

## LARGE DIAMETER CHECK VALVES

Goodwin specializes in the manufacture of large diameter valves, being capable of manufacturing valves to 144" diameter in all materials and relevant pressure classes.

### Applicable Flange Standards

26" – 60": ANSI B16.47 Series A  
ANSI B16.47 Series B

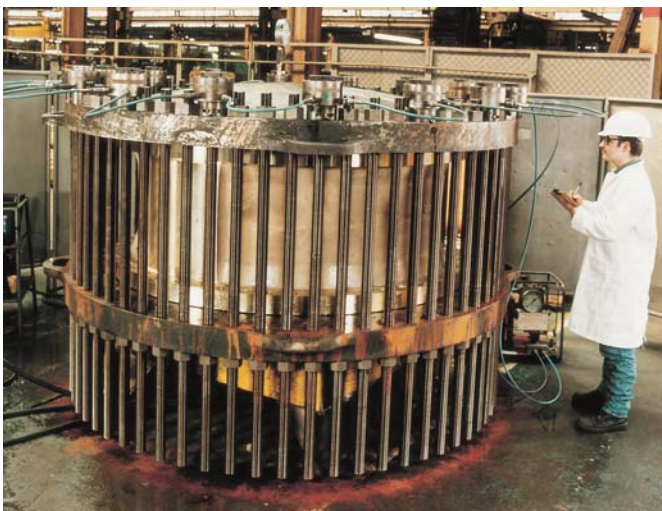
66" – 144": AWWA C207 Class B, D, E & F and Taylor Forge.

With its in-house foundry and pattern shop, Goodwin is able to closely control the quality and integrity of these very large valve castings.

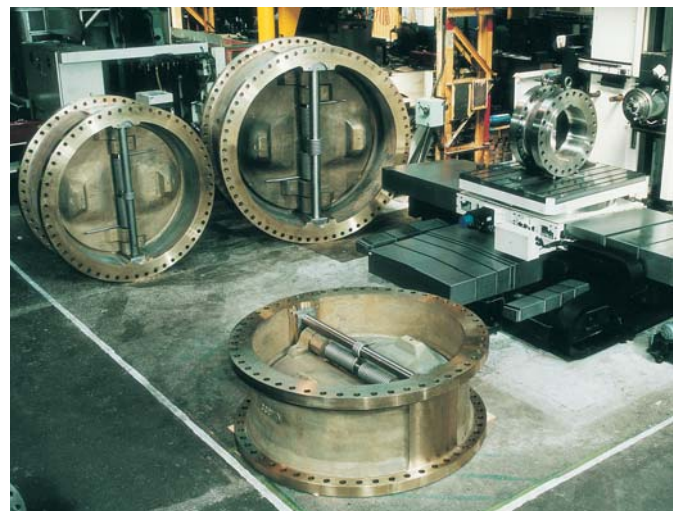
Often the larger valves are supplied into water applications. Typical materials of construction are Ni-Resist Iron, Rubber lined Carbon Steel, Aluminium Bronze, Duplex Stainless Steel and CF8M Stainless Steel. Goodwin can supply these materials and others as listed on page 5.



52" 150lb Dual Plate Check Valve



84" 150 lb valve undergoing hydrotest in Goodwin factory



Two 66" 150 lb and one 84" 150 lb Check Valves in Aluminium Bronze

The two photographs above show valves supplied to Ibn Rushd (SABIC) for the Utilities Plant at its PTA & Aromatics Complex in Yanbu, Saudi Arabia. The 84" is installed on the seawater Intake line and a total of three 66" valves are installed on the seawater discharge pumps.

Many large diameter valves are required in Desalination plants where Goodwin has gained extensive experience. With these plants seawater is converted into potable water. Stagnant seawater poses significant corrosion problems if the correct materials are not selected. Goodwin recommends the use of Inconel 625 spring in both stagnant seawater and oxygenated brine applications.

Large diameter Goodwin dual plate check valves are utilised in a wide variety of industries and increasingly so in the LNG market, where valves are in service at temperatures of -161°C. The adjacent photograph shows one such valve cooling down for cryogenic testing at -196°C at Goodwin International's in-house cryogenic test facility.



70" 150 lb valve cooling down for cryogenic test.