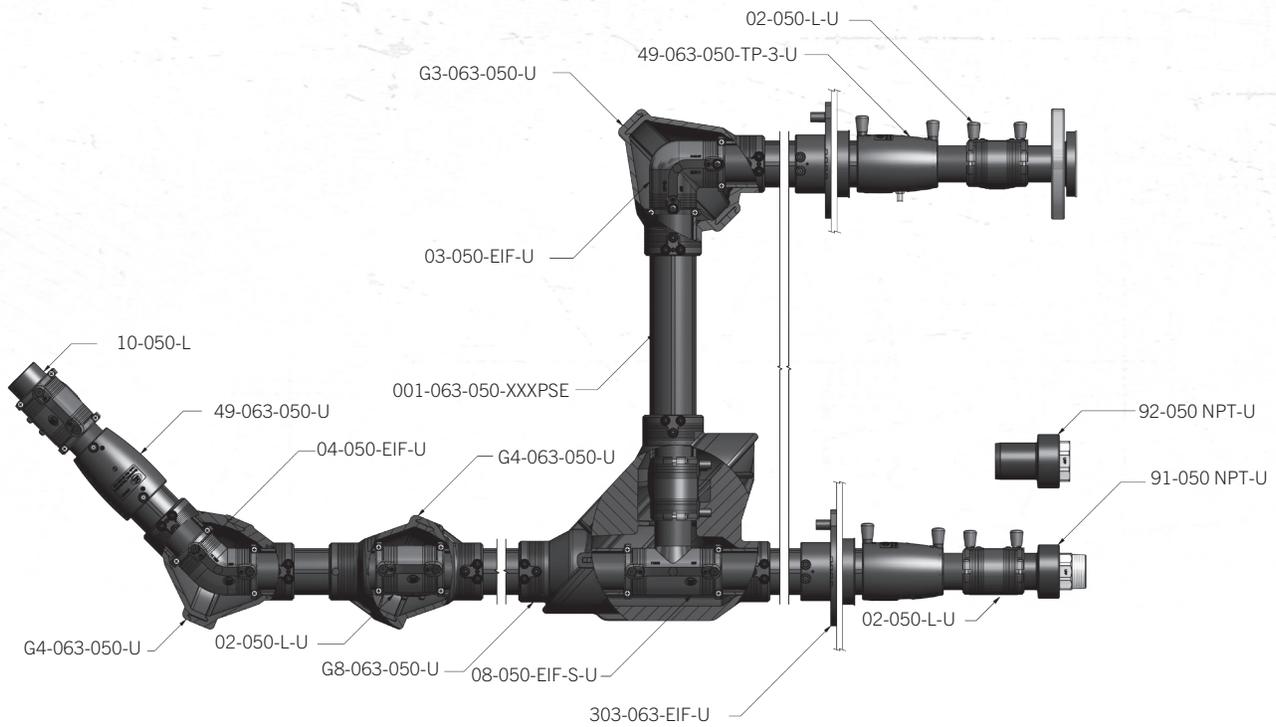
## ORDERING INFORMATION

### Pipework

Model	Description	Nominal Primary Pipe		Nominal Secondary Pipe	
		ID	OD	ID	OD
001-063-050-XXXPSE	1½" double wall pipe	1.67"	1.97"	2.18"	2.48"
001-075-063-XXXPSE	2" double wall pipe	2.12"	2.48"	2.59"	2.95"
001-110-090-019PSE	3" double wall pipe	3.02"	3.54"	3.82"	4.33"
001-125-110-019PSE	4" double wall pipe	3.69"	4.33"	4.34"	4.92"
001-063-019VE	2" single wall pipe	2.12"	2.48"		
001-090-019VE	3" single wall pipe	3.02"	3.54"		

Note: For "XXX" enter pipe lengths from available unit options found in the following pages.

