Zhejiang JYSS Bio-Engineering Co., Ltd.

金收盛世 JYSS BIO

Provider of high-quality Bioprocess Solutions for Single-use Systems

Company Introduction

Established in 2014, JYSS BIO, China's first high-tech enterprise who achieved the localization and industrialization of SU bioreactor, SU consumables.

Continuous innovation is a central goal for us. Based on this important mission, we offer innovation, manufacture and sales to customer - range from SU bioreactor, SU dispensing reservoir systems, related disposable consumables accessories, and downstream ultrafiltration chromatography.

JYSS BIO brings to market bioprocess solution that covers the whole process from biopharmaceutical R&D to commercial production, which supports applications across antibody, recombinant protein, cell and gene therapy, and vaccine fields.

Cell Culture

Current CUR Single-Use Bioreactor and Bag

The CUR bioreactor adopts the "Non-bubbling Interfacial Oxygen Transfer Mechanism" for oxygen transfer, which has high volumetric oxygen transfer coefficient (kLa) and avoids the damage to cells caused by the bubble surface tension and the high shear force of the stirring paddle in the traditional bioreactor, so it is easy to realize high-density and high-activity cell culture., and can also achieve higher cell density and viability than traditional stirred bioreactors. Available in a wide range of size 2.5L, 5L, 50L, 300L, 500L, 1200L.

Application

cell suspension culture (HEK293, CHO, etc.) and is suitable for different culture processes (Batch , Fed-Batch, Perfusion modes)

Features and Advantages

- Non-bubbling interface oxygen transfer mechanism, high oxygen transfer efficiency
- No internal mixing impeller, extremely low shear forces
- Easy to achieve high viable cell density and high viability 10^8 cells/ml achieved
- Intelligent control system, simple operation interface. Local online data monitor and control of process parameters.
- Enable remote monitor and control of process parameters; multilevel user account management system configured that complies with FDA 21 CFR part 11 electronic records and electronic signatures.
- Short lead-time , 100% integrity test of bioreactor container
- Customized upon end user request

GER Wave Bioreactor and Bag

Available range of size 10L to 50L.

Features and Advantages

- Excellent culture property
- Powerful platform universality
- Flexible configuration and convenient operation
- Accurate and reliable control system

Application

Applied in producing biopharmaceuticals, vaccines, gene therapy and other products, and typical applications include:

- Suspension culture of mammalian cells, such as CHO or HEK293 cells
- Microcarrier culture of adherent cells, such as Vero
- Insect cell culture, such as Sf9 cells
- Immune cells, such as stem cells, and continuous perfusion of T cells
- Batch and fed batch culture of suspension cells

TOR Single-use Stirring Bioreactor and Bag

TOR bioreactor based on the mixing principle for traditional bioreactor, is featured with superior performances involving both mixing culture effect of traditional stirring and single-use process unit free from cleaning and sterilization verification, covering the scale range from 50L to 2000L.

Application Areas

TOR single-use & straight-axis stirred bioreactor is developed and tested for mammalian cell culture, and is suitable for areas of biological products involving the antibody, vaccine, gene and cell therapy. Typical applications include:

- Suspension cell and microcarrier culture
- Process development
- Process amplification
- Seed amplification of large bioreactors
- production of clinical trial samples
- Production of pilot scale
- cGMP scale production

Product Features

- Mixed axial flow, excellent materials transfer effects and high-quality accessories secure stable & convenient system operation and modular design, and support customer customization
- Pressure control function provides safety protection
- Three-level permission and audit trail are offered, and complete report for electronic data is provided for easy transmission and storage
- Multiple, simple and intuitive touch screen software control functions are presented, and the feedback system logic is clear
- Complete FAT, SAT, IQ/OQ files and services are offered

Fluid Management

ITD Single-use Magnetic Mixing System and Bag

ITD single-use liquid handling system consists of three main components: mixing tank, drive unit and control box. The system design is based on bottom mounted magnetically coupling technology to achieve optimum liquid-liquid mixing and solid-liquid mixing. The mixing assemblies are also easy to install. Scalable from 50L up to 2500L, other size can be customized.

Application

ITD family is suitable for a wide range of process scenarios such as buffer preparation, media preparation, intermediate hold, virus inactivation and final formulation.

- Media, buffer preparation
- Intermediate mixing
- Product suspension and re-suspension
- Virus inactivation, process mixing

Features and Advantages

- Bottom mounted magnetically coupling mixing technology
- Front door for easy bag loading and cleaning
- Equipped with sensors installation holder
- Modular design, pre-defined communication interface for DCS or SCADA upon request
- Optional jacket and thermal insulation layers with efficient heat exchange performance, allowing efficiently heat and cool the liquid in mixing assembly
- Inline temperature control, weight, pH monitoring and control, Conductivity monitoring and data management
- 1° slope at the bottom of mixing carrier enables easy drain and a low hold-up volume
- Available from 50L up to 2500L

LMS Single-Use Mixing System

The LMS family of single-use mixing system is designed to optimize complex mixing application. It is ideally suited for both laboratory and pilot scale application and meets all your process mixing needs. LMS combines drive unit and different impellers to deliver efficient mixing from low to high viscosity(1-1×105mPa*s) liquid. LMS tank sizes from 200L to 1000L.

Application

- Media, buffer preparation
- Intermediate mixing

Features and Advantages

- Top mounted mechanically mixing technology
- Modular design, customization upon request
- Achieve efficient mixing from low to high viscosity liquid
- In-line control and monitoring of process parameters such as weight, pH, temperature and conductivity
- Can use a single drive motor for multiple tank sizes (200L-500L-1000L)

Liquid storage, transport System

Square storage bins are 304 stainless steel and food-grade PP material containers designed for the storage of bioprocess fiuids contained in 3D single-use bags. Optional side hanger provides a better support for storage container. The bins mounted with universal wheel and directional wheel allow convenient and reliable buffer transportation. Available range of size 100L to 3000L.

Application

- Liquid storage, transportation and harvest in GMP facility

Features and Advantages

- Supported by an optional bottom cart for easy transportation
- Stackable and collapsible for optimization of storage and transportation space
- Easy to setup and use