

SURFACE CHOKE VALVES

TECHNICALLY ADVANCED SURFACE CHOKES - FOR DEMANDING APPLICATIONS

The KKI Series 73 surface choke valve offers a unique solution for the majority of choke applications in the oil and gas industry. The flexible valve design can incorporate many different trim and body material options to suit differing flow rates and in-service conditions. Thousands of KKI Series 73 surface chokes are installed around the world on projects for some of the world's leading oil and gas production companies.



TECHNICALLY ADVANCED SURFACE CHOKE VALVES - SERIES 73

SIZES: 1" to 16" (25mm to 400mm)

RATINGS: ASME 600 to 4,500/API 6A 3,000 to 15,000

WHY CHOOSE A SERIES 73 CHOKE VALVE?

- Proven design for more than 30 years.
- Designed and manufactured to ASME B16.34/API 6A/ISO 10423.
- Choose from numerous trim designs, from single-stage, high-capacity to multi-stage low noise and anti-cavitation.
- Patented sand-resistant LCV trim design.
- Choke design has inherently high capacity and rangeability.

FEATURES:

- Choke body materials can be of forged, HIPped or cast construction.
- Robust cartridge trim (bi-directional flow option).
- Patented plug/seat design for heavily contaminated flows.
- Solid or balanced plug available.
- High-grade premium carbide trims for optimum erosion resistance.
- Brick stopper anti-collapse trim available.
- Seals are resilient and do not suffer from explosive decompression.
- Choose from a wide range of actuator options.



TRIM DESIGN:

All KKI Series 73 choke valves use the low-pressure recovery High Friction (HF) trim design, which dissipates and controls high energy, velocity and turbulence within the confines of the trim - preventing erosion damage to the pressure-containing boundaries. Single or multi-stage trims can be used, depending on the application and service conditions. On multi-stage trims, the holes are aligned so that the individual jets must repeatedly change direction in the recovery chambers between each sleeve. This results in controlled, staged pressure reduction without causing cavitation and its associated problems of erosion, vibration and noise.

HF HIGH FRICTION CARTRIDGE TRIM:

- Divides the main flow into many small streams, increasing turbulence and noise peak frequency and maximising the pipe wall transmission loss.
- High energy levels, pressure and velocity are dissipated within the trim - avoiding erosion damage.
- Design of final stage ensures low-velocity non-interacting jets, avoiding unnecessary noise generation in the choke outlet.
- Various trim sizes can be used on different choke body sizes, to suit a wide range of process parameters.
- The inner tungsten carbide control elements are protected from impact damage by the outer cartridge sleeve.

HF-LCV ANTI-EROSION TRIM DESIGN:

On applications where there is a risk of high sand contamination, the HF-LCV trim design is the ideal choice. It has been independently tested and has proved very successful in some of the most erosive service conditions.

- Premium-grade solid tungsten carbide critical control elements.
- Solid tungsten carbide sacrificial plug nose.
- Shrouded plug seat, protected from the high erosive flow path.
- Hole development dead band - the seating area is removed from the main flow area.
- Stem scrapers prevent migration of sand into the stem seal area.
- Resilient plug seals with scraper rings.
- Metallic 'brick stopper' prevents solid particles impacting directly on the tungsten carbide.
- Optional tungsten carbide wear sleeve.