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

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NEWSMAKERS: *Aquatherm * Borealis * ExcelPlas * GF Piping * IPLEX * McElroy * Plasson * REHAU * SCG * TUBI * Uponor * Viega * Vinidex

Australian TUBI Opens Third Production Plant for HDPE Pipe in Florida

<https://themarketherald.com.au/tubi-asx2be-opens-third-production-plant-in-florida-2020-05-11/>

Australian HDPE Pipe Production Company Expansion Plans for USA (Declassified)

<https://www.asx.com.au/asxpdf/20200311/pdf/44fxtltblm82.pdf>

Townsville Specifies Vinidex's New Chlorine Resistant HDPE Piping

https://www.vinidex.com.au/app/uploads/pdf/20200507-Chlorblue_Townsville-specifies-Chlorblue_Case-Study.pdf

Gold Coast Sees 900 m Long HDPE Pipeline Being Towed Along Broadwater

<http://www.mygc.com.au/watch-900-metre-long-pipe-towed-along-broadwater/>

McElroy and Weldmaster – The Best in Butt Fusion Machines for HDPE Piping

<https://utilitymagazine.com.au/mcelroy-and-weldmaster-the-best-in-butt-fusion-machines/>

China HDPE Pipe Prices Rise on Robust Demand, Tight Supply

<https://www.icis.com/explore/resources/news/2020/05/11/10506177/china-hdpe-pipe-prices-rise-on-robust-demand-tight-supply>

Borealis Patent New HDPE for Pressure Resistant PE Pipes

<https://patentscope.wipo.int/search/en/detail.jsf;jsessionid=064BEEE8FCDAD554526FE921C7274143.wapp2nA?docId=WO2020089003>

Slow Crack Growth Test Methods for Service Life Prediction of High Density Polyethylene Piping

<https://asmedigitalcollection.asme.org/pressurevesseltech/article-abstract/doi/10.1115/1.4046884/1082579/Constraint-Effects-in-Slow-Crack-Growth-Test?redirectedFrom=PDF>

AXEO Uses HDPE Pipe for Trenchless Pipelaying

<https://elydan.eu/en/case-report-axeo-uses-hdpe-for-its-trenchless-pipelaying/>

Effects of Perforation Geometry on Pipe Drainage in Agricultural Lands

<https://ascelibrary.org/doi/abs/10.1061/%28ASCE%29IR.1943-4774.0001482?af=R&>

SCG HDPE Pipe - Enhance the Quality and Standards of Infrastructure

<https://www.scgchemicals.com/en/news-media/feature-story/detail/4>

Meeting GF Piping at Data Centre World London 2020 (Video)

<https://www.youtube.com/watch?v=gurBbc7V84c>

Delicate marine operation involving 13 vessels towing the polyethylene pipe down the Broadwater from The Spit arriving at Waterways Drive, adjacent to the carpark at Pelican Beach

<https://www.miragenews.com/our-water-future-s-in-pipeline/>

First Graphene and Hexcyl to Collaborate on Graphene-enhanced HDPE Piping Project

<https://www.graphene-info.com/first-graphene-and-hexcyl-collaborate-graphene-enhanced-hdpe-project>

Viega Announces Vertical Integration in PEX Manufacturing

<https://www.contractormag.com/piping/article/20880281/viega-announces-vertical-integration-in-pex-manufacturing>

California Approves PEX for Plumbing — Again

<https://www.contractormag.com/plumbing/article/20879315/california-approves-pex-for-plumbing-again>

ICC-ES Issues Uponor PMG Listing for AquaSAFE™ System

<https://www.contractormag.com/codes/article/20884082/icces-issues-uponor-pmg-listing-for-aquasafe-system>

New Industrial Technical Committee Formed to Support Use of Polypropylene (PP-R, PP-RCT) Pipe

<https://www.contractormag.com/piping/article/20883414/new-industrial-technical-committee-formed-to-support-use-of-polypropylene-pipe>

Aquatherm North America Celebrates Opening of New Headquarters

<https://www.hpac.com/piping-pumping/article/20929136/aquatherm-north-america-celebrates-opening-of-new-headquarters>

Assessing Remaining Service Life of Polyolefin Pipes (HDPE, PEX, PP-R, PB) (How Long Will My Pipes Last?)

ExcelPlas has developed Protocol for Determining the Remaining Service Life of In-Service HDPE Pipelines

The 5 step protocol is based on lab testing to measure the following:

1. The oxidative induction time (OIT) profiling to assess whether or not oxidation protection is still afforded by the stabilising additives.
2. Measure the carbonyl index (CI) to assess extent of any polymer oxidation that has occurred.
3. Determine the critical CI at which oxidative stress cracking (OSC) is initiated.
4. Measure oxidative stress cracking resistance (OSCR) to determine the time until OSC is initiated.
5. Measure the depth of micro cracking on 180 degree bent coupons by Scanning Electron Microscopy

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

- PPN Now Offering Digital Ads, Featured Articles and Premium Positioning
- PPN Can Publish Press Releases and Time Sensitive Messages Instantly to a Global Geosynthetic Audience

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 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 Parallell-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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