HYDRAULINK Hose Test Program

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Area Sales Manager – Lower South Island

WHO IS HYDRAULINK

1945 Established as an engineering company

1953 Manufactured first hydraulic fittings

1973 Changed name to HYDRAULINK

1989 Purchased by Noel Davies and Lee Short

2001 Purchased Auspower Australia

2017 Launched Hydraulink hose with MSHA cover as standard

2022 Purchased CCR in Western Australia

2025 80 Years

Hydraulink®
Hose Solutions

OUR NETWORK


Timor Sea
NORTHERN TERRITORY
Coral Sea
Australia
WESTERN AUSTRALIA
SOUTH AUSTRALIA
Sydney
Great Australian Bight
TASMANIA
Hobart


Christchurch


Hydraulink
Best Under Pressure

Hose Assembly Type Approval Testing

Hydraulink hose and fittings tested to ensure safety and conformance to relevant hose and hose fitting standards.

Validation of hose tail, ferrule type and crimp specification for crimped fittings.

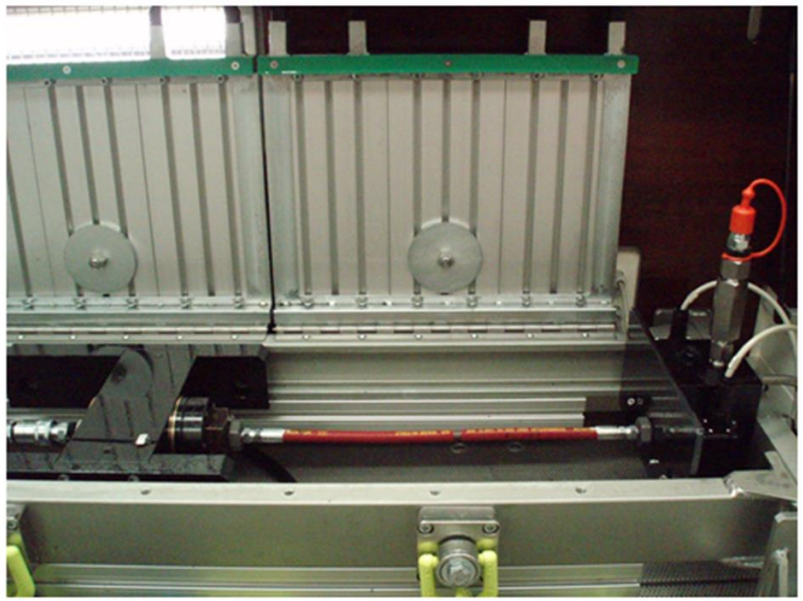
ISO 6605 “Hydraulic fluid power - Hoses and hose assemblies - Test methods”.

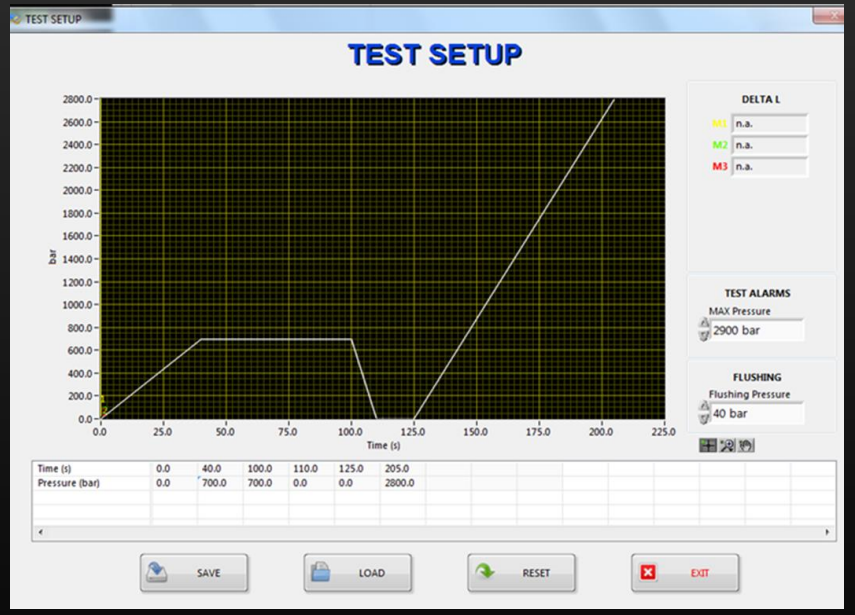
- Burst Test.
- Leakage Test.
- Hydraulic-pressure impulse test without flexing.

Burst Test and Leakage Test

Bimal BPS40/C Burst Test machine.

- Test stand for Hydrostatic pressure testing hose assemblies and components per ISO 6605/1402.
- Maximum test pressure of 4,000 Bar (58,000 psi).
- Test above 300 bar (4,300 psi) can programme pressure profiles that raise and lower the test pressure.





