

# Pulsation Control Equipment

MATTCO provides custom tailored pulsation control for liquid, mud and slurry applications inclusive of all makes and models of reciprocating pumps for the oilfield service, forging plant, water purification, electrical power generation and many other industries. With designs ranging from 150 to 10,000 PSI, MATTCO eliminates 100% of the damaging harmonic resonance. Custom OEM designs and ASME, ABS, CE and DNV certifications are available.

## Suction Stabilization and Control

MATTCO Suction Stabilization and Control products are designed to stabilize the velocity variation of the suction feed stream. Using a closed cell foam, MATTCO's maintenance-free solution is currently the only method available to eliminate acceleration head loss between the suction feed system and the reciprocating pump. By reducing peak-to-peak hydraulic pressure variation to near zero: hydraulic resonance cannot occur in suction piping, the potential for pump cavitation is completely eliminated, each cylinder is guaranteed proper feeding so the pump can operate at full rated speed, and particulate matter will remain in suspension which protects against damaging uneven wear to suction pump valves. In many pump systems, acceleration head loss also directly results in piston cross head shock which can greatly shorten the service life of costly power-end components such as crankshafts and bearings.

## Discharge Pulsation Control

MATTCO Discharge Pulsation Dampeners are designed to stabilize the velocity variation of the liquid, mud or slurry for all makes and models of reciprocating pumps. MATTCO can nearly eliminate

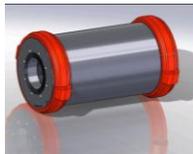
peak to peak pressure variations at all pump operating speeds. The elimination of pump and system dynamic responses directly results in increased safety, improved MWD signal processing and extended life of the pump and system components

## Cellular Suction Stabilizing Manifold (U.S. Patent 7,621,728)



MATTCO Cellular Suction Stabilizing Manifolds are the premium solution since performance is optimized when the stabilizer is used in place of a traditional intake manifold.

## Cellular Suction Stabilizer



MATTCO Cellular Suction Stabilizers utilize a flow through design and have been the best performing suction stabilizers for the drilling industry for many years. The CSS is configured for simple and easy installation.

## Pneumatic Pulsation Dampeners



MATTCO Pneumatic Discharge Dampeners are available in both 10 gallon and 20 gallon versions ranging in operating pressure from 3,000 to 10,000 psi. Molded bladders are interchangeable with Hydril series K dampeners. The replaceable bottom plate connects to standard API flanges.

## Maintenance-Free Pulsation Dampeners



MATTCO Maintenance-Free Discharge Dampeners are available in all sizes from 5 to 160 gallons ranging in operating pressure from 200 to 10,000 psi.

## Combination Dampener



MATTCO's Combination Discharge Dampener offers the synergistic benefits of both the Maintenance-Free and Pneumatic Discharge Dampeners. The combination dampener includes a strainer on the outlet so it takes the place of one pneumatic dampener, one maintenance-free dampener and a strainer cross. As a result, performance is optimized while the weight and footprint are minimized.

## Wave Blockers



MATTCO Wave Blockers eliminate up to 70% of the hydraulic resonance in discharge piping. They can be utilized in conjunction with MATTCO's Maintenance Free Discharge Dampeners or the Wave Blockers can be ordered as a stand-alone solution for hydraulic resonance. Designed with a proprietary ceramic insert, the wave blockers have a service life in excess of 5 years.

**Proper sizing and location of pulsation control equipment is essential to its performance. Call us today for your specific application.**

## Mattco Fluid Ends

**Fluid Ends, Strainer Crosses, Suction and Discharge Manifolds, Strainer Crosses, Spools, Fluid End Parts and Gaskets**



MATTCO specializes in equipment for all makes and models of reciprocating pumps with operating pressures from 150 to 10,000 PSI. MATTCO duplex and triplex fluid ends are

identical replacements for original equipment and accept standardized components and expendables. Custom designs and ASME, ABS, CE and DNV certifications are available.

## Bear Instruments

The Bear Cat Automatic Driller and Twin-Stop are extremely rugged and simple to install and operate and require little maintenance.

### Bear Cat Automatic Driller

The Bear Cat Automatic Driller provides for a consistent weight on the bit which results in an increased life span and reduces drilling cost. It is 100% pneumatic.

### Bear Cat Twin- Stop



The Bear Cat Twin-Stop is the premier safety device that sets the brake to stop the drawworks motion in both directions. It engages the drawwork's brake automatically, in

either direction, at pre-set points. As a result, it protects both the rotary floor and the crown block.

## TTE Brake Rims and Discs



TTE specializes in XTRA-Life™ rims and discs for all manufacturers of drawworks and many industrial applications. XTRA-Life™ rims and discs are produced with a special high-alloy material that greatly extends service life and extends brake-block life by resisting grooving, streaking and ribbing. Service histories show that TTE rims and discs last more than twice as long as non-hardened, Q&T and flame hardened products. Service life can be further extended through an integrated water-cooling jacket which is offered in either a low-carbon or stainless steel configuration. Custom OEM designs and ASME, ABS, CE and DNV certifications are available.



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**Serving the Oilfield Industry  
Since 1947**



MATTCO Manufacturing, an independent manufacturer specializing in the oilfield service industry since 1947, provides a full array of products from custom engineered components to complete OEM solutions for many of the world's largest reciprocating pump and drawworks equipment companies.

MATTCO Manufacturing provides three main product brands: MATTCO, TTE and Bear. All products are proudly made in the USA and can be delivered with ASME, ABS, CE and DNV certifications.