March 2023 Vol. 1

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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: * Aliaxis * Borealis * CPVC * ExcelPlas * Failure Analysis * FlowGuard Gold® * Iplex Pipelines * PEX-a * Polyethylene Pipes * Polyline * PP-R Pipes* QENOS * Rehau * SABIC * Safripol * SCR * Slow Crack Growth * TEPPFA * Vinidex

LEGAL NEWS

Failure of FlowGuard Gold® CPVC Pipes at Solera Apartments Goes Legal
https://scholar.google.com/scholar_case?case=13687070783111492833&q=polyethylene+pipe&hl=en&scisbd=2&as_sdt=2006

INDUSTRY NEWS

7 Challenges Facing Plastic Pipe Manufacturing (Special Feature)
https://cloud.excelplas.com/s/pX5mtJPA4lTKoTf

Polyline Dangles Savings Before Inflation-Weary Pipe Users
https://www.businessnews.com.au/article/Polyline-dangles-savings-before-inflation-weary-pipe-

users

Aliaxis Delivers Impressive Growth FY 2022 Results
https://aliaxis.com/aliaxis-delivers-on-its-growth-with-purpose-strategy-and-presents-strong-fy-2022-results/

Vinidex Seeking Materials & Processing Engineer for Plastic Pipes
https://www.careerone.com.au/jobview/materials-processing-engineer/e0295b71-b88b-11ed-bbb1-02b662f67062

Iplex Pipelines Awarded Contract to Supply 16.25km of 900mm Diameter HDPE Pipe
https://cloud.excelplas.com/s/9R19oF1OEQ5pk5E

BOREALIS Earnings at Resin Maker Sag after Q4 Loss / JV Contributions to OMV Plunge
https://www.plasteurope.com/news/BOREALIS_t252134/

SABIC's Quarterly Net Profit Slumps 94% on Lower Sales Prices
https://kalkinemedia.com/news/world-news/sabics-quarterly-net-profit-slumps-94-on-lower-sales-prices

Pipe Resin Maker SABIC Says Pressure on Margins Likely to Continue in H1 2023
https://www.argaam.com/en/article/articledetail/id/1624755

Special Feature - Polyethylene Pressure Piping a Sustainable and Durable Alternative to Legacy Pipe Materials
https://www.engineeringnews.co.za/article/polyethylene-pressure-piping-a-sustainable-and-durable-alternative-to-legacy-pipe-materials-2023-03-03/rep_id:4136

Why Plastics Pipes are Important to the Future
https://www.insidewaste.com.au/why-plastics-pipes-are-important-to-the-future/

Calculation of Gas Supply Pressure Using Plastic Pipes for Preventing Accidental Emissions
https://www.e3s-conferences.org/articles/e3sconf/pdf/2023/08/e3sconf_afe2023_01040.pdf

Industry Profile: Meet Olaf Kruse of Rehau
https://www.rehau.com/sites-cp/people-behind-rehau-olaf-kruse

HDPE Pipes

Recent Advances in Slow Crack Growth Modelling of Polyethylene Materials
https://www.researchgate.net/publication/368845342_Recent_advances_in_slow_crack_growth_modeling_of_polyethylene_materials

Mechanical Characterization of HDPE Pipe Damaged by Illegal Hot Tapping in Hydrocarbon Theft
https://somim.org.mx/memorias/memorias2022/articulos/A2_40.pdf

PP-R Pipes

New Technique for Studying Degradation of Phenolic Stabilizers and Ageing Behaviour of Polypropylene (PP-R) Pipes
• The phenol index allows for assessment of partly oxidized phenolic antioxidants.
• Single-, double- and triple-oxidized products of Irganox 1330 were monitored.
• Embrittlement of the PP-R material was ascertained at a phenol index of 1.0.
https://www.sciencedirect.com/science/article/pii/S0141391023000630

PVC Pipes

Experimental Investigation of Water Flow Losses in Elbow of PVC Pipe
https://aip.scitation.org/doi/pdf/10.1063/5.0118071

Composite Pipes

Investigations on the Mechanical Behaviour of Polymer Composite Pipes for Hydrogen Transport Considering Process-Induced Residual Stress
https://www.sciencedirect.com/science/article/abs/pii/S0013794423000802

GRP Pipes

Investigation into GFRP Composite Pipes under Hydrostatic Internal Pressure {PDF]
https://www.mdpi.com/2073-4360/15/5/1110/pdf?version=1677137545

MICROPLASTICS

Microplastic Pollution: An Emerging Contaminant in Aquaculture
https://www.sciencedirect.com/science/article/pii/S2468550X23000175

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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