### 1½" Secondary Contained Pipework System



Model	Description	Unit
001-063-050-028PSE	1½" double wall pipe	28' stick
001-063-050-033PSE	1½" double wall pipe	33' stick
001-063-050-165PSE	1½" double wall pipe	165' coil



Model	Description
02-050-L-U	1½" primary welding coupler



Model	Description
03-050-EIF-U	1½" primary electrofusion 90° elbow fitting



Model	Description
04-050-EIF-U	1½" primary electrofusion 45° elbow fitting



Model	Description
04-050-L	1½" primary plain 45° elbow fitting



Model	Description
08-050-EIF-S-U	1½" single wall electrofusion tee fitting



Model	Description
08-050-L	1½" primary plain tee fitting



Model	Description
09-063-050-L	2" x 1½" primary plain reducer fitting



Model	Description
10-050-L	1½" primary plug



Model	Description
02-63SC-U	1½" secondary welding coupler



Model	Description
49-063-050-U	1½" secondary electrofusion reducer fitting
49-063-050-TP-3-U	1½" secondary electrofusion reducer fitting with test port



Model	Description
49-110-063SC-U	4" x 1½" secondary electrofusion reducer fitting



Model	Description
91-050 SS NPT-U	Stainless steel 1½" (pipe) x 1½" NPT male threaded termination fitting
91-050 NPT-U	1½" (pipe) x 1½" NPT male threaded termination fitting



Model	Description
92-050 NPT-U	1½" (pipe) x 1½" NPT female threaded termination fitting



Model	Description
92-050 UF NPT-U	1½" (pipe) x 1½" NPT union adapter termination fitting
11.50G	1½" gasket



Model	Description
HEX 2	2" NPT X 1½" NPT Hex adapter



Model	Description
303-063-EIF-U	1½" double wall / 2" single wall electrofusion entry boot
304-110-063-TP-3-U	1½" double wall ducted entry boot with ducting test port*



\*For use with UPP® 4" ducting.

Model	Description
G3-063-050-U	Double wall 1½" Gemini 90° Elbow



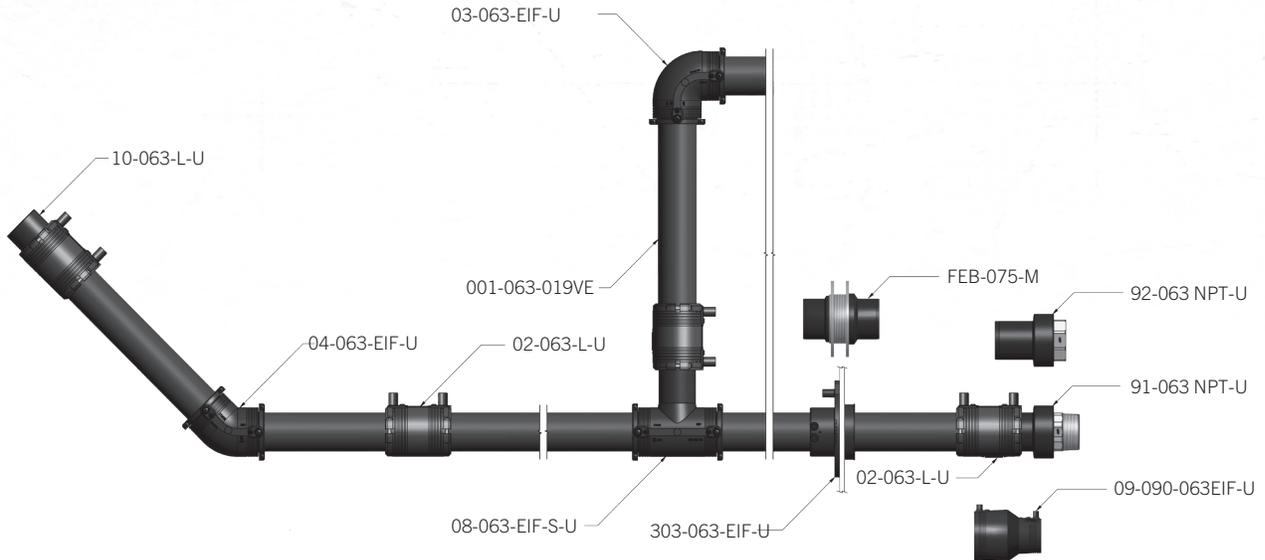
Model	Description
G4-063-050-U	Double wall 1½" Gemini 45° Elbow OR 1½" Gemini Inline Joint



