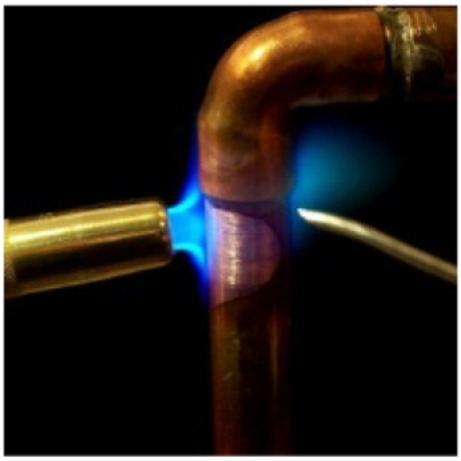
Mechanical Push Fit Connections - Reducing Construction Site Fire Risks

The risk of a fire during construction is considerable. Fire detection and extinguishing systems are normally inoperable. There are additional risks because the partially completed building does not have the final fire stopping installed. In addition, there are likely to be a greater amount of combustible materials on site during the construction phase.

The client & the CDM co-ordinator set out to reduce or eliminate hot work (eg for cutting, welding and jointing) wherever possible during the construction phase. However, normal methods of controlling the risk of fire (such as Hot Work permit to work system) can be insufficient or unreliable.

Consultation with mechanical contractors to establish how to eliminate hot work resulted in the majority of hot works carried out off-site, with components delivered as pre-assembled or prefabricated units. One simple idea to eliminate hot works is cold pipe jointing using innovative push fit methods on speed-fit piping. These have recently advanced sufficiently, making them suitable in all environments and specifications (glycol, potable water etc…)



Site Hot Work

Construction Site Fire

Small Diameter Push Fitting Elbow

Benefits

- Significant reduction in fire risk
- Ideal for confined space where fire, access & installation time increase risk to operatives
- Reduced need for inventory of flammable products (gas bottles etc) on site
- No special tools required (no crimp tool)
- No soldering
- No gas
- No flammable glue is needed (eliminates Fire Risk, RPE & DOSHH)
- The restrictions on hot works encourage significant prefabrication off site with a consequential reduction in personnel and waste production.

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