

NEXT GENERATION OF PE-STEEL TRANSITION FITTINS – INJECTION MOULDED

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K okhanovsky Pipe Plant (the Belorussian production branch of POLYPLAS-TIC Group) implemented production of PE-Steel transition fittings of the most common sizes (32x32, 63x57, 110x108 mm) at the end of 2007.

A PE-Steel transition fitting is a straight joint that connects PE and steel pipes of the same diameter. It is usually produced by pressing a steel pipe into a PE socket, with an additional PE clamp sleeve reinforcement. This type of fitting is designed for buried PE gas pipelines such as GOST R 50838 or others.

In 2015, the deployment of new technology and a technical upgrade switched the production process from multi-level manual assembly. Now the products are made by injection moulding using modern forming machines.

A steel pipe piece and sealing ring are placed in the special injection mould and a few seconds later you get a ready product. This method reliably fixes the steel part into the joint and gives complete integrity without the need for a clamp sleeve reinforcement.

This advanced technology enables the fittings to be made faster than ever before. Injection moulding also provides higher quality (within one batch of products and from batch to batch). Greater performance consistency is also achieved as opposed to traditional manual production where quality depends on the experience and skills of the employee.

The Kokhanovsky Pipe Plant is currently the only enterprise in FSU producing PE-Steel transition fittings using the injection moulding method.

The welding of transition fittings with PE pipes is performed according to SP 42-103 using an electrofusion coupler or butt fusion. The new design of fittings has been optimised and the customer now has the opportunity for poor welding errors to be correct as the length of the PE pipe section of these new products allows for a bad coupling to be cut and the transition welded again.



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