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

Global News on Plastic Piping and Fittings

NEWSMAKERS: * AGRU * Aliaxis * Borealis * Borouge * Class Action * CPVC * ExcelPlas * Failure Analysis * Flowtite® * GF Piping * JM Eagle * Iplex * Municipex™ * Murphy Pipeline Contractors * NIBCO * PE100 * Plascorp * Polybutylene Failures * PPI * PPN * PVDF * PVC-O * Rehau * Rollepaal * SOLVAY * TOTAL * Uponor * U-PVC Pipe * Vinidex

INDUSTRY NEWS

Aliaxis Share Price Reaches an All-Time Record High
https://cloud.excelplas.com/s/gDuNuQPPU9KyTTZ

Borealis Patents New High-Pressure Resistant HDPE Pipes with Improved Homogeneity [PDF]
https://www.freepatentsonline.com/20210317290.pdf

TOTAL Patents New HDPE Pipes with Conductive Carbon Particles in PEG Carrier for Antistatic Mining Pipe [PDF]
https://www.freepatentsonline.com/11118039.pdf

NIBCO PEX Pipe $7.65M Settlement With Homeowners Gets Final OK
https://news.bloomberglaw.com/class-action/nibco-plastic-pipe-settlement-with-homeowners-gets-final-ok

New Website Dedicated to Polybutylene Pipe Failures
https://poly-b.com/

Largest Plastic Pipe Maker in the US Sues Law Firm for Legal Malpractice in Asbestos Lawsuit
https://www.courthousenews.com/largest-pipe-maker-in-us-sues-law-firm-for-legal-malpractice-in-asbestos-lawsuit/

Rollepaal Accelerating Sustainability through the Accelerated Adoption of Polymer Pipe Technology
http://assets.ctfassets.net/0ri93i7jg879/4ptpIdzRl0ggq75IdZV3R6/3b76c0d4f589626f4db6b8fb5c8bbbc3/Accelerating-Sustainability-through-the-Accelerated-Adoption-of-Technology-Venegas-2021.pdf

Presentation on Subrogation Water Damage from Failure CPVC Piping
https://www.cozen.com/subrogation/resources/publications/private/subrogation-water-damage-part-2-pipe-failures-and-hot-water-heaters-webinar

Solvay Pushing its Polyphenylsulfone (PPSU) Fittings for PP-R, CPVC, and PEX Pipes As "Better than Metal"
https://www.solvay.com/en/chemical-categories/specialty-polymers/construction/plumbing/ppr-cpvc-pex-pipe-fitting-systems-eguides

Delivery of Ultra-Large Diameter AGRU HDPE Pipe By Truck for Murphy Pipeline Contractors
https://www.facebook.com/murphypipelines/posts/delivery-of-large-diameter-hdpe-pipe-to-the-job-site-how-much-on-a-truck-4-stick/2085182604862469/

Rollepaal's R&D Manager Describes Challenge that Companies are Facing Due to the Increasing Demand for Piping Systems when Materials Used for Pipe Production are Becoming More expensive and Scarce
https://www.rollepaal.com/news/the-need-to-act-has-never-been-more-urgent

PVDF Piping Chosen for Nuclear Facility Acid Handling Project
https://www.csemag.com/articles/pvdf-piping-used-for-nuclear-facility-acid-handling-project/

Pipecon Pipe Installer Failed to Properly Supervise Worksite where Men Died in Trench Collapse
https://www.abc.net.au/news/2021-10-19/civil-construction-company-pipecon-failed-to-supervise-worksite/100550974

Why Uponor PEX Pipes are Failing (Class Action)
Because the outside surface of Uponor PEX is depleted of antioxidants after the flame treatment, the outside surface prematurely becomes brittle and develops microcracks when the tubing is expanded during installation
https://www.classaction.org/news/discontinued-red-blue-uponor-pex-piping-plagued-by-cracking-defect-class-action-alleges

GF Piping Showcases Reference Cases Worldwide in New Video
https://www.youtube.com/watch?v=4dS1-4VhEPs

Failure Analysis of Plastic Pipes
If you are looking for an expert witness for your case involving plastic pipe failure analysis, then you can't beat the team at ExcelPlas Consulting. Our team is setting a new standard for excellence in failure analysis of plastic articles but especially plastic pipe. For plastic pipe, this includes HDPE, PVC & CPVC pipe as well as other plastic piping systems like Hobas GRP pipe, PP-R Pipe, and spoolable composite pipe. When a plastic pipeline fails to perform as intended, our team can determine the root cause (chemical failure, oxidative failure, creep failure, overstress failure, fatigue failure, design failure, etc). We are experts in HDPE water pipe failures, CPVC sprinkler pipe failure, PVC pipe failure analysis and PP-R Oxidation/Degradation investigations.
https://www.excelplas.com/wp-content/uploads/2020/01/Excelplas-A4-Brochure-4pp-Plastic-Pipe-Testing-NTs.pdf

