

# **EXCLUSIVE TO KPS 6" Conductive HDPE Piping System** High Flow Rate | Conductive | Lightweight

Created to meet demand for applications requiring high flow rates up to 2,500 litres/minute,\* the NEW 6"KPS piping system draws on over 40 years of experience engineering HDPE piping to create the first and only 6"conductive double wall pipe system on the market.



www.kpspiping.com

### **KPS 6" Conductive HDPE Piping System**

#### High Flow Rate | Conductive | Lightweight

The first 6" conductive double wall system on the market, this new piping system was created to meet demand for applications requiring a high flow rate up to 2,500 litres/minute\* including mining, diesel storage terminals, marinas, data centres, military and many more.

#### Extra Layer, Extra Safety, No Leaks

Engineered for all current liquid fuels and many chemical products, KPS electrofusion piping is made from high-density polyethylene (HDPE) and includes a permeation layer for extra security.

For sensitive areas and fluids like fuel transfer, KPS' double wall (secondary contained) electrofusion piping system provides an extra layer of protection. All double wall KPS bends and electrofusion fittings have an interstitial space to contain any leakage from the primary pipe.

#### **Electrofusion**

The complete range of fitting and components for the new 6" conductive double wall pipe system are electrofusion welded, with no butt welds needed.

Our ANACONDA electrofusion system retains a 360° interstitial space.

#### **Approvals**

EN 14125, ATEX 137, EN 13463-1 plus many other country and fuel specific standards.

For a full list of certifications and approvals, visit the resources page on the KPS website at www.kpspiping.com/resources

#### \*Depending on the length of the pipeline and type of fluid. Contact KPS for specific configurations and calculations.

## Technical Support & Training

KPS offers technical support from the beginning to the end of each project, including drawings, site surveys, on-site training, and professional certifications.

#### **High Flow Rate**

The new 6" double wall conductive pipe system provides flow rates up to 2,500 litres/minute\*, the highest flow rate available in the KPS piping portfolio. The innovative conductive system consists of a 160 mm primary pipe and a 200 mm secondary pipe.

#### Local Service. Globally

Regionalised manufacturing, and a worldwide network of employees and distributors, ensures hands-on support, local service, and solutions, around the globe. KPS piping is manufactured in Sweden for the EMEA region under the watchful eye of the OPW technical team, ensuring consistent quality.

#### **Key Benefits**

- Flow rates up to 2,500 litres/min\*
- Engineered for pipefitters: reducing cost and build time
- Conductive (electrostatically safe)
- Extra permeation barrier to protect the environment
- Corrosion-free
- Technical support, training and certification (classroom and on-site)
- Leak detection & interstitial monitoring (secondary containment/multi-layer)
- Lightweight
- UV resistant
- Operating pressure 3.5 bar (test pressure 5 bar to 30 bar)
- Temperature rating -20°C to +50°C
- Suitable for above and below ground

#### **Fluid Compatibility**

- Petrol
- Diesel
- Biodiesel
- Ethanol blends\*
- AdBlue
- Jet-Al
- Alcohols\*
- Acids\*
- Chemical products\*
- Other\*
- \*For full compatibility details, contact KPS at info@kpspiping.com



#### SEE IT INSTALLED

Download our case study book at www.kpspiping.com/casestudybook



6" Supply Lines For Underground High Capacity Depots



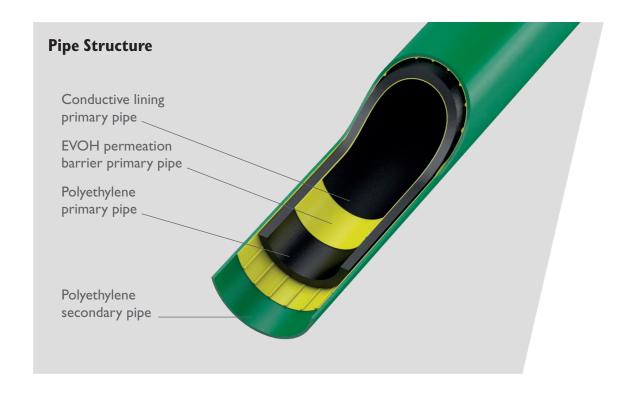
6" Supply Lines



ANACONDA Electrofusion Welding Sockets

### **KPS 6" Conductive HDPE Piping System**

### **Technical Specifications**



#### **Mechanical & Physical Properties**

Hydrostatic pressure testing is performed at 23°C after conditioning at 50°C. At 23°C piping is pressurised to the lower test pressure for 5 minutes and the higher test pressure for 1 minute, (see table overleaf). After conditioning at 50°C pipework is pressurised to the lower test pressure for 5 minutes.

