

# CARE & MAINTENANCE **RADCOFLEX**

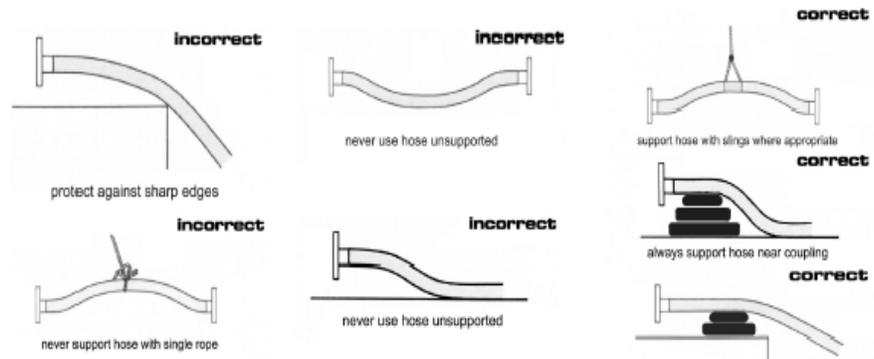
## Installing

Incorrect installation of a hose assembly will create stresses within the assembly and result in a premature failure. The following guidelines should be followed:

- hose assemblies must not be twisted either during installation or in use
- hoses must not be over flexed or bent into a smaller diameter than the specified minimum bend radius
- hose assemblies should be installed so that flexing always occurs in the same plane
- it is recommended that flanged assemblies have a floating flange on one end for easier installation and to reduce the possibility of twist.

## Handling

Hoses should be stored in a straight line on solid supports or racks. Large bore hoses should be carried on a trolley or moved by crane. Hoses must not be supported by a single rope or wire. A wide belt sling should be used, supporting the hose at least every 3 meters. Avoid curvatures that are less than the minimum bend radius of hose. Do not allow sharp bends adjacent to the end connection fitting - this area is the weakest spot in any type of hose. Hoses should not be dragged along the ground or over guard rails. Do not allow the hose to chafe (rub) against hard surfaces and/or sharp edges. If unavoidable, consider having the hoses rope lagged.



## Cleaning

Before storage, hoses should be drained and flushed with clean water to remove dangerous vapors, the exception being hoses which have been used for conveyants such as sulphuric acid when dilution with water could leave a very corrosive residue. In such instances, drain dry. Hoses must be electrically earthed during cleaning operations. Hoses may be cleaned using low pressure air, however hoses must be open-ended to avoid excessive pressure build up. Steam is not recommended for cleaning as the excessive temperature involved (over 100°C) will damage the hose fabrics. Pigging is not recommended.

## Inspection

Inspect hose for visual damage at least every six months, more often if experience demands it. Look for:

1. Weakening of the hose adjacent to the end fitting
2. Cuts and abrasions on the fabric cover
3. Abrasion of the outer wire
4. Displacement of the outer wire - identified by differing widths between each round of wire over the length
5. Dents, kinks or twisted sections

## Testing

Composite hose assemblies should be hydrostatically tested at least once every twelve (12) months and electrical continuity tested, where applicable, at least once every six (6) months. See 'hose assembly testing' data sheet.

## HOSE ASSEMBLY & TESTING

### Hydrostatic testing

Composite hoses should be hydrostatically tested with water at least once every twelve (12) months. The test pressure should be no greater than 1.5 times the proposed working pressure of the assembly as determined by the lower of the assembly's actual working pressure or the maximum working pressure as listed in the product data sheets (see note below).

Some Standards and Codes call for a lower test pressure and where the assembly is operating under this code, the lower test pressure calculation should be used. For example, the Australian Institute of Petroleum Code of Practice CP27 calls for testing at only 1.25 times the nominated working pressure.

**Note:** Where the hose and end coupling working pressures differ, the maximum working pressure of the assembly is that of the lowest rated component. Elongation is not a satisfactory way of judging deterioration of a composite hose, as by its method of manufacture some elongation is to be expected.

### Electrical continuity test

Fuel and Oil composite hoses should be tested for correct electrical continuity at least once every six (6) months or in accordance with relative industry standards. By laying the hoses on dry ground and testing with an approved electrical measuring device, hoses can be checked that they meet the electrical continuity specifications shown on the original Radcoflex tag attached to the hose. Hoses not meeting these specifications should be retired from service. The electrical continuity of other composite hoses with inner and outer wire can also be checked if required. However, the electrical continuity of Transchem cannot be checked due to the polypropylene coating on the inner wire. To check Transchem, the inner metal of the wire would need to be exposed (from the polypropylene cover), which would create an opening for future corrosive attack.

**NOTE:** This information is for guidance only, dimensions and weights shown are approximate.  
We reserve the right to alter or amend specifications as deemed necessary.

**RADCOFLEX® reserves the right to change product specifications without notice.**

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