

## **Comments & Exceptions for API 676**

GlobalGear® Pump

## **Abstract**

Tuthill's GlobalGear® series pumps meet the intent of API Standard 676 specifications in all cases with the exception of some specific points which are outlined below referencing the individual API requirement paragraph. In certain cases API specifications can be met through additional pump features which are not standard design. Additional cost may be incurred by the purchaser for these instances as indicated.

6.1.17.3	Internal-socket-type (aka SHCS) bolts are utilized in the design of the pumps.
6.3.1.4	Corrosion allowance is not standard design. 3mm (0.12") material loss would result in a rapid decline in performance requiring pump replacement and therefore has not been considered in the pump design.
6.3.4	The vast majority of tapped holes comply but there are exceptions where the depth of the tapped hole is slightly less than the required 1.5 times the diameter.
6.3.5	Pump design uses register fitted components to facilitate disassembly/reassembly. Jackscrew locations do not have one of the faces relieved.
6.5.4.3	Tapped openings not connected to piping are plugged with commercially available plugs and may not comply with solid round-head steel plugs per ASME B16.11.Tuthill standard is to use PTFE tape on threads for sealing plugged connections. Contact Tuthill if either of the above presents problems.
6.6.1.2	Class 300# flanges thicknesses are not provided for 150# flanges.
6.6.1.4	Specific size flanges are not designed for through-bolting and require studs threaded into the flange face. Studs may be fully threaded.
6.8.1.6	Shaft keyways do not have fillet radii conforming to ASME B17.1
6.13.2.18	Bolting material standard is Class 8.8, per DIN 933-A2 for fully threaded fasteners and DIN 931-A2 for partially threaded fasteners.