Vacuum testing is performed on pipes intended for vacuum suction including vent, vapour recovery and secondary containment type C2. The test vacuum is specified in the table. Pipework is also (for positive pressure) subjected to cyclic pressure testing at 21.5°C. Pressure is varied between 1.0 and 4.0 bar for 1.5 × 106 cycles.

#### **Plastic To Steel Transition – DIN Flange**



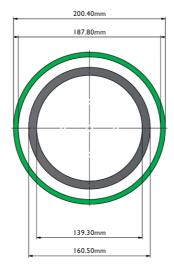


#### **Drawings & System Definition**

The new 6" double wall pipe system is conductive and includes a comprehensive range of compact easy-install electrofusion fittings.

Custom solutions are also available.

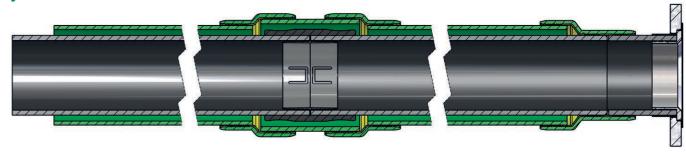
## Secondary Contained Pipe System



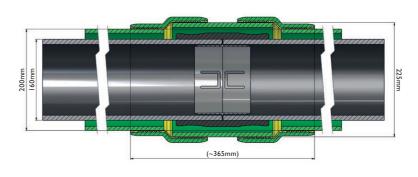
#### Secondary Tee



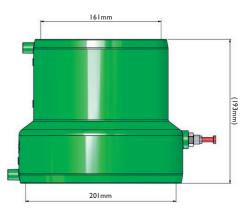
#### **Joints & Transition To Steel**



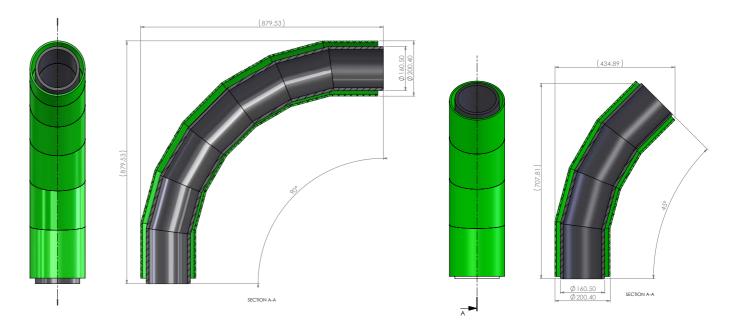
#### **Secondary Contained Welding Socket**



#### **Termination Fitting**



#### **Buttwelded Bends**



### **KPS 6" Conductive HDPE Piping System**

### **Technical Specifications**

The new 6" piping range draws on KPS' 40 years experience engineering and manufacturing fuel piping for the world's leading oil companies. Full technical details below.

#### **Operating & Test Pressures [EN 14125]**

All Measurements in [bar]	Operating Pressure	Test Vacuum	Lower Test Pressure	Higher Test Pressure
Primary Delivery Pipework (Positive Pressure)	3.5	-	5.0	30.0
Primary Delivery Pipework (Vacuum Suction)	-0.6	-0.9	5.0	30.0
Vent & Vapour Recovery Pipework	1.0	-0.9	5.0	30.0
Fill Pipework	1.0	-	5.0	30.0
Secondary Containment Type CI	0.5	-	1.0	5.0
Secondary Containment Type C2*	-0.5 to 4.5	-0.6	5.0	10.0

