January 2023 Vol. 3

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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 in Real-Time

NEWSMAKERS: * AGRU * Borealis * Borouge * CIP * Danco * ExcelPlas * Failure Analysis * GCPS * Global Composite Piping Solutions * GRP Pipes * KPS Piping * Microplastics * PERT II * PP-B * PPN * SABIC * Uponor

BREAKING NEWS

Hydrogen Reliably Transported with AGRU PE 100-RC Piping
https://cloud.excelplas.com/s/YLTwkfyLKDzp8Qk

Borealis Announces Chemical Recycling for PEX Pipes
https://www.ptonline.com/news/chemical-recycling-process-for-crosslinked-pe-

Borouge Block Polypropylene (PP-B) Selected to Manufacture Drainage Pipelines for Greater Cairo Metro Project in Egypt (17.7 km of Pipes)
https://www.zawya.com/en/press-release/companies-news/borouge-materials-selected-for-infrastructure-works-of-the-greater-cairo-metro-project-xjzp2ys2

SABIC Showcases its New Pipe Grade: BiAx PE/PP, PERT II and PE100 Orange
https://www.zawya.com/en/press-release/events-and-conferences/sabic-showcases-sustainable-metal-and-pipe-solutions-at-big-5-rq7ge3jk

KPS Launches World's First 6" (160/200mm) Conductive HDPE Double Wall Piping System
https://www.prnewswire.com/news-releases/kps-introduces-new-high-flow-6-conductive-high-density-polyethylene-double-wall-piping-system-301725079.html

KPS Plastic Pipe Systems Seeking Distributors for Double-Wall Conductive HDPE Piping
https://kpspiping.com/contact-us/

Disrupting The Multi-Trillion Dollar Water Market with New Patented Piping Technology to Make Large-Diameter Steel-Reinforced HDPE Pipe
https://finance.yahoo.com/news/disrupting-multi-trillion-dollar-water-135000593.html

INDUSTRY NEWS

52 km of HDPE Pipes Used for Campus Geothermal Renewable Energy Plan
https://www.bizjournals.com/denver/news/2023/01/17/colorado-mesa-university-geoexchange-state-funding.html

How Innovative Engineering by AGRU Helps Chile's Desal Ambitions
https://www.bnamericas.com/en/interviews/how-innovative-engineering-helps-chiles-desal-ambitions

Air Pollution Discharged into Terrestrial Environments from Cure-In-Place (CIP) Pipe Lining and Repair
https://pubs.acs.org/doi/10.1021/acs.estlett.2c00710

Dallas Family Sues Atmos After Deadly HDPE Gas Pipe Explosion
https://www.dallasobserver.com/news/dallas-family-sues-atmos-after-deadly-gas-explosion-10526753

Uponor Pex A #1 of 4 Failures at 4 Homes
https://m.youtube.com/watch?v=qKHeLUMwCLY

Danco Capital Limited: A Leading African HDPE Pipe Systems Producer
https://constructionreviewonline.com/company-reviews/danco-capital-limited-a-leading-african-hdpe-pipe-systems-producer/

HDPE PIPES

Comparison of Fatigue Performance of Polyethylene Pipe Grades in the form of Extruded and Compression Moulded Specimens
https://www.sciencedirect.com/science/article/pii/S2452321622008137?ref=pdf_download&fr=RR-2&rr=78b48d903b9b5a6d

Study on Ultrasonic Phased Array Detection of Hot Melt Butt Joint of Polyethylene Pipe
https://ieeexplore.ieee.org/document/10009794/

Plastic Pipes Chlorine Resistance Testing to ASTM F2023 and ASTM F2263
https://www.excelplas.com/contact-us/

Not all F1960 Fittings are the Same
https://m.youtube.com/watch?v=DW_c2XPoUA8

CPVC PIPES

Influence of Acetone and Primer on Strength and Ductility of Chlorinated Poly(vinyl chloride) (CPVC) Pipes
https://mdpi-res.com/d_attachment/polymers/polymers-15-00489/article_deploy/polymers-15-00489.pdf?version=1673964332

Above Ground PVC/CPVC Pipe Installation Information
https://www.usplastic.com/knowledgebase/article.aspx?contentkey=781

GRP PIPES

Influence of Polymer Matrices on the Tensile and Impact Properties of Long Fibre-Reinforced Thermoplastic Composite Pipes
https://www.mdpi.com/2073-4360/15/2/408

Experimental Study of the Effect of Temperature on the Circumferential Bending Performance of GFRP Pipes
https://www.mdpi.com/2073-4360/15/2/392

Cracking Failure Analysis of a Steel Wire-Reinforced Thermoplastic Composite Pipe Used in an Oily Sewage Conveying System
https://link.springer.com/article/10.1007/s11668-023-01595-x

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/

MORE POLY PIPE NEWS

PPN the 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/

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 3mm 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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