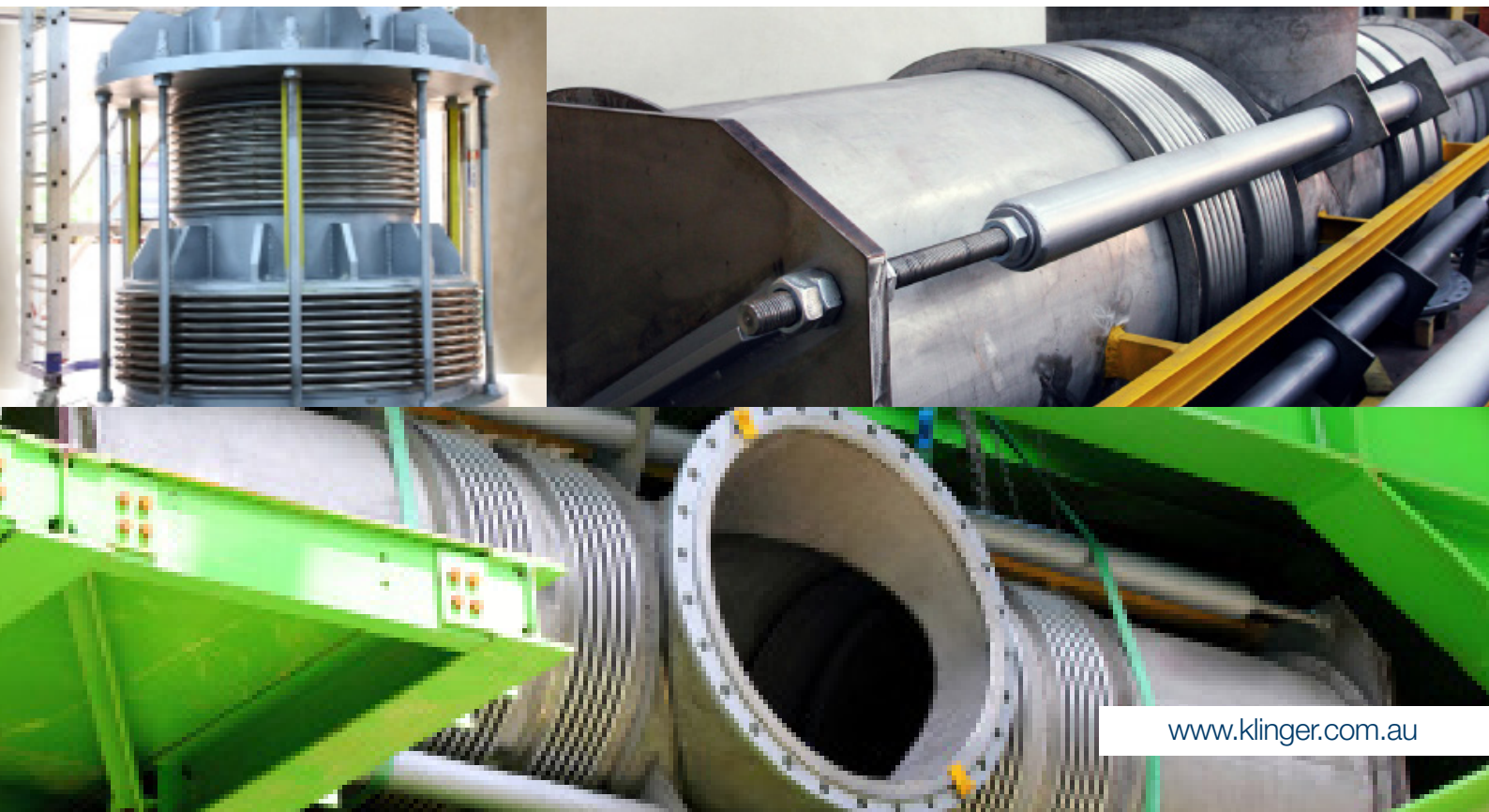




# METAL EXPANSION JOINTS PRESSURE TESTING

best practice checklist



# PRESSURE TESTING

Metal expansion joints need to be pressure tested to ensure safe and reliable operation and leak tightness of the system. Pressure testing must be carried out according to the stated test specifications on the drawing and/or the tag plates on the expansion joint. Use the below checklists as a best practice approach prior to, during and after pressure testing.

## PRIOR TO PRESSURE TESTING

- There is no evidence of damage to the expansion joint during installation
- The entire pipe system, especially anchors, guides and expansion joints are installed as shown in the drawings in the installation instructions
- Expansion joint is correctly fitted into the system and not used to correct fabrication inaccuracies
- The flow direction of the expansion joint is correct
- The bellows and other moving parts on the expansion joint are free from foreign objects such as insulating material
- All shipping bars, pre-tensioning devices, protective parts and packaging materials have been removed
- All guides, supports and expansion joints have been released to allow the expected movements in the pipe system
- If the system is designed for a light flow medium such as air or gas and is to be tested with a heavier medium such as water, have the necessary steps been taken to ensure that the extra dead-weight loads to the expansion joint and pipe system can be safely accommodated

# DURING PRESSURE TESTING

- Increase pressure gradually until the specified test pressure is reached
- In case of any doubt, test pressure should not exceed more than 1.5 x design pressure without previous written confirmation from manufacturer
- Check the expansion joint for any sign of leakage at the connections and check the gauges for pressure drops
- Examine the expansion joint for any signs of twisting, instability, squirming at the bellows or unexpected movement of any of its components
- Investigate and address any unexpected movement of the pipe system which could be pressure-related

# AFTER PRESSURE TESTING

- Check anchors and their attachments to civil works or structure do not display any signs of distress
- It should be noted that after testing, some residual testing fluid may remain in the bellows. If this is likely to affect the functioning of the system, make arrangements to remove the fluid

**!** **AVOID**  
**AT ALL TIMES**

- » Dropping or knocking the bellows
- » Using cleaning agents containing chlorides
- » Using steel wool or steel brushes on the bellows



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