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PPN- The Leading Source of Industry News on Polymer Pipes and Plastic Pipe Failure

Keep Up-to-Date During Corona Isolation with PPN

NEWSMAKERS: * AGRU * COVID-19 * ExcelPlas * Friatec * Georg Fischer * REHAU * Thames Water * SCG

AGRU Piping Fully Deliverable Despite COVID-19 Measures
https://www.agru.at/en/company/covid-19/

Georg Fischer Piping To Reduce Production In Europe Due To Coronavirus
https://www.reuters.com/article/brief-georg-fischer-to-reduce-production/brief-georg-fischer-to-reduce-production-in-europe-due-to-coronavirus-idUSFWN2BP1IA

Thames Water Approves REHAU's Polypropylene (PP) Pipe for Use in New Residential Development Sewer Systems Across their Entire Network
https://www.ukconstructionmedia.co.uk/news/thames-water-polymer-pipework/

Investigation Into the Failure of Chilled-Water-Pipe Insulation
http://cloud.excelplas.com/s/J4WDVjEBqe2pJ0e#pdfviewer

Fracture Mechanics Testing and Crack Propagation Modelling in Polypropylene Pipes
https://www.emerald.com/insight/content/doi/10.1108/IJSI-01-2020-0006/full/html

COVID-19: Mitigating Transmission via Wastewater Plumbing Systems
https://www.thelancet.com/action/showPdf?pii=S2214-109X%2820%2930112-1

Michael Toh Discusses Benefits of GF Piping Systems
https://www.youtube.com/watch?v=CriVZylvXzU

CURRENT CORONA PANDEMIC IS AFFECTING GEORG FISCHER'S BUSINESS GLOBALLY
COVID-19 Pandemic: GF Curtails Production at European Plants
https://www.reuters.com/article/brief-georg-fischer-to-reduce-production/brief-georg-fischer-to-reduce-production-in-europe-due-to-coronavirus-idUSFWN2BP1IA

GF Piping Systems to Discuss Business Headwinds on April 15th 2020 Meeting
https://www.georgfischer.com/content/dam/gfcorp/documents/investors/annual-shareholders-meeting/2020-asm/GF_GV_EInladung_englisch_2020_def.pdf

Testing of Electrofusion Welds
https://www.polypipetesting.com.au/electrofusion-welds/

Influence of Aggressive Environmental Ageing on Mechanical and Thermo-mechanical Properties of Ultra Violet (UV) Cured in Place Pipe liners
https://journals.sagepub.com/doi/abs/10.1177/0021998320913988

The Effects of the Recycled Polyethylene on the Properties of Special Material Blends for Pipe and Final Products
https://iopscience.iop.org/article/10.1088/1757-899X/774/1/012052/pdf

Uponor Offers New ProPEX® Brass Transition Fittings for PEX Hydronic Piping Applications
https://www.contractingbusiness.com/commercial-hvac/article/20868738/uponor-offers-new-propex-brass-transition-fittings-for-pex-hydronic-piping-applications

FACTORS AFFECTING QUALITY OF ELECTROFUSION JOINT FITTINGS
https://www.conferenceco.com.au/ozpipe/PAPERS/LEHUNT.PDF

PVC PIPE EXTRUSION TO DELIVER BEST PRACTICE END CUSTOMER REQUIREMENTS
https://www.conferenceco.com.au/ozpipe/PAPERS/AYLETT.PDF

A Review of Calcium Based Stabiliser Systems for Pipes – 30 Years Young – What's Next?
https://www.conferenceco.com.au/ozpipe/PAPERS/FOKKEN.PDF

Elastomeric Joints in Plastic Pipe Systems and the use of Long Term Stress Relaxation Testing to Predict Service Life
https://www.conferenceco.com.au/ozpipe/PAPERS/BOERMA.PDF

Considerations When Restraining Molecularly Oriented PVC Pipe (Failure of PVC-O Pipe and Fittings)
https://www.conferenceco.com.au/ozpipe/PAPERS/ALCHIN.PDF

A RECENT SURVEY OF WATER MAIN FAILURES IN THE US AND CANADA
https://www.conferenceco.com.au/ozpipe/PAPERS/FOLKMAN.PDF

