PUREPIPE
COMPOSITE MANUFACTURING

CASE STUDY

RADEMON HYDROELECTRIC PROJECT



Project name:	Rademon Hydroelectric Project
Country:	Northern Ireland
Location:	Crossgar, County Down
Description	400 metres of 1200 & 1400mm pipes, pressure 6 bar and stiffness 5000n/m^2
Application	Hydroelectric
Transported medium	River water
Working pressure	6 bar
Type of project	New Installation
Design standards / specifications / approvals	AWWA - M45
Special requirement on pipe-system	Pipe system was produced to follow the layout of the existing Mill Race.
Chosen pipe system	Purepipe Pressure
Pipe production technology	Discontinuous Helical Filment Winding
Other materials in this project	None
Reasons for choosing our product	Light Weight, Corrosion Resistance, Flow Characteristics, Fast Jointing Time (20mins per joint), Mechanical Properties, Price, Delivery
Project owner	Killultagh Estates
Consultant / engineer	ARUP, 8th Floor, 32-38 Linenhall Street Belfast BT2 8GH
Contractor	Corramore Ltd

Pipe Details - Material 1:	
Total pipeline length	200 metres
Diameter DN min / max (mm)	DN 1400
Pressure PN min / max (bar)	PN6
Stiffness SN min / max (N/m^2)	SN 5000
Joint types	Standard Bell & Spigot - Single ‘O’ Ring
Fittings used	Elbows, Tees & Concentric Reducers

Pipe Details - Material 2:	
Total pipeline length	200 metres
Diameter DN min / max (mm)	DN 1200
Pressure PN min / max (bar)	PN6
Stiffness SN min / max (N/m^2)	SN 5000
Joint types	Standard Bell & Spigot - Single ‘O’ Ring
Fittings used	Elbows, Tees & Concentric Reducers

Installation Details:	
Type	Closed Trench
Native soil type:	Rock
Backfill soil type / compaction	Rounded Granular Pea Gravel 95% compaction
Thrust Blocks / Lockjoints	Thrust Blocks
Deflection min / max	Less than 3°
Year start / end	2009 / 2010

Purepipe Composite Manufacturing | Springbank Industrial Estate | Pembroke Loop Road | Dunmurry | Belfast | BT17 0QL | Northern Ireland
T: +44 (0)28 9062 6358 | F: +44 (0)28 9062 6224 | E: info@purepipe.co.uk | W: www.purepipe.co.uk

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