June 2021 Vol. 3

Author : PPN

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

Global News on Plastic Piping and Fittings

NEWSMAKERS: * Aliaxis * Borealis * Borouge * Ecoflex™ * ExcelPlas * FB Balzanelli * IPLEX * McElroy * PE100 * PE100+ Association * PE-RT * PEX * PPN * PP-R * PP-RCT * PVC-A * Rehau * RAUPEX™ * SCG (Thailand) * Simona * Uponor * Zurich Insurance

INDUSTRY NEWS

Simona Develops Special PE100 Pipes with Wear Resistant Co-extruded Inner Layer for Waste Water Applications
https://www.simona.de/en/applications/water-management/waste-water-disposal/pe-100-ap-line-wastewater-disposal-pipes/

Video – ‘Moving Forward with Uponor’ - from PEX to PP-RCT pipe
https://www.youtube.com/watch?v=DAW0qGA8M9o

PE100+ Association Updates List of Approved PE100 Resin Suppliers
https://www.pe100plus.com/PE-Pipes/pe100/companies/r1016.html

Rehau Launches RAUPEX® UV Shield PEX-a Pipe
Crosslinking takes place in special extruders and this results in a higher degree of crosslinking compared to PEX-b or PEX-c pipes, which gives the pipe greater strength, higher flexibility and greater toughness
https://www.rehau.com/downloads/496556/raupexuvshieldcounterguide-855825-rehau.pdf

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

REHAU Showcases Polymer Heat Networks District Heating & Pre-insulated Pipe
https://www.youtube.com/watch?v=-PLbg07VjyA

UPONOR LAUNCHES ECOFLEX™ VIP THERMO PRE-INSULATED PIPES
https://www.installeronline.co.uk/uponor-launches-ecoflex-vip-thermo-pre-insulated-pipes/

PE100+ Association Invited to Speak at the Annual German Pipe Conference
https://www.pe100plus.com/PE-Pipes/news/PE100-Association-had-been-invited-to-speak-at-the-annual-German-Pipe-Conference-i2241.html

Cautionary Warning: Some PEX 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 PEX 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 PEX 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

Aliaxis Share Price Recovers to Pre-COVID Levels
https://cloud.excelplas.com/s/iS7Qac89Q6GtzVd

Borealis and Borouge to Share Latest Plastic Piping Innovations at Plastic Pipes XX Conference
https://www.borealisgroup.com/news/borealis-and-borouge-to-share-latest-innovations-at-plastic-pipes-xx-conference

FB Balzanelli Strengthen its Fleet of Automatic Coilers for Large HDPE Pipe Sizes
https://www.fb-balzanelli.it/fb-balzanelli-strengthen-its-fleet-of-automatic-coilers-for-large-pipe-sizes/

Zurich Insurance Issues Bulletin on Plastic Pipe Plumbing Failures
https://www.zurich.co.uk/news-and-insight/-/media/Zurich_Resilience_Solutions_ZMunicipal_Final_Version.pdf

Aliaxis Announce Their Commitment to Plastics Recycling in Australia
https://aliaxis.com/recycling-australia/

McElroy Minute: Update GPS Location For A HDPE Pipe Joint's Final Location In A Fuse/Pull Situation?
https://www.youtube.com/watch?v=9P8CQDRLIM4

NEW PATENTS

Thai Polyethylene and SCG Patent New Bimodal Polyethylene for HDPE Pressure Pipes
https://www.freepatentsonline.com/EP3293208B1.pdf

Borealis Patent New PP-R Pipe Composition
https://www.freepatentsonline.com/20210108058.pdf

Borealis Patent Polyethylene Blend of Recycled PE and Virgin PE
https://www.freepatentsonline.com/WO2021122299A1.pdf

NEW RESEARCH

Aging of Polyethylene of Raised Temperature Resistance (PE-RT) Pipe Liner After a Four-Year Service in a Crude Oil Gathering System
https://link.springer.com/article/10.1007/s11668-021-01176-w

Life Cycle Assessment of PVC-A Pipes in the Construction Sector [PDF]
https://www.cetjournal.it/cet/21/86/121.pdf

Structural Response of Non-Perforated and Perforated Corrugated HDPE Pipes Under Variable Loading
https://www.sciencedirect.com/science/article/abs/pii/S1537511021001021

JOBS

Iplex Seeking Testing and Design Engineer for Plastic Pipes
https://www.careerone.com.au/jobview/testing-design-engineer/950457ea-24af-4199-9f5a-55e23ee1a7c0

BRAND MARKETING

How to Get Noticed by More Than 40,000 People in the Poly Pipe Space Across the Globe
PPN we reaches over 40,000 people each month and this high level of audience engagement comes from years of creating content that matters to the plastic pipe industry.
We provide the industry's most reliable and current information, and have the trust and attention of the leaders and decision makers.
Not only can we help you get in front of our highly engaged audience, but we also have a number of channels you can use to target your message – as well as the subject matter experts to put it all together.
https://www.polypipenews.com.au/

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/