EFFECT OF CARBON BLACK DISTRIBUTION ON POST YIELD DEFORMATION PROPERTIES OF POLYETHYLENE PIPES FOR WATER TRANSPORT
https://www.conferenceco.com.au/ozpipe/PAPERS/DEVECI.PDF

Friatec Issued Watermark Certificate of Conformity for Fittings for PE Pipes for Pressure Applications
https://www.vinidex.com.au/app/uploads/pdf/Certificate-SF01.AS125036.WMKA20677.4-2020.04.02.pdf

ExcelPlas Polymer Testing Laboratory for Polymer Pipe Testing
Materials characterization, failure analysis, quality control, and materials and process development services are offered to polymer pipe manufacturers, installers and end users. Our analytical techniques allow us to assess elemental and chemical material composition, thermal properties, coating thickness, electrochemical properties, surface chemistry, surface wetting, corrosion rates and pitting potentials, contamination and degradation problems, metallography, fractography, phase transitions, static coefficient of friction, adhesive bonding strength and causes of adhesive bonding failures, surface tension and surface energy, tensile and compressive strength, bend deflection, lapshear strength, elasticity properties, UV and visible light absorption and reflection, density and porosity, and many other material properties integral to improving your piping products. We have conducted analyses on a broad range of materials processed in a multitude of ways and used in thousands of applications in many hundreds of environments.
https://www.excelplas.com/

Our capabilities give us many powerful tools to apply to your materials and process evaluations to enhance your product and productivity. We produce comprehensive written reports to ensure that you can fully understand and independently examine the analytical results and conclusions. This establishes a documented history for future process and product development and quality control issues. It is usually a great idea to also characterize your materials when all appears fine as a baseline for comparison should any future problems with your materials or their processing occur.
https://www.excelplas.com/

Australian Poly Solutions Specialises in HDPE Pipe Fusion Welding and Hydrostatic Testing Services with Knowhow and Experience you can rely on
https://www.aussiepoly.com.au/

RITMO: APP - SET & GO! PRO Butt Fusion for Pressure Pipe
https://www.ritmo.it/en/butt-fusion-for-pressure-pipe/app-set-go-pro/
Video: https://youtu.be/YP4GmmBdufU

ExcelPlas Labs Pipe Failure Investigations
ExcelPlas Labs have created a new benchmark in failure analysis of HDPE, PP-R, PB and PEX pipes in addition to PVC & CPVC pipes as well as composite GRP and GRE pipes. When a plastic pipeline fails to perform as intended, our team can determine the root cause of failure (e.g. oxidative failure, chemical failure, creep failure, over-stress failure, fatigue failure, design failure, etc). ExcelPlas are experienced with all plastic piping failure modes and mechanisms including Slow Crack Growth (SCG) Rapid Crack Propagation (RCP), Environmental Stress Crack Resistance (ESCR), Oxidative Stress Cracking (OSC), cyclic fatigue, manufacturing defects, and polymer material problems.
http://www.excelplas.com/

ExcelPlas Strain Hardening Test (SHT) for HDPE Pipes
The SHT in accordance with ISO 18488 is a relatively new, but excellent way to obtain a rapid indication of the Stress Crack Growth (SCG) resistance of your piping material. This tensile test performed at 80°C has become in just a few years the new standard for Batch Release Testing (BRT). And not without reason. The test requires only a very small amount of material, the results are very reliable with a very low inter-laboratory scatter and the results are available within a few days, regardless of the PE grade. The SHT is usually performed on resin material but it can also be performed on samples taken directly from pipes or sheets. As accredited lab, EXCELPLAS is happy to discuss the possibilities with you, whether it is for BRT, benchmarking, quality control of your (high performing) PE grade or for polymer compliance/ validation.
http://www.excelplas.com/

