



**CRYOGENIC PIPE ISOLATION
AND
HOT TAPPING SERVICES**

Cryogenic Pipe Isolation

Put simply, Pipe-freezing is a non-intrusive, controlled method of providing pipeline isolation, through the application of liquid nitrogen. The pipework freezing process begins by drawing out the heat from the product within the pipe until it reaches a temperature below its freeze point until eventually the product freezes to form an internal ice plug. The major advantage of liquid nitrogen or water pipe freezing is that a 'break-in' can be performed without incurring the costs and down-time of a complete system drain down.



Variety Of Applications

- Valve Installations
- Pipe Section Replacement
- Equipment Isolation
- Pipe Branch Terminations
- Pipe Diversion
- Pipeline Abandonment
- Metering installations
- * Subject to Certain conditions

Common Pipe Contents

- Water
- Acids
- Coolants
- Paints
- Alcohols
- Oils
- Liquid Food product
- Various Chemicals
- Sewage

Common Pipe Materials

- Carbon Steel
- Nickel Alloy
- Copper Based alloys
- Kunifer
- Aluminium alloys
- Stainless Steel
- Ductile and Cast Iron

Common Pipe Freezing application

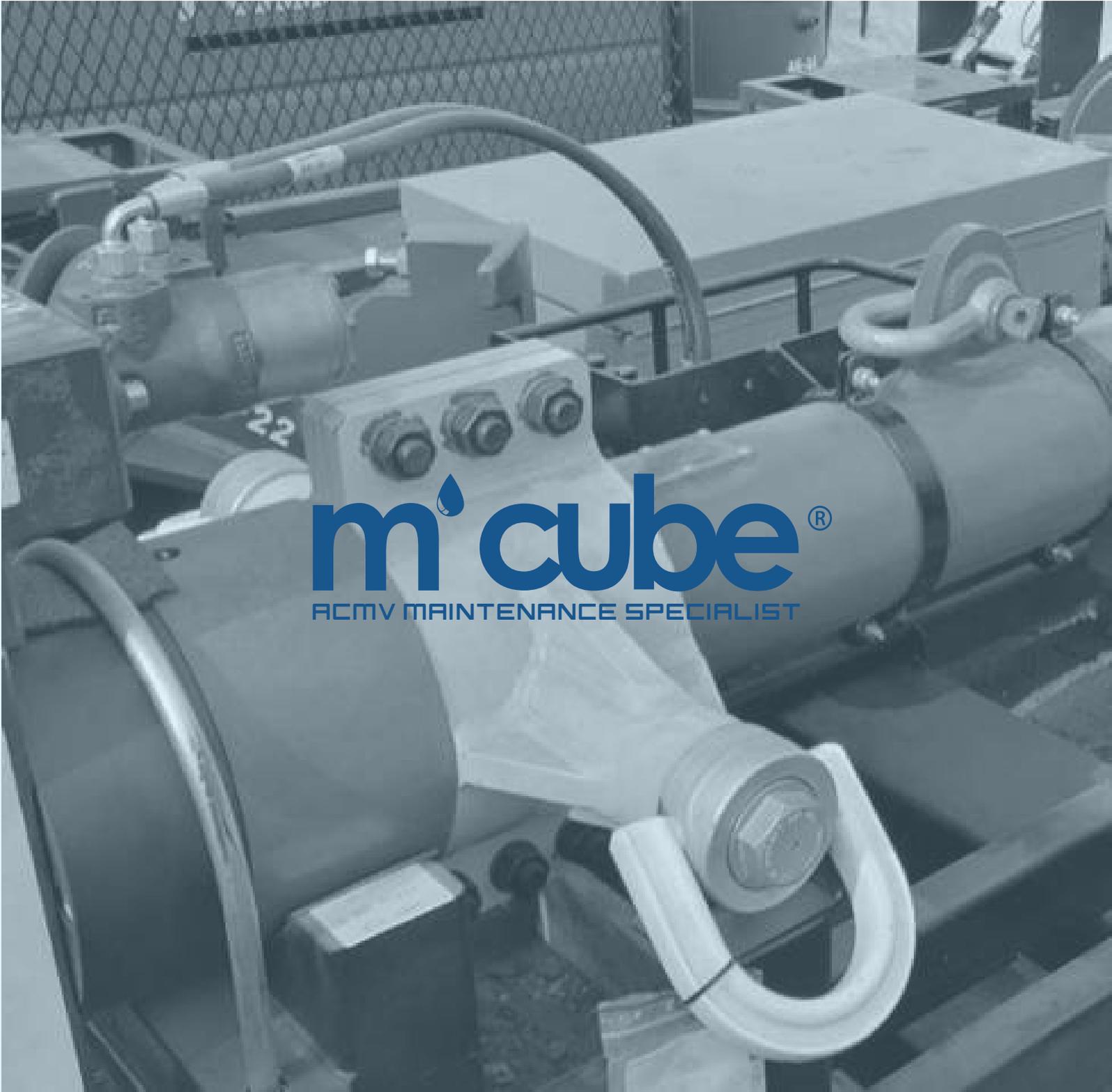
- Cooling Water
- Fire Protection Systems
- Process systems
- Fuel Oil Lines
- Sludge Lines
- Hydraulic Control Lines
- Domestic/Utility Systems
- Hydrocarbon Risers
- Water Injection Lines
- Heat Exchanger Lines
- Heating Services
- Chilled Water Systems

