Chemineer Agitator Drive	
Mfg: Chemineer	Model: 2HSA-15
Stock No. BWSS01.	Serial No <u>.</u>

Chemineer Agitator Drive. Model 2HSA-15. Drive element has: right-angle design, spiral bevel gearing, high-capacity tapered roller bearings, positive lubrication, extra capacity reducer shaft, and a rugged steel construction. Reliance Electric Motor, 15 hp, 1760 rpm, 370 rpm (final), 230/460 V, 40/20 amps, 60 Hz, 3 phase. Shaft dimensions: 1-1/2 in. dia. x 24-1/2 in L. Mounting base has a 13 in. dia. flange with (8) 7/8 in. dia. attachment holes at a center-to-center distance of 4-1/2 in. Overall dimensions: 39 in. L x 19-1/2 in. W x 51 in. H.











## **Chemineer HS Agitator**

HS Side-Entering Agitators offer the same ruggedness, dependability and simplicity of design found in our other high-quality turbine agitators and mixers. At the heart of the HS Agitator is a right-angle drive exclusively engineered for side-entering agitator service. Chemineer HS Side-Entering Turbine Agitators work efficiently when a tank is too large for convenient installation of a top-entering agitator, or where headroom is severely limited. Supporting a top-entering agitator on a large tank is often far more expensive than the installation of a side-entering agitator. Long shafts on extremely tall tanks can be eliminated for cost savings and design simplicity. For large tank installations, several smaller side-entering agitators may be more efficient and economical than a single, larger unit. The HS Agitator is available in four standard sizes from 1 to 75 hp. Special designs, up to 250 hp, are available. The wide range of power selections and seal options, combined with two standard output speeds and accurately sized impellers, means that there is an HS agitator available for nearly every standard application. Consider HS Side-Entering Agitators for process applications involving continuous blending, heat transfer, mass transfer or solids suspension.

## **Drive Elements**

**Right-Angle Design** The right-angle gear design of the HS Agitator reduces overhung load and minimizes nozzle reinforcement requirements. A structural steel support leg is standard on HS Agitators with optional adjustable tie-rods available.

**Spiral Bevel Gearing** HS drives utilize hardened spiral bevel gearing sized to provide heavy-duty performance and strength. All gears are load-rated per AGMA standards and inspected to AGMA Quality 10 levels.

**High-Capacity Tapered Roller Bearings** Rated at a minimum of 30,000 -hour L10 bearing life, the Timken ® high-capacity, tapered roller bearings throughout the HS drive provide long service life and exceptional wear resistance.

**Positive Lubrication** All gears and bearings in the HS drive are splash-lubricated by an exclusive system developed by Chemineer. Double lip seals on the drive shaft prevents oil loss or the infiltration of contaminants.

**Extra Capacity Reducer Shaft** Due to a large cross-section, the low-speed shaft inside the drive minimizes gear misalignment and deflection. The extension shaft is also designed to minimize deflection for superior seal life. Shafts are stocked in carbon steel as well as types 304 and 316 stainless steel. Machinable alloys are also available to address an even wider array of applications.

**Motor Types and Mounting** For installation flexibility and easy mounting, the HS Agitator is compatible with standard foot-mounted electric motors ranging from 1 to 75 hp. Vertical adjusting screws permit precise alignment of the motor even when the agitator is mounted on the tank. Readily available, standard couplings reduce costs and replacement difficulties.

**Rugged Steel Construction** Drive housings, support pedestals and mounting feet are fabricated from steel plate using high-tech NC machining equipment. Each component must then pass a quality inspection on a computerized precision coordinate measuring inspection machine. Each housing features lifting lugs and eyebolts for simplified, safe handling of the agitator during installation and removal. Catalyzed, polyurethane exterior finishes protect against corrosion in both indoor and outdoor operating environments.

**Tank Shut-Off System** A retracting mechanism and seal shut-off are standard on all HS Agitators. This permits the replacement of cartridge mechanical seals or the repacking of stuffing boxes without emptying the tank. The mechanical seal shut-off is engaged when the easily accessible retraction bolt pulls the shaft shut-off collar back into the flange housing. The shut-off seal is provided by a fluoroelastomer O-ring. The shaft is then rotated to lock the extension shaft into the housing. This locking feature assures positive shut-off and shaft stability during a mechanical seal change. The stuffing box shut-off is accomplished by simply tightening the retraction bolt, which pulls the shut-off collar back and holds it securely. The seal is provided by a corrosion-resistant gasket sandwiched between the shut-off collar and the mounting flange.