Australian Plastic Pipe Testing Laboratory
ExcelPlas Laboratories provides a comprehensive plastic pipe joint testing service and is equipped with a state of the art laboratory to test a range of polymer materials including polyethylene and polypropylene. ExcelPlas can carry out testing on plastic tube and pipe ranging in wall thickness from 3 mm to 80 mm. ExcelPlas Laboratories provide a comprehensive service to Industrial & commercial companies, environmental consultants, Government bodies and local Authority customers throughout Australia & NZ. All testing is carried and out in accordance with ISO & ASTM methods and is fully accredited to ISO 17025 by NATA.
http://www.excelplas.com/

Australia's Plastic Pipe Testing Laboratory
ExcelPlas Laboratories provides a comprehensive plastic pipe joint testing service and is equipped with a state of the art laboratory to test a range of polymer materials including

polyethylene and polypropylene. ExcelPlas can carry out testing on plastic tube and pipe ranging in wall thickness from 20mm to 1200mm. ExcelPlas Laboratories provide a comprehensive service to Industrial & commercial companies, environmental consultants, Government bodies and local Authority customers throughout Australia and Asia.
All testing is carried and out in accordance with ASTM, ISO & WIS methods and is fully accredited to ISO 17025 by NATA.
• Butt Fusion Weld Testing
• Weld Testing
• Testing of Electro-fusion Welds
• Tear on saddle joints
• Crush De-cohesion of Electro-fusion welds
• Polymer & Plastics Identification
• Chemical & Thermal Testing
• Site Audits
http://www.excelplas.com/

ExcelPlas - the Australian Pipes & Fittings Testing Laboratory

- Accredited to ISO 17025 by the National Association of Testing Authorities (NATA) Australia, and is Australia's largest laboratory dedicated for the testing of plastic pipes and fittings to various Standards which include Australian, European and International Standards.
- The staff employed at the laboratory have a combined experience of more than 85 years within the plastics industry specifically with manufacturing, quality control and the research and development of plastic piping systems including HDPE, PEX, PP-R, PVC, U-PVC, M-PVC, O-PVC, ABS, GRP, GRE and PB.
- Services provided include conformance testing, compliance testing, batch release testing, root cause analysis for field failures and non-destructive testing of samples.
- http://www.excelplas.com/

ExcelPlas Lab Specialising in HDPE Pipe Condition Monitoring, Failure Analysis and Testing
In the event of a HDPE buttweld or electrofusion weld failing during initial testing, or in service, we can conduct investigations to assist in identifying the root cause of the failure.
This service also extends to the premature failure of the pipe or fitting itself.
http://www.excelplas.com/plastic-pipes

ExcelPlas Pipe Testing is a Leader in the Field of Polyethylene (PE) and High-Density

Polyethylene (HDPE) Testing
ExcelPlas is accredited with the National Association of Testing Authorities (NATA) for butt weld tests, bend and tensile tests, peel decohesion tests on electro fusion sockets and failure mode determination
http://www.polypipetesting.com.au/butt-fusion-welds/

New UHMWPE Pipe for Tailing Offers Greater Than 4X the Abrasion Resistance of PE100 (Australia wide)
http://slurrypipes.com.au/

ExcelPlas Poly Pipe Weld Inspection Lists Top 7 Causes of Weld Failure:
• Lack of scraping
• Inaccurate scraping
• Contamination from dirt, water, oil or clays
• Lack of Paralell-ness of fusion faces
• Misalignment of surfaces
• Time, temperature and pressure deviations
• Not adhering to cool times

We have extensive experience in inspection of poly pipe welds for assuring welded joint quality. Direct Poly Pipe Inspection ensures that operators are following the proven welding procedure; this reduces the occurrences of operational errors which lead to defects such as inclusions, lack of fusion (LoF), porosity and misalignment.
More information, contact john@excelplas.com

Get Your HDPE Pipe Products or Services Noticed – Advertise in Poly Pipe News (PPN) Australia
https://www.polypipenews.com.au/advertise/

This Newsletter is brought to you by Excelplas Labs, Australia's Largest group of Poly Pipe Testing Labs.

Pipe Poly News (PPN) is now Australia's most current and comprehensive source of news on Polyethylene pipes and Poly Pipe Welding;

Poly Pipe News is now sent to over 4500 Poly Pipe Industry Members every week.

Any news requests should be sent to john@excelplas.com
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