Orifice Plates
Simple, Predictable and Reliable Differential Flow Measurement

Series 500 & 520 Universal Plates and Seals
Series 560 & 590 Ring Type Joint Plates

We manufacture all of our flow measurement universal orifice plates, paddle plates, ring type joint (RTJ) plates and restriction orifice unions to meet or exceed standards set by A.G.A., I.S.A., A.N.S.I., A.S.M.E. and A.P.I. recommendations. Stocked plates include 304 & 316 stainless steel in 1/8” and 1/4” thicknesses. Other material and/or thicknesses are available upon request. We bore the plates to the customer’s supplied sizing calculation, but we also provide sizing calculation services for an additional fee.

Series 500 Orifice Plates & Seals

Our Universal Orifice Plates are designed to be used with all standard orifice fitting assemblies or RTJ plate holders. Standard industry sizing allows our plates to be used with any of the dual- or single-chambered orifice fittings on the market.

Seal rings for Series 500 Orifice Plates are sold separately.

Series 520 Paddle Orifice Plates

USA Industries’ Paddle-Type Orifice Plates are manufactured for use with Raised Face Orifice Flanges and Holding Blocks.

Skilled craftsmen and state-of-the-art machining practices assure that our paddle orifice plates meet or exceed the stringent requirements of AGA, ISA, ANSI, ASME & API Standards.

Series 560 Plates & 590 Plate Holders

Series 560 plates are machined as one piece and available in all ring sizes.

Series 590 plates are manufactured with hold-down screws and use Universal Plates for the Orifice bore.

The RTJ type orifice plate incorporates an integral gasket, either oval or octagonal ring, for mounting between RTJ flanges. It’s proven technology has no moving parts and is suitable for high temperature and pressure applications.

Plate thicknesses depend on line size and differential pressure, and may be machined in one piece, or alternatively from two pieces, with an Orifice Plate screwed onto a carrier ring/gasket.

Restriction Orifice Unions

Restriction Orifice Unions consist of orifice plates that are one-piece stainless steel shaped to fit the contour of the union seat (ball to cone), eliminating the need for gaskets. Plates can be configured to work as recessed, pressed, or pressed with tab so you can identify the orifice size without breaking the union.

Orifice unions are stocked in carbon & stainless steel bodies with pressure ratings of 3,000 PSIG. Restriction orifice unions are also available in line sizes from 1/4” through 2” and with female NPT or socket-weld connections. Other non-standard orifice union sizes and materials can be produced rapidly upon request.

For more information on USA Industries, Inc.’s products, contact us at (713) 941-3797 or go to www.USAIIndustries.com