Track record: Reference Installations PE100+ listed materials

Title	Installation	Material	General description	PE 100 arguments	Installation facts
"1400 mm PE 100 pipe installed in Shetland Islands"	2001	Borstar® HE3490-LS	- Protection pipe for oil exploration at Shetland Islands - Pipe production at Pipelife Norge AS - 163 m one piece pipe - Transport over 1000 km by towing on the water in 3 days	- Large diameter - Excellent extrusion properties - Easy transport on water - Lower transport costs	163 m one piece PE 100 pipe - PE 100 1,400 mm pipeline - Wall thickness 100 mm - 430 kg/m pipe weight - Extrusion output rate 1 m/h
"710 mm wastewater pressure pipe made of PE 100"	1999	Vestolen® A 6060 R black	- Portugals's Foz do Arelho submarine-outfall pipeline - Environmental protection against waste water contamination - Installation of a 2.2 km submarine-outfall made of PE 100 - Basic bid was in concrete and PVC	- Quick and unproblematic installation - Lower installation cost - Operational safety - excellent lifetime - Easy handling - improved safety	2.2 km submarine-outfall pipeline - PE 100 710 mm pipeline - 27.2 mm wall thickness - Operation pressure 6.3 bar - 31 Mio. litre/day max. hydraulic capacity
"Alpine village Grindelwald - 25 bar PE 100 drinking water distribution"	1998	Hostalen® CRP 100	- Switzerlands Grindelwald started 100 years ago to install public water transportation due to a mayor fire accident - Present installation amounts to 42 km - Earlier used PE 80 and cast iron pipes needed to be replaced	- Easy jointing - Lower cost by flange jointing - Easy laying and high flexibility - No heavy building machines - Lowest maintenance - Decrease maintenance cost	Over 1 km fall pipeline in two parts - PE 100 125 - 180 mm pipeline - Operation pressures up to 16 bar (SDR 11) and up to 25 bar (SDR 7.4) - Mainly butt-welded
"Lichtensteiner Unterland - 25 bar PE 100 water transportation"	1998	Hostalen® CRP 100	- Switzerlands Liechtensteiner Unterland installed steel pipline in 1935 - High age of steel pipe forces a replacement - High altitude of springs needs - Replacement by PE 100 pipelines	- Advanced laying techniques - Use of ground protective pipes - Easy jointing - Lower cost even in remote sorounding	Over 1 km fall pipeline in two parts - PE 100 125 - 180 mm pipeline - Operation pressures up to 16 bar (SDR 11) and up to 25 bar (SDR 7.4) - Mainly butt-welded
"First natural gas distribution made of PE 100 pipes for 12 bar"	1998	Finathene® XS10B	- Vladimir Oblast in Western Russia - Russia is one of the major natural gas producers in the world - Natural gas represents 53% of the entire Russian energy market - The use of PE for gas distribution started beginning of the 1960s	- High corrosion durability - Lower cost of maintenance - Better flowing qualities - Lower friction losses	1 km connection pipe - PE 100 160 mm pipeline - Operation pressures up to 12 bar (SDR 7.4) - Stick length 12 m - Butt-welded
"1000 km of PE100 pipes to reconstruct Palermo water network"	1998	ELTEX ® TUB121	- Grave water crisis in Palermo at the end of the 80's - 40% of water was lost due to pipeline failures - First complete city water network renewal in Italy - Efficient till 2040 with water availability of 432 l/inhab/day	- Highest long-term pipe mechanical performance - Best competitiveness through lower pipe wall thickness - Lower installation costs – Fast installation	"> 1,000 km PE 100 water network" - PE 100 40 up to 500 mm pipes - Operation pressure 10 bar - Duration of installation 48 months - Coiled pipes (40, 63 mm); stick lengths of 12 m
"The biggest underwater PE 100 pipe disposing of treated municipal effluent in Greece"	1996	ELTEX® TUB124	- Greece's Patras municipality decided in 1996 for a biological cleaning site - Large diameter PE 100 pipe to transport cleaned municipal effluent - Jacketing concrete blocks to prevent system floating - Highly appreciation by the end-user	- Blue coloured pipes - Immediate idendification - Wall-thickness reduction - Cost improvement - Reduced project cost - Roughly 14% less than PE 80	1.44 km transportation pipe - PE 100 1,200 mm pipeline - Operation pressure 6.3 bar (SDR 26) - Stick lengths of 14 m - Jacketing concrete blocks
"The first 10 bar PE gas pipeline in Germany"	1996	ELTEX ® TUB125	- Gas connection pipeline to Würzburg industrial area - Full project responsibility taken by MEG and Thüga in the absence of the DVGW guideline G472 - Clear globally advantage using PE 100	- Highest performance – Full safety at 10 bar for gas - Low installation costs – Light weight, flexibility - Global leak free system – Butt fusion welding	"22 km PE 100 gas pipeline" - PE 100 180 and 225 mm pipes - Operation pressure 10 bar (SDR 11) - Butt fusion welded - Stick lengths of 12 m
"The biggest PE gas pipeline: 630 mm diameter; Reconstruction of the gas pipeline to supply gas for the heating plant in Brno"	1995	ELTEX ® TUB121	- The gas company Jihomoravska Plynarenska (Bruno/CZ) renovated their old steel pipes (DN500) supplying the city heating plant by gas in 1995 - Steel and Polyethylene are the two alternative materials - Intense corrosion due to heavy dense industrial and civil area	- Large diameter – Wall thickness reduction towards PE 80 - Flexibility of the pipes - Industrial area with stray earth currents - No corrosion – Earlier problems with corrosion protection	1.4 km PE 100 gas pipeline - PE 100 630 mm pipeline - 37.1 mm wall thickness - Operation pressure 4 bar (SDR 17) - Special saddle developed