



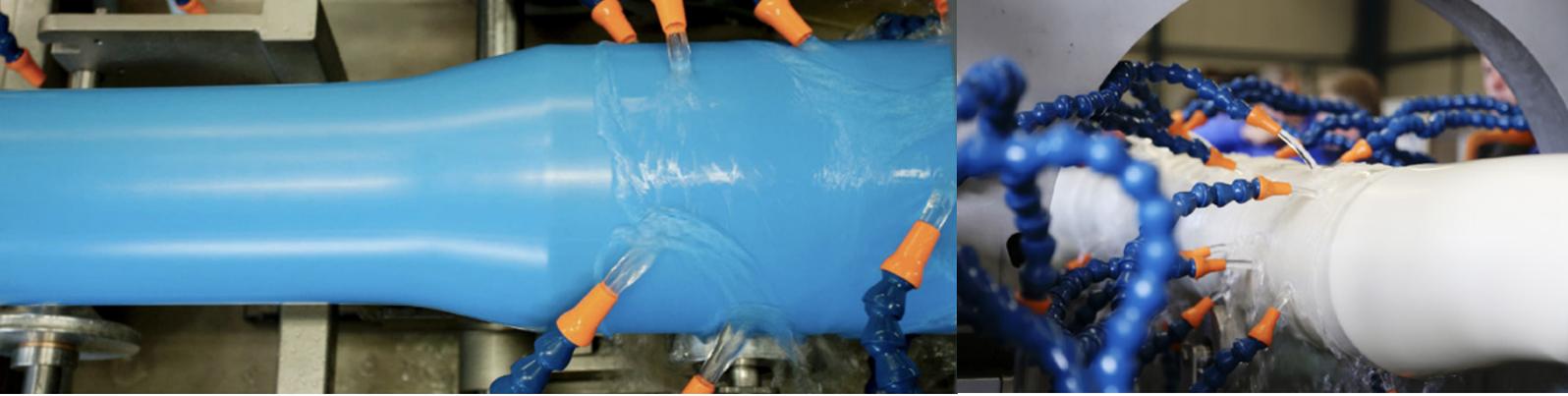
PVC-O technology

Although molecularly oriented PVC (PVC-O) has been around for four decades already, it has only been widely accepted since 2006, when the introduction of the international ISO16422 standard and improved technologies increased its popularity. The rise in concern about environmental impact and the demand to produce with a lower carbon footprint makes PVC-O the perfect pipe solution and an interesting technology for potable water application.



Rollepaal

Pipe Extrusion Technology



PVC-O technology

There are many advantages of PVC-O compared to non-polymer solutions. Not only the carbon footprint of PVC-O is by far much lower than traditional solutions like ductile iron, but also corrosion, a major problem in ductile iron, is a thing of the past with PVC-O. In short, PVC-O is a much better solution for water pipe installations than PO solutions like PE100.

Rollepaal's PVC-O technology of is an air based in-line technology, a technology that assures you of a reliable process which you can control and adjust at all times.

Rollepaal technology is unique in terms of how the pipe is stretched, which is done using compressed air. Because air uses less energy, this makes Rollepaal technology is a cost saving solution.

Why PVC-O?

- ▶ Highest impact resistance, also at low temperatures
- ▶ Low bending resistance for PVC-O resulting in simple curving of the pipe
- ▶ Highest minimum required strength (MRS) class; for PE the highest class is 100 while for PVC-O this is 500! This results in the lowest wall thickness and lowest weight per length
- ▶ Best flow properties: PVC-O transports 34% more water than PE, with the same diameter and the same PN class
- ▶ Lowest carbon footprint/LC A compared to PE, PVC-U, ductile iron and cast iron
- ▶ Proven highest resistance to oxidising media, natural oil based substances and diluted water

Features and benefits of in-line technology

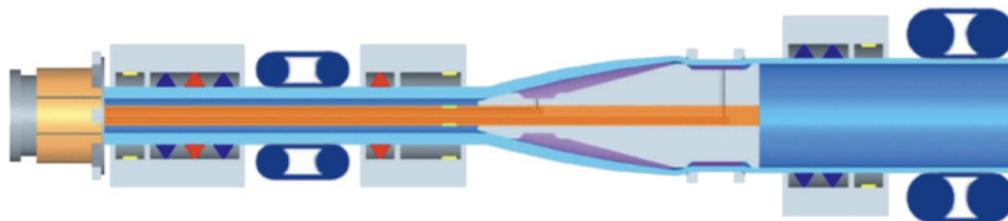
- ▶ Lowest overweight due to integral process control (difference absolute 15% to off-line) resulting from the lowest wall thickness variation in the pipe length
- ▶ Quality control of end product: all products are scanned
- ▶ Guaranteed controlled biaxial stretching
- ▶ Highest production speeds
- ▶ Highest automation degree using hands-off principle
- ▶ Lowest scrap rates
- ▶ Reliable in-line process compared to batch process with cycle time issues
- ▶ Extrusion process is part of production
- ▶ Different lengths are easy to produce

Features and benefits of the air based process

- ▶ Absence of high-temperature water: clean and safe operation
- ▶ Lowest scrap rates: because air is easier to heat up, start-up time (heat transfer time) in an air-based system is shorter, meaning quick start up and, with this, lower scrap rates

Range

From 110 to 630mm



Rollepaal

Pipe Extrusion Technology

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