<sup>\*</sup>KPS approval includes secondary containment type C2

#### **Physical & Chemical Properties**

	Value	Test Method
Temperature Range	-20 to 50°C	EN 14125
Bend Radius	20 × d	-
Crush Resistance	2000 N	EN 14125
Puncture Resistance	500 N	EN 14125
Impact At -20 °C	> 8.8 J	EN 14125
Fuel Compatibility	Wide range of commercially available fuels*	EN 14125, UL 971
Fuel Permeation	< 0.2 g/m2·d	EN 14125
Static Electricity	Insulative	EN 13463-1, CENELEC TR50404
Weathering (UV-stability)	> 3.5 GJ/m2	EN ISO 16871, EN ISO 4892-2
Estimated Working Life	30 years	EN 14125, ISO 9080

### Industries & Applications

The new 6" KPS piping range is ideal for applications where a high flow rate is essential (up to 2,500 litres/minute\*) including mining fuel transfer, diesel transfer & storage terminals marinas, data centres, military and many more.



Mining Fuel Transfer

AdBlue / Diesel Exhaust

Fluid (DEF) Transfer

Hydrocarbon

Data Centre

Power Supply

Drainage

Military

Depot **Facilities** 



Diesel Transfer & Storage Terminals



Marinas, Ports & Harbours



Fleet, Commercial & Public Transport Vehicle Refuelling



Power Supply: Critical Power & Backup Generators



Oil Transfer & Lubricant Oil



Chemical Processing

Residential &

Polluted Water

Transfer

Industrial Heating



Other Fluid Distribution

Airports



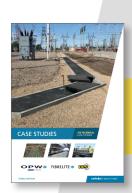
Nuclear



Send us an email: info@kpspiping.com



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**SEE IT INSTALLED** Download our case study book at www.kpspiping.com/casestudybook



Fuel Depot, Saint Michele, France

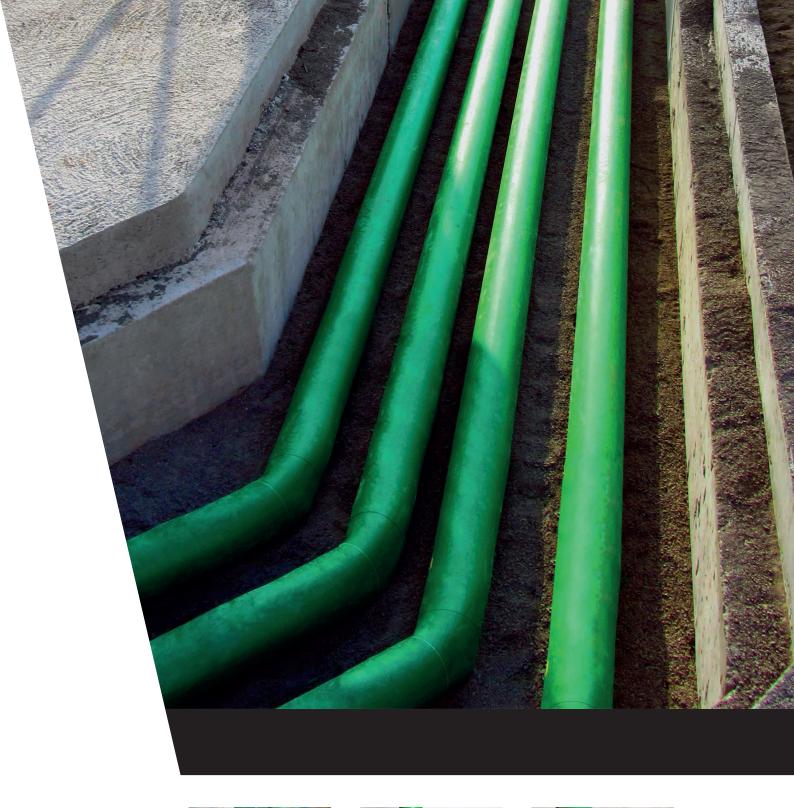


Data Centre, China



EDF Depot, Saint-Pierre, France

<sup>\*</sup>Depending on the length of the pipeline and type of fluid. Contact KPS for specific configurations and calculations.







Contact Us
Call: +44 (0) 1756 799 773 Email: info@kpspiping.com
Visit: www.kpspiping.com

Interested In Becoming A Distributor?
We are always looking to find new partners in countries where we don't currently have a partner please email us at info@kpspiping.com