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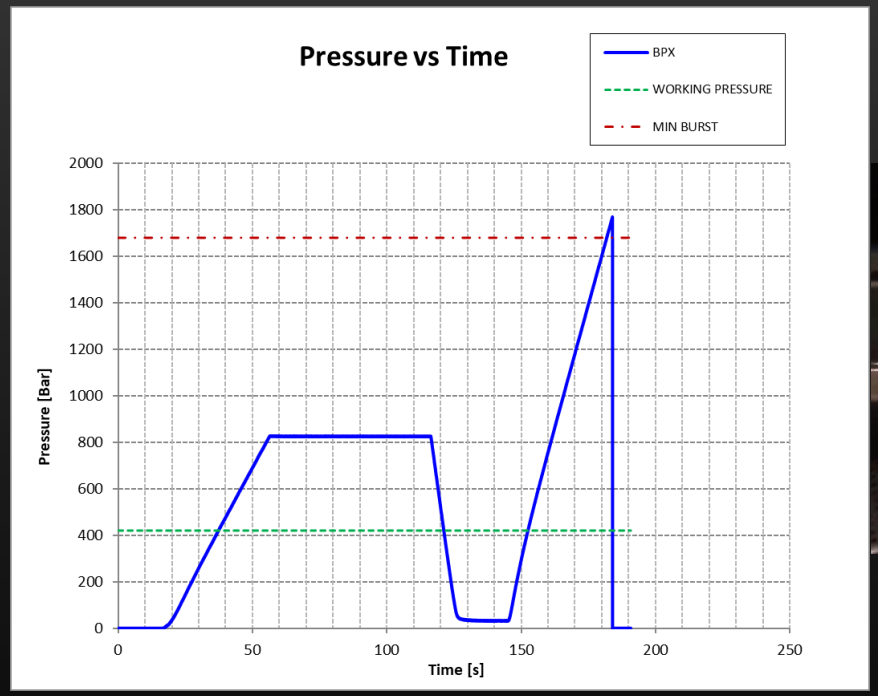
Burst Test – Destructive Test

Minimum burst pressure specified in relevant hose and fitting standards.

Typically minimum burst pressure is 4 x hose assembly maximum working pressure.

Hose assembly MUST NOT leak or rupture below minimum burst pressure.



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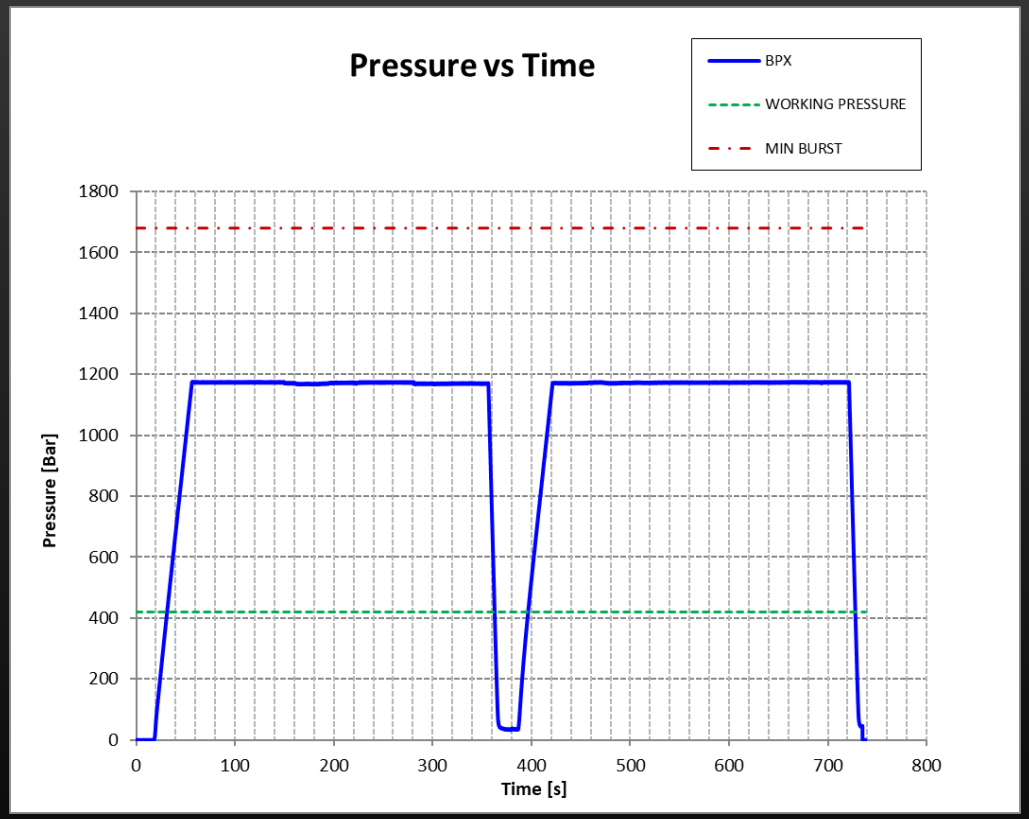
Leakage Test

Test pressure 70% of hose minimum burst pressure.

Pressure held for 2 cycles of 5 minutes.

Hose assembly MUST NOT leak or rupture during both pressure cycles.



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Pressure Impulse Test

Bimal Impulse Test machines.

