

The Industry's largest selection of valves that combine the corrosion resistance of Teflon[®] with the strength of metal

Inside the gatefold at the right, you'll see PHOENIX complete lined valves line at glance... four different valves types. Since the maximum recommended use temperature for each valve depends on the liner resin used, these limits are provided below.

The best of two materials

These Teflon-lined valves combine the best properties of two different materials of construction. On the outside, a metal body provides ease of installation, strength, shock resistance and a high pressure handling capability.

On the inside, a teflon lining offers corrosion resistance even stainless & high alloy metal valves can not match at a cost that is usually lower. This thick teflon lining also provides abrasion & erosion resistance as well as low thermal conductivity.

Handle any corrosive

With one of their three basic teflon liners, Phoenix valves will handle an almost unlimited variety of corrosives at a temperature from -40° C to +230° C.

That includes acids, caustics, waste streams, salt solutions, saturated slurries, oxidants, reducing agents, organics and many other fluids.

Protect stream purity

In addition to corrosive handling, Phoenix lined valves are used in processes where maintaining stream purity is vital, such as the handling of food and pharmaceutical products.

Lined valves are also very useful for applications where added protection is needed against system failure particularly when sudden leakages and spillage of dangerous or toxic fluids can cause environmental damage or injure the operating personnel.

Maximum Valve Operating Temperatures

The recommended upper temperature limits for Phoenix teflon lined valves vary with the liner selected and aggressiveness of the fluid handled. The maximum temperature shown here for each liner material is only a **general** limit. To determine which liners are suitable for the fluid to be handled and the specific maximum temperature limit of liner for that fluid, kindly refer to us.

Liner Material	Resin Description	Maximum Temp.
Teflon PTFE	Poly tetrafluoro ethylene	230° C
Teflon PFA	Perfluoroalkoxy copolymer	230° C
Teflon FEP	Perfluoro ethylene propylene copolymer	200° C

Thick Quality Liners

Section any Phoenix valve in half and you will see not only a thick teflon liner, but one with closely controlled thickness throughout. The manufacturing process is carefully controlled to assure that liners will not thin out around sharp corners or in deep draws.

Our thick liners are superior in ability to withstand thermal cycling, mechanical shock and permeation by corrosive problems that can cause failures in a thinner liners.

A rigorous system of 100% Valve testing

Liner resins, castings and component parts are sampled to ensure compliance with Phoenix specifications. But we do not stop with these random checks.

Each and every valve despatched to you by Phoenix is tested in two different ways in accordance to API/BS standards.

First, each valve is spark-tested at 10,000 volts to assure liner integrity. Second, it is hydrostatically shell-tested at 1.5 times the maximum rated pressure.

Backed by one-year Valve guarantee

We test 100% of our valves as one part of an overall commitment to product quality. That's why we offer our valves with a one-year guarantee against factory defect in materials and workmanship.

"We want the valve we sell you today to be best reason for coming back to us for tomorrow."

Single-Source The entire system

With Phoenix, you can order your valves from the same supplier who provides all other teflon lined piping components for your system.

This allows undivided responsibility for quality and delivery.