Model	Description
G8-063-050-U	Double wall 1½" Gemini Tee



## 2" Primary Pipework System



Model	Description	Unit
001-063-019VE	2" single wall pipe	19' stick



Model	Description
02-063-U	2" primary welding coupler



Model	Description
02-063-L-U	2" primary welding coupler, long



Model	Description
03-063-EIF-U	2" primary electrofusion 90° elbow fitting



Model	Description
03-063-L	2" primary plain 90° elbow fitting



Model	Description
04-063-EIF-U	2" primary electrofusion 45° elbow fitting



Model	Description
08-063-EIF-S-U	2" single wall electrofusion tee fitting



Model	Description
08-063-L	2" primary plain tee fitting



Model	Description
09-090-063-L-U	3" x 2" primary plain reducer fitting



Model	Description
09-110-063-L-U	4" x 2" primary plain reducer fitting



Model	Description
10-063-L-U	2" primary plug



Model	Description
91-063 SS NPT-U	Stainless steel 2" (pipe) x 2" NPT male threaded termination fitting
91-063-1 NPT-U	2" (pipe) x 1½" NPT male threaded termination fitting
91-063 NPT-U	2" (pipe) x 2" NPT male threaded termination fitting



Model	Description
92-063-1 NPT-U	2" (pipe) x 1½" NPT female threaded termination fitting
92-063 NPT-U	2" (pipe) x 2" NPT female threaded termination fitting



Model	Description
90-063 QL-U	2" (pipe) x 2" quick release termination fitting



Model	Description
92-063 UF NPT-U	2" (pipe) x 2" NPT union adapter termination fitting
11.63G	2" gasket