TECHNICAL REPORTS & NEW RESEARCH

UV Degradation by Sunlight Exposure of HDPE Pipes for Transportation of Natural Gas
https://www.sciencedirect.com/science/article/pii/S0141391021002718

Migration of Substances from U-PVC Pipes and Fittings Into Drinking Water - Estimation of Conservative Diffusion Coefficients
https://www.sciencedirect.com/science/article/pii/S0142941821003305

Study on the Creep Properties of Butt Fusion–Welded Joints of HDPE Pipes Using the Nanoindentation Test
https://link.springer.com/article/10.1007/s40194-021-01186-0

An Investigation of Time-Dependent Behaviour of Medium-Density Polyethylene Pipes [PDF]
https://research.library.mun.ca/15053/1/thesis.pdf

Simulation of Electrofusion Parameters of PE Saddle Pipe Based on Finite Element Analysis of Temperature Field
https://www.springerprofessional.de/simulation-of-electrofusion-parameters-of-pe-saddle-pipe-based-o/19782992

Research on Controlling Method of Welding Temperature of PE Electrofusion Pipe Fittings Based on Simulation of Temperature Field
https://link.springer.com/chapter/10.1007/978-981-16-7210-1_38

Application of HDPE Lining Technology for Pipelines in Oil and Gas Fields
http://yqcy.paperonce.org/en/oa/DArticle.aspx?type=view&id=202103013

Stability of Phenolic Antioxidants in the Presence of Sulfonic Acid: Model Compound Studies for Moisture-Crosslinked Polyethylene (PEX) Pipe
https://www.sciencedirect.com/science/article/pii/S0141391021002664

Controlling Flow in Polyethylene Pipes
https://www.worldpumps.com/ancillary-products/features/controlling-flow-in-polyethylene-pipes/

Investigation of Tensile Creep Behaviour for HDPE Pipe via Experiments and Modelling [PDF]
https://www.mdpi.com/1996-1944/14/20/6188/pdf

COURSES

Electrofusion Welding of Polyethylene Pipelines
https://citb.org.au/courses/electro-fusion-welding-polyethylene-pipelines

JOBS AND POSITIONS AVAILABLE

Vinidex Seeking Production Manager for HDPE Pipe Extrusion for Townsville, Queensland, Australia
https://au.linkedin.com/jobs/view/production-manager-at-vinidex-2746651099?refId-JSP9IJa0od4ppLrfcL0Vrg-&trackingId-C0WBvyjSaKfBuJm0LXI6tQ-&position-11&pageNum-0&trk-public-jobs-jserp-result-search-card

Aliaxis Seeking Financial Performance Manager- Group Manufacturing & Supply Chain
https://be.linkedin.com/jobs/view/financial-performance-manager-group-manufacturing-supply-chain-at-aliaxis-2728273280?refId-hH8WkqxahMPFzXAVYxTQSg-&trackingId-9r1qKIXT3dYdt4CF4NlSTg-&position-4&pageNum-0&trk-public-jobs-jserp-result_search-card

REHAU Seeking Business Development Manager – Municipex®

https://www.linkedin.com/jobs/view/business-development-manager-municipex-at-rehau-2767267448

PLASTIC PIPE FAILURE ANALYSIS

ExcelPlas Investigating Poly Pipe Failures
Through failure analysis & forensic chemistry, we help clients improve product performance, increase profits, & resolve product liability claims with plastic pipes and fittings.
We are dedicated to unmatched excellence in failure analysis, investigative chemistry, material testing, and expert witnessing for plastics, polymers and composites.
With over 25 years of investigative experience, the staff at ExcelPlas are uniquely positioned to help clients resolve the most challenging performance and processing issues related to materials and finished pipes and fittings.
https://www.excelplas.com/contact-us/

Cautionary Warning: Some HDPE Piping is Prone to Development of Cracks Due to Early Oxidation
ExcelPlas Labs have developed a three-step testing program to detect early failure of **HDPE** pipe and their expected service lifetime.
The 3 Step Testing is based on:

- Oxidative Induction Time (OIT) testing to determine the residual level of oxidative stability (i.e. thermal stability)
- Quantitative Additive Analysis (QAA) to determine the type and level of protective antioxidants and stabilizer present.
- Scanning Microscopy on inner surface after bend back to image developing microcracks

Samples of **HDPE** pipe just 10 cm long are needed for the analysis. 7 Day turnaround on test reports.
https://www.excelplas.com/wp-content/uploads/2020/01/Excelplas-A4-Brochure-4pp-Plastic-Pipe-Testing-NTs.pdf

MORE POLY PIPE NEWS

New Digital News Platform for Communicating to the Global Plastic Pipe Industry
Send Us Your News!!! PPN Publishes weekly.
https://www.youtube.com/watch?v=eUKxWbOZY10

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
To subscribe, visit https://www.polypipenews.com.au/subscribe/

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