

## January 2019 Vol. 4

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

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Townsville RPC 1.8-metre diameter Glass Reinforced Polymer Pipe Project on Track

<https://www.facebook.com/TownsvilleCityCouncil/videos/2220312108216670/>

"The contract to provide and install the pipes for the pipeline was awarded to Iplex and included ensuring advanced manufacturing was established locally, which has been done through Iplex's partnership with RPC."

<https://www.townsville.qld.gov.au/about-council/news-and-publications/media-releases/2019/january/pipeline-project-boosting-townsvilles-advanced-manufacturing/ nocache>

Vinidex Introduce StormPRO® and Sewer PRO® Twin-Walled Corrugated Polypropylene Pipe

<https://www.vinidex.com.au/wp-content/uploads/VIN264-StormPRO-and-SewerPRO-Product-Catalogue-1.pdf>

Building Products Stocks Only for the Brave as Housing Sours (Plumbing Pipe Demand to Fall)

<https://www.afr.com/business/construction/building-products-stocks-only-for-the-brave-as-housing-sours-20181220-h19b15>

Canary in the Coalmine - Fletcher Building Dual-listed on both the Australia and New Zealand stock exchanges

<https://www.afr.com/business/construction/builders-hold-their-nerve-amid-housing-gloom-20181228-h19irp>

New Vinidex Pipe Case Study – Vulcathene™

<https://www.vinidex.com.au/wp-content/uploads/Vulcathene Industrial VIC 029-Melbourne-Uni.pdf>

Uponor Patent New Method of Manufacturing PEX Pipe

<https://patents.google.com/patent/US20180258255A1/en>

Organic Carbon Release and Chlorine Disinfectant Decay for Cross-linked Polyethylene (PEX) Plumbing Pipes

<https://docs.lib.purdue.edu/cgi/viewcontent.cgi?article=1929&context=surf>

Uponor Publishes Hydronic PEX Piping Guide

[https://www.uponorpro.com/~/\\_media/extranet/files/hydronic%20distribution%20literature/hydronic%20piping%20product%20guide.ashx?version=060520181229](https://www.uponorpro.com/~/_media/extranet/files/hydronic%20distribution%20literature/hydronic%20piping%20product%20guide.ashx?version=060520181229)

Rehau Publishes Technical Manual on PEX Piping

<https://www.rehau.com/download/2105628/raupex-technical-manual.pdf>

Polybutylene Pipes – The Danger Lurking Behind Your Walls

<https://blackdiamondexpert.com/the-danger-lurking-behind-your-walls-polybutylene-pipes/>

Discovering Polybutylene Piping in a Home can be a Difficult Obstacle to Overcome When Buying or Selling a Property

<https://www.gulfshoreinsurance.com/the-polybutylene-piping-solution/>

ExcelPlas Labs Offering Pressure Testing of PB Pipes to ASTM D1599 (zero to burst in 60 seconds) and AS 2642.1 Appendix C (15.5 MPa at 20 deg.C for 60 mins.)

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

Warning Field Failures of PB Pipe Related to Depleted Antioxidant Levels

To protect PB pipes from degradation, antioxidants are added during pipe manufacture. When the antioxidants are depleted, the PB pipe's oxidative resistance, or oxidation induction time (OIT), approaches zero, and polymer chain scission can occur unchecked leading to pipe embrittlement.

Unprotected PB, like virtually all other polymers, is vulnerable to degradation due to prolonged exposure to heat, oxygen and chlorine, resulting in embrittlement and reduced service life. To prevent these damaging effects, PB pipe materials are typically formulated with a variety of stabilizing additives, ranging from antioxidants to long-term heat stabilizers, to maintain required long-term performance. ExcelPlas Labs can conduct a condition assessment on in-service PB pipes to determine residual lifetime.

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

Solving Plastic Pipe Problems - We solve polymer problems and find economic solutions that help drive product development to yield higher quality plastic products.

Whether the problem occurs during manufacturing or during the lifetime of a product, our knowledge and technical expertise can provide you with solutions. From consulting and technical expertise to engineering and design solutions ExcelPlas can help.

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

ASTM Standard Specification for Polyethylene of Raised Temperature (PE-RT) Plastic Hot and Cold-Water Tubing and Distribution Systems

<https://www.astm.org/Standards/F2769.htm>

Useful Links for Poly Pipe Welders

<https://www.acu-tech.com.au/about-us/useful-links-for-hdpe-pipe-installers/>

**Stay Up to Date with the Latest Poly Pipe News by visiting the PPN Newsletter Website!**

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

## **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/>

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### **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](mailto: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](mailto:john@excelplas.com)  
To subscribe, visit <https://www.polypipenews.com.au/subscribe/>

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