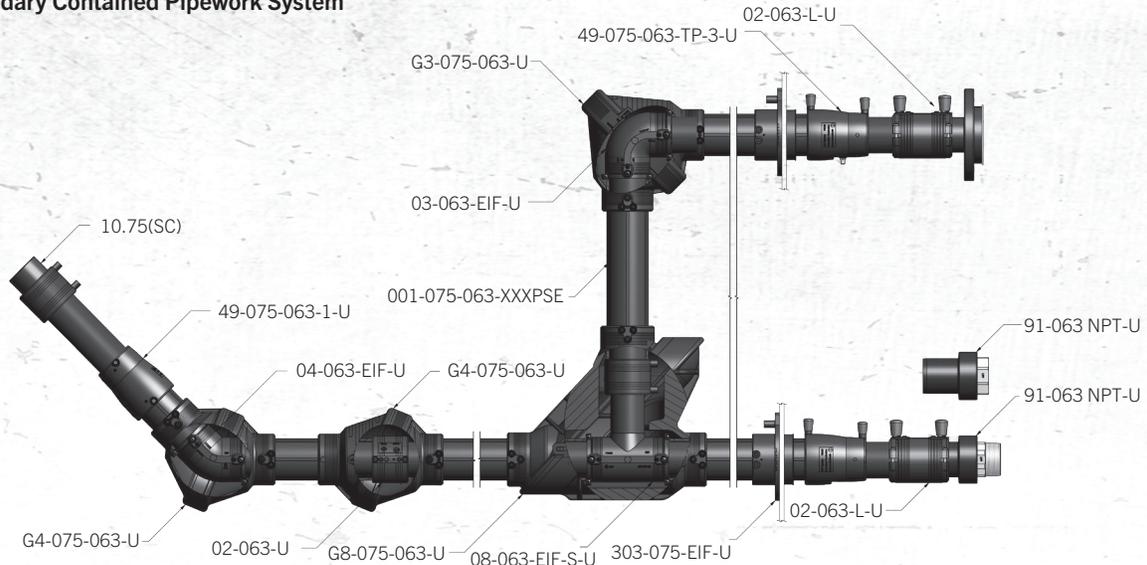


Model	Description
303-063-EIF-U	1½" double wall / 2" single wall electrofusion entry boot



Model	Description
FEB-075-M	2" (pipe) fiberglass entry boot



**2" Secondary Contained Pipework System**


Model	Description	Unit
001-075-063-028PSE	2" double wall pipe	28' stick
001-075-063-033PSE	2" double wall pipe	33' stick
001-075-063-038PSE	2" double wall pipe	38' stick
001-075-063-100PSE	2" double wall pipe	100' coil
001-075-063-165PSE	2" double wall pipe	165' coil



Model	Description
02-063-U	2" primary welding coupler



Model	Description
02-063-L-U	2" primary welding coupler, long



Model	Description
02-75SC-U	2" secondary welding coupler



Model	Description
03-063-EIF-U	2" primary electrofusion 90° elbow fitting



Model	Description
04-063-EIF-U	2" primary electrofusion 45° elbow fitting



Model	Description
08-063-EIF-S-U	2" single wall electrofusion tee fitting



Model	Description
49-075-063-1-U	2" secondary electrofusion reducer fitting
49-075-063-TP-3-U	2" secondary electrofusion reducer fitting with test port



Model	Description
49-110-75SC-U	4" x 2" secondary electrofusion reducer fitting



Model	Description
09-110-75SC-U	4" x 2" secondary plain reducer fitting



Model	Description
91-063 SS NPT-U	Stainless steel 2" (pipe) x 2" NPT male threaded termination fitting
91-063-1 NPT-U	2" (pipe) x 1 1/2" NPT male threaded termination fitting
91-063 NPT-U	2" (pipe) x 2" NPT male threaded termination fitting



Model	Description
92-063-1 NPT-U	2" (pipe) x 1 1/2" NPT female threaded termination fitting
92-063 NPT-U	2" (pipe) x 2" NPT female threaded termination fitting



Model	Description
90-063 QL-U	2" (pipe) x 2" quick release termination fitting



Model	Description
92-063 UF NPT-U	2" (pipe) x 2" NPT union adapter termination fitting
11.63G	2" gasket



Model	Description
303-075-EIF-U	2" double wall electrofusion entry boot
304-110-075-TP-3-U	2" double wall ducted entry boot with ducting test port*



\*For use with UPP® 4" ducting.