- Test stand for hydraulic pressure impulse testing hose assemblies per ISO 6605/6803.
- Maximum test pressure of 1,000 Bar (14,500 psi).
- Maximum test oil temperature 135°C.

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Pressure Impulse Test

Maximum impulse pressure specified in relevant hose and fitting standards. Typically 120-133% of hose maximum working pressure.

Hose assembly 180° or 90° bend at hose minimum bend radius as specified in relevant standards or hose manufacturer specification.

Test oil temperature at hose maximum working temperatures specified in relevant standards or hose manufacturer specification.

Pressure cycle rate typical 1 Hz, 0.5 seconds high, 0.5 seconds low.

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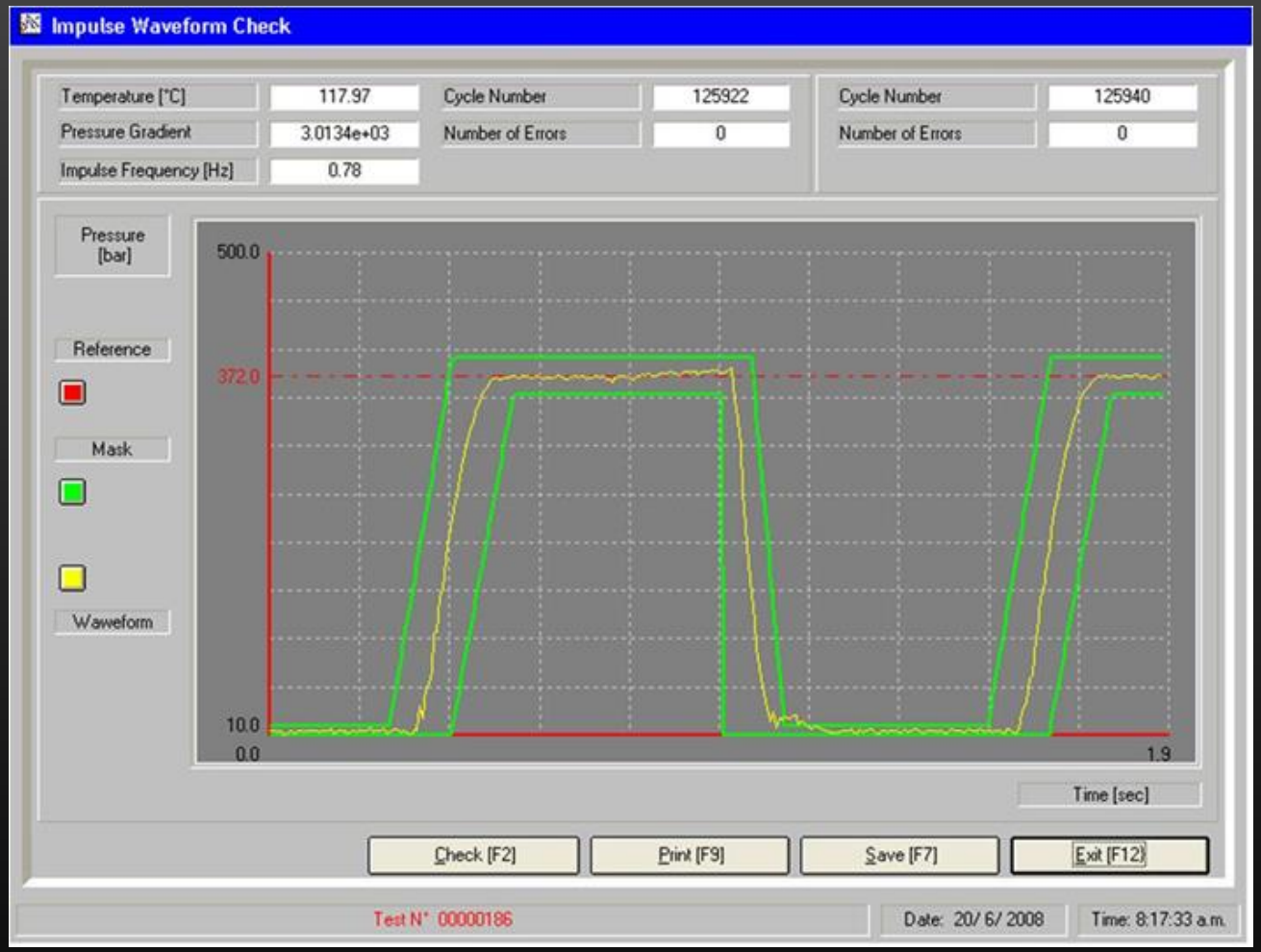
Pressure Impulse Test – Pressure Profile



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Pressure Impulse Test

Minimum pressure impulse cycles specified in relevant standards or hose manufacturer specification. Typically:

- SAE 100R1/ R7 – EN 1SN/ 1SC – 150,000 cycles.
- SAE 100R2/ R8/ R16/ R17/ R19 – EN 2SN/ 2SC – 200,000 cycles.
- SAE 100R12/ R13/ R15 – 500,000 cycles.

Hose assemblies MUST NOT show any leakage or other evidence of failure before reaching the specified number of cycles.

Questions

Thanks

Feel free to come and see us at the Trade Display.