## **PRODUCT COMPATIBILITY**

In general, AIP products are designed or selected for compatibility and as such, we recommend they be used in conjunction with each other, for example **hose fittings and clamps**. Product quality and tolerances can vary between different brands and as such, could compromise the integrity of items such as hose assemblies, which could void warranties. Therefore, where possible, we recommend the use of AIP products in conjunction with each other.

## HOSE COUPLING

Before making any hose assembly, check over these general instructions and procedures:

- 1. Make sure that the hose ends are cut square. This will help prevent leakage of the coupling.
- 2. Lubricate the hose and shank for easier insertion; soap and water or even water alone are recommended lubricants.
- 3. Keep hose and coupling aligned as they are being pushed together. This avoids damaging the hose tube and ensures coupling reaches full insertion depth.
- 4. Locate clamp(s) over shank, usually in the middle of the shank.
- 5. Make certain that you are using the correct size clamp for the hose being coupled. Never attempt to enlarge the hose tube to make the coupling fit. Use of a nipple pusher tool will assist in pushing an oversize nipple into the hose.
- 6. Static bonding. Certain hoses have a wire built into the body for establishing electrical continuity between the ends.\* Continuity can be assured by using either of the following methods.
  - Method A Cut ends of hose square and seal with shellac or cement. Insert a flat brass pin into the centre of the static wire for about 6mm to 10mm, remembering that the wire is on a spiral. Bend the remaining end of the pin inside the hose so it will be in contact with the coupling. Some hoses have 2 wires, so be sure to connect both at each end.
  - Method B Cut off end of hose about 13mm, being careful not to damage or cut the wire. Bend the projecting length of wire inside the bore of the hose and seal the end of the hose with shellac or cement. Insert the coupling into the hose, making positive contact with the wire.

After assembly of couplings, inspect the inside of the hose for cuts, tears or bulges resulting from improper assembly. \*This can either be a tinned copper wire, or in the case of some wire reinforced hoses, the suction wire.

## HOSE COUPLINGS

Camlock Couplings	
Medium pressure couplings for use where quick or frequent connection and disconnection is required. Used mainly for suction and delivery of petroleum products, chemicals, water and other liquid or dry products. Available in aluminium, nyglass, polypropylene, bronze and stainless steel.	
Claw Couplings	
A medium pressure coupling used mainly on air or water hoses.	
Combination Nipple	
Low to medium pressure suction and discharge of water, slurries and other liquid or dry materials. Available in carbon steel in sizes up to 250mm. Normally attached with Band-It clamps or Double Bolt hose clamps.	
Ground Joint Coupling	
Used on high-pressure air, water, steam applications requiring a high-pressure coupling. Attached with 2 or 4 Bolt hose clamps.	
Muff Couplings	
Suitable only for use with Muff Coupling Hose. <b>Coupling Construction –</b> <b>Material</b> : High strength aluminium alloy. <b>Design</b> : Fully integrated sleeve with standard Table D flanges. Also available in cast iron, stainless steel and other materials to customer requirements.	
Internally Swaged Coupling	
This type of coupling is internally expanded to lock between the hose wall and the ferrule. As a "full flow" coupling is obtained, this coupling can be used with food, acid, materials handling and petroleum hoses. Available in stainless steel or carbon steel with plain, flanged, threaded, victaulic ends, in sizes from 50mm – 305mm.	