Model	Description
FEB-075-M	2" (pipe) fiberglass entry boot



Model	Description
G3-075-063-U	Double wall 2" Gemini 90° Elbow

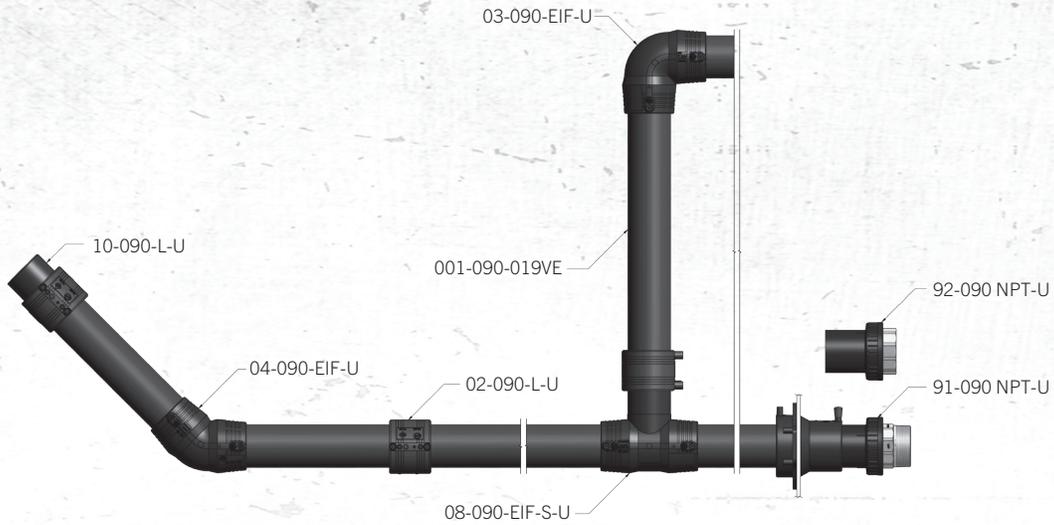


Model	Description
G4-075-063-U	Double wall 2" Gemini 45° Elbow OR 2" Gemini Inline Elbow



Model	Description
G8-075-063-U	Double wall 2" Gemini Tee



**3" Primary Pipework System**


Model	Description	Unit
001-090-019VE	3" single wall vent pipe	19' stick



Model	Description
02-090-L-U	3" primary welding coupler



Model	Description
03-090-EIF-U	3" primary electrofusion 90° elbow fitting



Model	Description
04-090-EIF-U	3" primary electrofusion 45° elbow fitting



Model	Description
08-090-EIF-S-U	3" single wall electrofusion tee fitting



Model	Description
08-090-L-U	3" primary plain tee fitting



Model	Description
09-110-090EIF-U	4" x 3" primary electrofusion reducer fitting



Model	Description
10-090-L-U	3" primary plug



Model	Description
91-090 SS NPT-U	Stainless steel 3" (pipe) × 3" NPT male threaded termination fitting
91-090 NPT-U	3" (pipe) × 3" NPT male threaded termination fitting

Model	Description
92-090 NPT-U	3" (pipe) × 3" NPT female threaded termination fitting

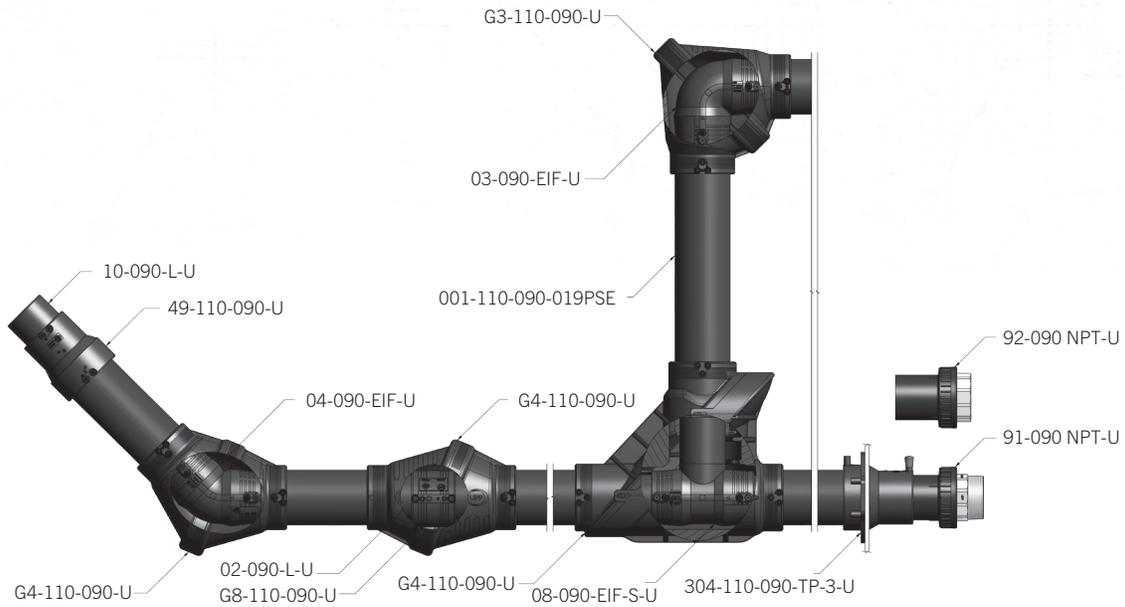
Model	Description
90-090 QL-U	3" (pipe) × 3" quick release termination fitting

