

**AVESTIN EMULSIFLEX C160** HIGH PRESSURE HOMOGENISER

**Production Scale High Pressure Homogeniser / Cell Lysis System**

The EmulsiFlex C160 from Avestin is a production scale homogeniser, ideal for a wide range of applications including nanoparticles, emulsions, liposomes and lysis of even tough cells like E-Coli and yeast.

The C160 is electrically powered with a motor-driven triplex pump designed to ensure continuous flow rate.

The unique EmulsiFlex design ensures that there are no O-rings or gaskets in the entire path of the product. This means less risk of contamination, easier cleaning and no leakage.

Pressures of up to 30,000 psi enable the EmulsiFlex C160 to process the toughest samples at a rate of up to 160 L / hr.



**AVESTIN**

## **HIGH PRESSURE HOMOGENISERS AND LIPSOME EXTRUDERS**



### **The EmulsiFlex C160**

- Electrical gear-motor driven high pressure triplex pump with frequency inverter with negligible pressure pulsation
- Programmable logic controller (PLC) with touch screen human machine interface (HMI)
- Three axial pump bodies individually mounted and made of hardened stainless steel
- Ceramics for long lasting high performance
- Sanitary process connections for product inlet
- No O-rings or gaskets in the product path: all face seals are precision-machined metal-to-metal or metal-to-ceramic

### **Homogenising Valve**

- Dynamic and fully ceramic homogenising valve with pneumatic control
- Virtually no air consumption
- Easy disassembly for cleaning or inspection
- Scalable performance

### **Performance**

- Feeds from variety of vessels
- Constant flow-through capacity of up to 160 L / hr
- Flow rate is independant of homogenising pressure
- Minimal sample volume 250 ml with minimal holdback < 6 ml

### **Two Models Available**

- A - Fully adjustable up to 20,000 psi / 1,380 bar
- B - Fully adjustable up to 30,000 psi / 2,000 bar

### **Temperature Control**

- Stringent inlet and outlet temperatures can be controlled with the installation of a cooling coil or a heat exchanger

### **Cleaning and sterilisation**

- Suitable for CIP (Clean-In-Place), cleanrooms and for GMP manufacturing
- All materials within the wetted parts will withstand prolonged exposure to high pressure steam for the purposes of sterilisation (SIP)
- Optional GMP certification available

### **Power Requirements**

- Electrical: 5.5 kW, Three-phase, 380V, 50Hz
- Clean, dry compressed air at 7 bar
- Recirculating water

### **Dimensions**

- 432mm (L) x 171mm (W) x 311mm (H)
- Weight: 25kg