



**DESIGN INTEGRATED TECHNOLOGY, INC.**

**100 E. FRANKLIN ST. WARRENTON, VA 20186**

**TF: 888.567.8213 P: 540.349.9425 F: 540.349.8092**

**DIT@DITUSA.COM | WWW.DITUSA.COM**

# 5SC HELICONE MIXER

## STANDARD SPECIFICATIONS

|                      |   |   |
|----------------------|---|---|
| <b>CAPACITY</b>      | Batch Range = 1.25 to 5 gallon (4.7 to 18.9 L)  | Maximum Internal Volume = 8 gallon (30.3 L) |
| <b>DIMENSIONS</b>    | 36" Depth x 45" Width x 73" Height  |   |
| <b>WEIGHT</b>        | 1,800 Lb. (816 Kg)  |   |
| <b>BOWL / HEAD</b>   | <p>Bowl is cone-type, designed for 15 psi pressure to vacuum of 0.01 inHg at a temperature of 450F. Vessel is equipped with baffled jacket to permit uniform circulation of heating and cooling medium at a pressure of 100 psi. It will be constructed of 304L SST with 320 scotch-brite polish finish throughout. A typical head will be complete with three sanitary loading ports, sight glass port and a vacuum port.</p> <p>Optional: ASME certified mixer vessel capable of 150 psi rating.</p>                                      |   |
| <b>BLADES</b>        | <p>The outer blade consists of two helical conical flights 180 degrees opposed. The inner blade is a positive screw auger ideal for mixing, lifting, or discharging product. Both are constructed of 304L SST with 320 scotch brite polish finish. These blades are independently driven in either direction. Blade speed is 1 to 60 rpm.</p>   |   |
| <b>DRIVE</b>         | <p>2 HP (outer blade) and 1 HP (inner auger), Inverter drive motors, 230/460 VAC, 60Hz, three phase, TEFC. The motor drives powers right angle reducers, providing blade speeds of 1 to 60 rpm.</p> <p>Optional: Exp proof motors (Class I Group D: Class II Group F,G)</p>   |   |
| <b>CONTROLS</b>      | <p>Standard: Mounted direct motor drives for simple motor operation</p> <p>Optional 1: Full controls cabinet with pushbutton controls featuring safety e-stop/limit circuit and the ability to integrate optional digital readouts for sensors and external equipment control.</p> <p>Optional 2: Full controls cabinet with PLC touchscreen featuring automation (recipes), advanced safety circuit, sensor readout, data collection (speed, temperature, torque, etc.), alarms, and optional external equipment control and feedback.</p> |   |
| <b>O-RINGS</b>       | <p>Standard: Viton o-rings for all</p> <p>Optional: High Temp Silicone, FFKM (Kalrez, Simrez, eta), PFA encapsulated Silicone</p>   |   |
| <b>DISCHARGE</b>     | Bottom discharge. Manually operated, slide type valve, 304 SST with a 4" opening.   |   |
| <b>SEALS</b>         | Mechanical seals designed for specified pressure / temperature service.   |   |
| <b>SENSORS</b>       | <p>Standard: Thermocouple, type J, located in the bowl wall protruding into mix to monitor temperature</p> <p>Optional: Pressure transducer, Preset pressure relief valve, Vacuum sensor, RPM Sensor, Humidity sensor,...</p>   |   |
| <b>FRAME</b>         | <p>Standard: Powder coated steel frame</p> <p>Optional: Bowl lift frame used to raise and lower the bowl, hydraulically or electrically</p> <p>Stainless steel frame available</p>  |   |
| <b>CUSTOMIZATION</b> | <p>In addition to the standard options listed above, each mixer can be customized to fit the needs of each customer. Features can be added or changed to integrate the mixer into your process.</p>   |   |