

August 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: * Aquatherm * Aramco * Baerlocher * Borealis * Corys * Electrofusion
* ExcelPlas * Failure Analysis * GF Piping * HDPE * PE100 * PE-RT * PIPA * PPN * PP-R
* Rehau

INDUSTRY NEWS

United States Sues Aquatherm Germany and its US distributors Over Failure of Polypropylene (PP-R) Hot Water Pipes

[https://scholar.google.com/scholar_case?case=17783523060362092030&q-aquatherm&hl-en&as-sdt-2006&as-ylo-2021](https://scholar.google.com/scholar_case?case=17783523060362092030&q-aquatherm&hl=en&as-sdt-2006&as-ylo-2021)

Rehau Say PERT is “Simply an Over-stabilized HDPE” with a Limited Track Record of Only 3-5 Years and Therefore High Risk

<https://constructionproductmarketing.com/wp-content/uploads/2021/04/pexvspertflyer-855776-rehau.pdf>

ExcelPlas Interdisciplinary Testing Labs for all your Poly Pipe testing needs, tensile, compression, thermal, DSC, TGA, FTIR, shear strength, pipe testing, plastic recycling, plastic pipe failure analysis, plastic identification, analytical methods,

additive analysis etc.

<https://www.excelplas.com/>

SAUDI Aramco Innovates Heavily in Polymeric Pipes and Non-metallic materials

<https://cloud.excelplas.com/s/t6AHj7yOJJn3iNF>

Borealis' 2Q Profits Hit Record as PE, PP Margins Widen

<https://www.argusmedia.com/en/news/2238770-borealis-2q-profits-hit-record-as-pe-pp-margins-widen>

PIPA Updates INDUSTRY GUIDELINES POP004 Electrofusion Jointing of PE Pipe and Fittings for Pressure Applications ISSUE 25 / JULY 2021

<https://pipa.com.au/wp-content/uploads/2021/07/PIPA-POP004-Polyethylene-Pipe-and-Fittings-Compound-Issue-25-July-2021..pdf>

A Review of Inspection Methods for Continuously Monitoring PVC Drinking Water Pipes and Mains to Detect Failure [PDF]

https://ris.utwente.nl/ws/portalfiles/portal/254710229/PVC_Inspection_Review_IEEE_IOT_final.pdf

Inauguration of a Prefabrication Workshop in Abu Dhabi | GF Piping Systems

https://www.youtube.com/watch?v=T0pVmk6Mp_c

GF Piping Systems Further Expands its Global Network of Prefabrication Workshops

<https://fluidhandlingpro.com/gf-piping-systems-further-expands-its-global-network-of-prefabrication-workshops/>

GF Piping Workshop Butt Fusion Machine Video

Workshop butt fusion machine for prefabrication of bends, elbows, T-Y-X segmented fittings for applications with piping systems made of PE, PP, PB in the dimensional range d90 - 315 mm.

<https://www.youtube.com/watch?v=cbG0Q8VKVwk>

Stabilizing the Performance and Quality of Recycled HDPE for HDPE Pipe

<https://www.waste360.com/plastics/stabilizing-performance-and-quality-recycled-hdpe>

Upcoming Pipeline Industry Convention and Exhibition for HDPE and GRP Pipes in Water, Gas and Mining (Brisbane on 25-28 September 2021)

<https://www.apga.org.au/apga-annual-convention-and-exhibition>

NEW RESEARCH

Modelling Time-Dependent Behaviour of Medium-Density Polyethylene Pipes [PDF]

<https://cloud.excelplas.com/s/tGLdCYzyXsqVtRo#pdfviewer>

Nonlinear Time-Dependent Mechanical Behaviour of Medium-Density Polyethylene Pipe Material [PDF]

<https://cloud.excelplas.com/s/OKxQ5p29vYiqJFV#pdfviewer>

Environmental Life Cycle Assessment of the Incorporation of Recycled HDPE to Polyethylene Pipe Grade Resins

<https://www.sciencedirect.com/science/article/pii/S0959652621027864>

Finite Element Analysis of the Soil Type Effect on Buried HDPE Pipelines Under Strike-Slip Faulting

<https://www.researchgate.net/profile/Mehdi-Hashemzadeh/publication/353555560-Finite-element-analysis-of-the-soil-type-effect-on-buried-pipelines-under-strike-slip-faulting/links/6102c2d21ca20f6f86e97c68/Finite-element-analysis-of-the-soil-type-effect-on-buried-pipelines-under-strike-slip-faulting.pdf>

Computational Fluid Dynamics Analysis of Head Losses in Pipelines With Butt Fusion Weld Joints

<https://link.springer.com/article/10.1007/s42797-021-00039-9>

An Overview of Cyclic Loading and Fatigue on Steel and PE Pipe during HDD Installations

<https://ascelibrary.org/doi/abs/10.1061/9780784483626.018>

Performance of Field-Aged Polymeric Spray Lining for Water Pipe Rehabilitation

<https://www.sciencedirect.com/science/article/abs/pii/S0886779821003072>

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.youtube.com/watch?v=eUKxWbOZY10>

Do You Have Any Poly Pipe News? – Get in Touch

<https://www.excelplas.com/contact-us/>

COMMUNICATE YOUR BRAND TO A GLOBAL AUDIENCE WITH JUST ONE CLICK

PPN - Your Global Source of Plastic Piping News and Technology

<https://www.polypipenews.com.au/>

MORE NEWS

Get More Poly Pipe News

<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 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 butt weld 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/>

2021 Copyright ExcelPlas Labs

PPN is owned and operated by ExcelPlas Pty Ltd. By subscribing to PPN you agree to receiving regular PPN newsletters as well as the PPN platform using your email contact details to enhance the performance and functionality of PPN and its analytics reports. These email contact details allow PPN to track page views and create more targeted and relevant content. PPN provides an unsubscribe link on the bottom of each PPN newsletter.