Model	Description
304-110-090-U	3" electrofusion entry boot

Model	Description
FEB-110-M	3" electrofusion fiberglass entry boot for use with 3" pipework systems



### 3" Secondary Contained Pipework System



Model	Description	Unit
001-110-090-019PSE	3" double wall pipe	19' stick



Model	Description
02-090-L-U	3" primary welding coupler



Model	Description
02-110SC-U	3" secondary welding coupler



Model	Description
03-090-EIF-U	3" primary electrofusion 90° elbow fitting



Model	Description
04-090-EIF-U	3" primary electrofusion 45° elbow fitting



Model	Description
08-090-EIF-S-U	3" single wall electrofusion tee fitting



Model	Description
49-110-090-U	4" x 3" secondary electrofusion reducer fitting
49-110-090-TP-3-U	4" x 3" secondary electrofusion reducer fitting with test port



Model	Description
91-090 NPT-U	3" (pipe) x 3" NPT male threaded termination fitting



Model	Description
92-090 NPT-U	3" (pipe) x 3" NPT female threaded termination fitting



Model	Description
10-090-L-U	3" primary plug



Model	Description
304-110-090-U	3" double wall electrofusion entry boot with integrated termination fitting
304-110-090-TP-3-U	3" double wall electrofusion entry boot with integrated termination fitting and test port



Model	Description
FEB-110-M	3" electrofusion fiberglass entry boot for use with 3" secondary contained pipework systems



Model	Description
G3-110-090-U	Double wall 3" Gemini 90° Elbow



Model	Description
G4-110-090-U	Double wall 3" Gemini 45° Elbow OR 3" Gemini Inline Joint



Model	Description
G8-110-090-U	Double wall 3" Gemini Tee





Model	Description
49-125-110-U	5" x 4" secondary electrofusion reducer fitting
49-125-110-TP-3-U	5" x 4" secondary electrofusion reducer fitting with test port



Model	Description
09.160.110(SC)	6" x 4" secondary plain reducer fitting
09-200-125SCM-U	8" x 4" secondary plain reduce fitting



Model	Description
RM-02-200-11-U	8" Coupling



Model	Description
91-110 NPT-U	4" (pipe) x 4" NPT male threaded termination fitting



Model	Description
92-110 NPT-U	4" (pipe) x 4" NPT female threaded termination fitting



Model	Description
305-125-110-U	4" double wall electrofusion entry boot with integrated termination fitting
305-125-110-TP-3-U	4" double wall electrofusion entry boot with integrated termination fitting and test port



Model	Description
FEB-S-125	4" electrofusion fiberglass entry boot for use with 4" pipework systems



Model	Description
G3-125-110-U	Double wall 4" Gemini 90° Elbow



Model	Description
G4-125-110-U	Double wall 4" Gemini 45° Elbow OR 4" Gemini Inline Joint



### 230V 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

\*Used to weld a series of single wall (primary) fittings.



### 110V EF1 Electrofusion Welder

Model	Description
EF1-110V-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

\*Used to weld a series of single wall (primary) fittings.



### Pipe Cutter

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



### Adjustable Rotary Scraper

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
RS-BLADE-40-315	Spare blade for pipe scraper tool



### Handheld Scraper

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



### Wooden Mallet

Model	Description
MAL1	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)



### Leak Detector Tube

Model	Description
LDT60-2	23" leak detector tube

