

Doebritz Motor Stand - Official Technical Overview & Datasheet

PRODUCT IDENTIFICATION: DOEBRITZ MOTOR STAND

Engineered for the precise mounting, alignment, and vibration damping of rotary valve drive systems, the Doebritz Motor Stand is a critical structural component in any industrial bulk handling or pneumatic conveying line. Designed to support IEC and NEMA frame motors, this stand ensures concentricity between the motor shaft and the valve input shaft, thereby extending seal life, reducing coupling wear, and maintaining volumetric efficiency. Manufactured from heavy-gauge carbon steel or stainless steel with an optional anti-corrosion coating, the Doebritz Motor Stand is a silent guarantor of uptime in cement, chemical, food, and mining applications.



INTERNAL AIRLOCK TOPOLOGY & INTERFACE LOGIC

The Motor Stand functions as the dedicated load-bearing bridge between the drive motor and the Doebritz rotary airlock or diverter valve. It eliminates cantilever stress on the valve's input bearing housing. All units feature a precision-machined top plate with slotted or fixed mounting holes compatible with major motor foot patterns (IEC 80-280, NEMA 143TC-405TC). The bottom mounting flange interfaces directly with the Doebritz valve drive bracket or an independent floor plate. A hollow central column allows free access for shaft coupling guarding and tachometer feedback sensors.

WEAR DEFENSE MECHANISMS & STRUCTURAL INTEGRITY

- BIFURCATED COLUMN DESIGN: Reduces harmonic resonance from drive torque pulses, preventing micro-movements that cause coupling misalignment.
- INTEGRATED SHIM POCKETS: Factory-machined pockets under the motor plate accept precision stainless steel shims for sub-millimeter height adjustments without removing the motor.
- DUAL-PHASE EPOXY COATING (Optional): Provides 1,500+ hour salt spray resistance for offshore or chemical washdown environments.
- FULLY WELDED SEAM CONSTRUCTION: All Doebritz stands undergo 100% visual and dye penetrant inspection on critical welds.

OPERATIONAL ADVANTAGES

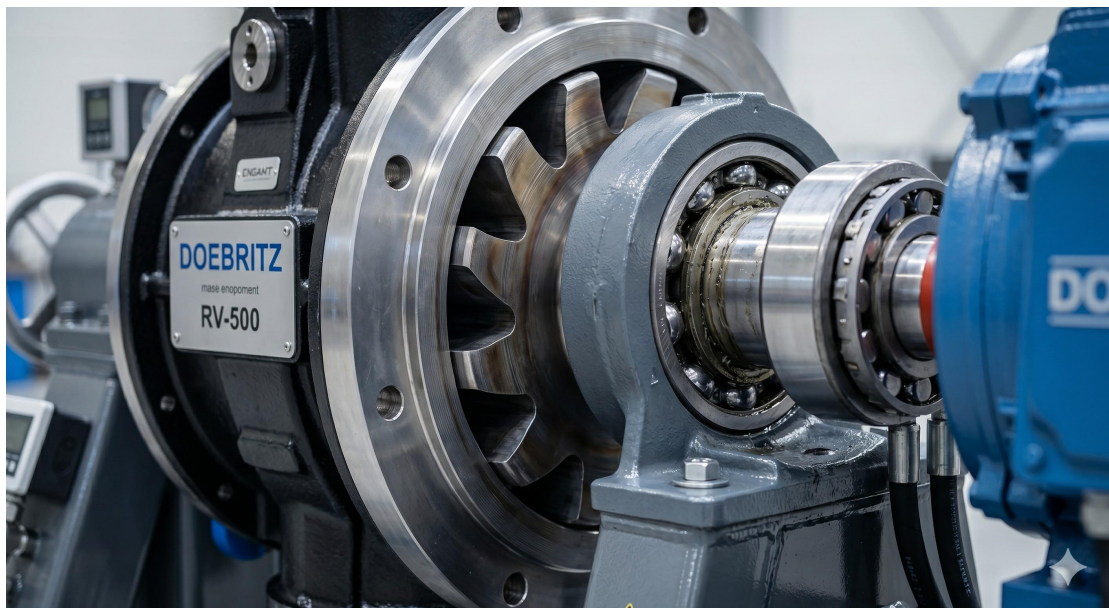
- Reduces drive-end bearing replacement frequency by up to 40% compared to direct foot mounting.
- Maintains alignment under thermal expansion up to 120°C continuous (250°C intermittent with Inconel hardware).
- Compatible with all Doebritz chain guard kits and torque arm restraint systems.
- Quick-release bolt access ports for coupling realignment without full motor disassembly.

SPECIFICATION MATRIX

Parameter	Specification
Material Options	Carbon Steel (ASTM A36) / Stainless Steel (304/316L)
Motor Frame Compatibility	IEC 80-280 / NEMA 143TC-405TC
Top Plate Flatness Tolerance	±0.1 mm over full surface
Maximum Static Load	750 kg (1,654 lbs) standard / 1,200 kg optional
Coating System	Epoxy polyester hybrid, 80-120 microns DFT

REGULATORY COMPLIANCE

- OSHA 1910.212 (Guarding requirements) – Stand design includes pre-drilled guard mounting bosses.
- ATEX 2014/34/EU: Optionally certified for II 2D c T120°C (dust zones 21/22) and II 2G c T4 (gas zones 1/2).
- ISO 9001:2015 manufacturing traceability. All welds comply with EN 1090 or AWS D1.1.
- NACE MR0175 (optional stainless material for sour gas environments).



DEPLOYMENT & ORDERING LOGIC

Each Doebritz Motor Stand is shipped with factory alignment verification report,

grade 8.8 hardware kit, and a set of stainless steel alignment shims (0.5mm to 3.0mm). Upon order, provide motor frame size, valve model, and coupling type. For custom motor heights (non-standard shaft centers), Doebritz offers a bespoke fabrication service with a 2-week lead time. All stands are compatible with explosion-proof motors and hydraulic drives. Mandatory periodic inspection interval: 6 months for torque retention.