The Benefits of Pipe Freezing

Pipe freezing is widely acknowledged as a safe, reliable and highly cost effective method of temporary pipeline isolation and offers a number of major benefits some of which are:-

- No need to drain down systems, thus avoiding costly and time consuming venting procedures
- No need to arrange for the bulk transfer/storage of fluids
- Cuts losses of expensive liquids, such as treated water and system inhibitors.
- Overcomes the problems of handling hazardous materials and enhances safety when working on lines containing contaminated or volatile liquids.

Hot Tapping Services



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Hot Tapping Services

M-Cube Hot tapping is the method of making a new branch connection to an existing main water without interrupting service on that pipe. The primary alternative to a hot tap is shutting down the main and "cutting in a tee". There are many other commonly used names for hot tapping - including wet tapping, pressure tapping, and TS&V (short for tapping sleeve & valve).

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M-Cube's Hot Tapping Advantages :

- Same day or next day service - guaranteed (on standard size taps).
- Large on hand inventory of tapping sleeves and valves - to enable a quick resolution/successful installation if existing pipe type/size are different than planned.
- Full time PM and office staff to ensure that all aspects of the service, not just the tap itself, are effectively managed.
- Extensive knowledge of local specs and procedures and long standing relationships with inspection teams.
- Highly trained, experienced installation technicians.
- Real-time job/installation checklists are generated and provided to our customer at the end of every job (these checklists are stored permanently by M-Cube CMMS System, in case there is ever a question about work performed).
- Reduces scheduling variability (no need to coordinate the authorities on water main shutdown, which can often take multiple attempts).
- Eliminates the risk of water main contamination
- Reduces crew service time and off-peak hours scheduling.
- Saves time and costs, from start to finish.



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Why Hot Tap?

The purpose of hot tapping or why a company would prefer M-Cube's hot tapping services is when it's impractical to take the main pipe or vessel out of service to clean it by conventional methods. The benefits of hot tapping for pipes and vessels include zero water loss and no damages to the infrastructure.

Advantages of Hot Tapping

- No shutdown required and therefore no loss of production/ interruption to operation
- No loss of product within a pipe – No emission to the environment
- Reduced cost of planning of manpower and resources.
- Coupled with a line stop operation, valves can be repaired/ inserted, or damaged /corroded pipe or fittings can be replaced or long stretches of pipelines can be re-routed.

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Hot Tapping Service Area

Our primary service area for municipal and commercial hot tapping (12" and smaller) in Kuala Lumpur and Selangor areas. For larger diameter and mechanical projects outside this area - please contact us and we will work with you to determine if our solutions are right for your work.

For any enquiries or information, please contact us at:

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