



Franklin Electric
FUELING SYSTEMS

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.



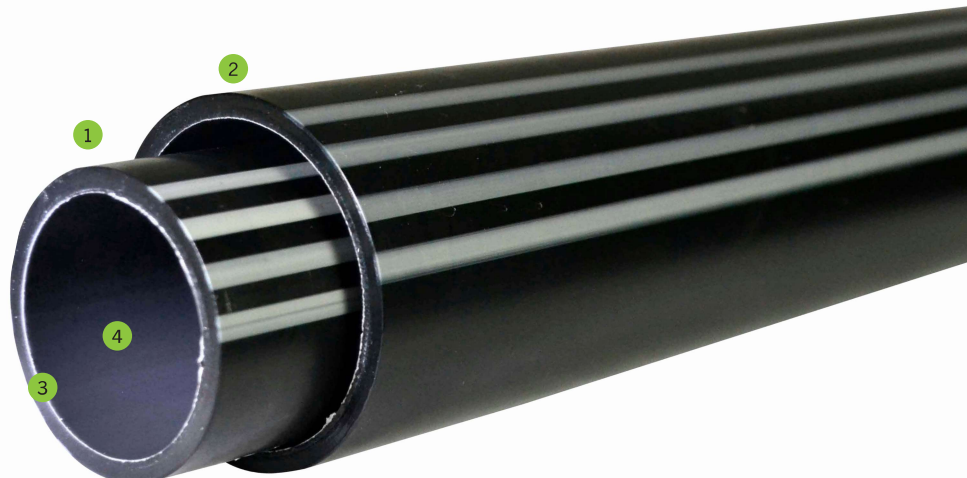
HIGHLIGHTS

- 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

Components

- 1 UV Resistant PE100 HDPE Primary Pipe
- 2 UV Resistant PE100 HDPE Secondary Pipe
- 3 Tie Layer (Bonding Layer)
- 4 EVOH Barrier Layer (Fuel Contact Layer)



SPECIFICATIONS CONTINUED

Pipe Outer Layer	PE100
Pipe Liner Layer	Ethylene vinyl alcohol (EVOH) resin liner
Pipe Intermediate Layer	Tie-layer 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"
Approvals & Certifications	UL971 listed
Fuel Compatibility	UL971 listed 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.lead gasoline.
Biodiesel Compatibility	- Biodiesel up to 5% (B5) - Biodiesel up to 20% (B20) - Biodiesel at 97% - 100% (B99 / B100) - All ASTM defined biofuel blends - High-blend Ethanol, with ethanol/gasoline blends between 51% - 83% (E51 - E83) - commercially known as "E-85"

Pipework Dimensions

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.