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

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NEWSMAKERS: * AGRU * ASTM * COVID-19 * CSG * ExcelPlas * Iplex * McElroy * PIPA * Plastic Pipe Conference

PIPA names Iplex's Cindy Bray as its new Executive General Manager
https://pipa.com.au/pipa-announces-its-new-egm/

Plastic Pipe Conference in Amsterdam Still Planned for September 21-23 2020 Despite COVID-19 Pandemic
https://ppxx.eu/

New ASTM Standard Specification for Crosslinked Polyethylene (PEX) Line Pipe For Oil and Gas Producing Applications
https://www.astm.org/Standards/F2905.htm

HDPE Pipe Demand for New Surat Basin Coal Seam Gas Project
https://www.miningweekly.com/article/a10bn-surat-gas-project-gets-greenlit-2020-04-17

Recycling of HDPE Pipe – A Pipeline of Opportunity
https://www.recyclingtoday.com/article/a-pipeline-of-recycled-hdpe-opportunity/

AGRU HDPE Pipeline Podcast
https://agruamerica.com/a-brief-history-of-agruline-fittings/

IPLEX Pipelines COVID-19 Update
https://www.iplex.com.au/news-and-case-studies/news/covid19-updates/

Constraint Effects in Slow Crack Growth Test Methods for Service Life Prediction of High Density Polyethylene Piping
https://www.researchgate.net/publication/340608812-Constraint-Effects-in-Slow-Crack-Growth-Test-Methods-for-Service-Life-Prediction-of-High-Density-Polyethylene-Piping

New Online Learning Series in Polyethylene and Polypropylene Pipe Welding by McElroy University Now Available
https://www.mining-technology.com/contractors/cables/mcelroy/pressreleases/new-online-learning-series/

McElroy Manufacturing Launches New Online Learning Series for Pipe Fusion
https://www.water-technology.net/contractors/pipes/mcelroy-manufacturing/pressreleases/mcelroy-manufacturing-online-learning-series/

ExcelPlas Laboratory Expands Plastic Pipe Testing Capabilities
The expanded ISO/IEC 17025-accredited laboratory brings together all of ExcelPlas' plastics testing and analysis capabilities, including advanced chemical and structural testing on plastic pipes, fittings and valves, manifolds, solvent cements, thread sealants and plastic materials for global applications.

ExcelPlas is the leading independent testing and analysis organization for the plastic pipe industry, including HDPE, PE-RT, PEX, PP-R, PB, CPVC and PVC pipes. The plastic testing laboratories have been relocated from Warrigal Road, Moorabbin to Wickham Road, Highett,

Victoria, Australia.

Plastic products are tested to verify they meet the required durability, performance and safety criteria of over 120 test methods and standards used in commercial and residential applications. These applications include drinking water, irrigation, mining, hydronic heating, gas distribution, sprinkler/fire safety, electrical conduit and geothermal systems.

Separate from testing, the new lab also conducts custom plastic testing as well as research and development. This includes evaluating non-standard polymer and rubber components using routine tests. It can also include evaluating routine components using non-standard tests and simulation of in-service conditions. One example is burst testing of plastic pipes to potentially determine failure mechanisms or estimated lifetime.

The new facility offers multiple test stations, including stations for long-term pressure/stress testing and hydrostatic design basis (HDB) and minimum required strength (MRS) ratings, as well as short-term burst and other pressure performance requirements. The ExcelPlas Laboratory also has test stations for chlorine resistance. The lab evaluates the long-term impact of oxidising disinfectants such as chlorine, chlorine dioxide and chloramines on plastic material performance. Other specialties include slow crack growth (SCG) validation and stress crack resistance (SCR) testing.
https://www.excelplas.com/

Australian Poly Solutions Specialises in HDPE Pipe Fusion Welding and Hydrostatic Testing Services with Knowhow and Experience you can rely on
https://www.aussiepoly.com.au/

RITMO: APP - SET & GO! PRO Butt Fusion for Pressure Pipe
https://www.ritmo.it/en/butt-fusion-for-pressure-pipe/app-set-go-pro/
Video: https://youtu.be/YP4GmmBdufU

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/

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