

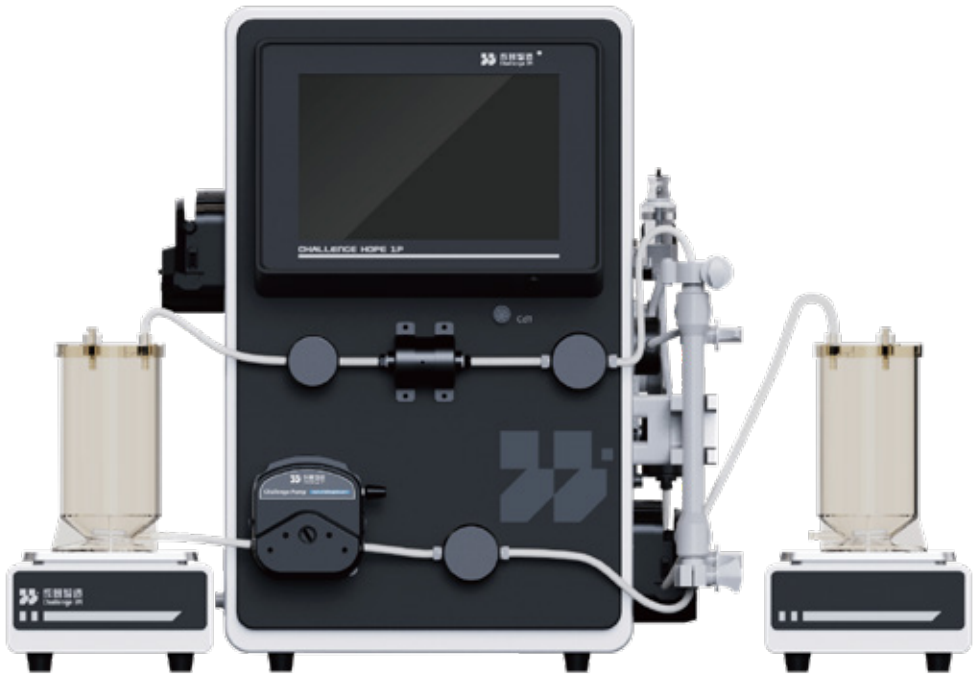


Product Overview

Challenge Hope series features a line of advanced, fully automated tangential flow filtration systems that are highly integrated, flexible, and user-friendly. Tailored for industries such as pharmaceuticals, food processing, environmental protection, and fine chemicals, these systems efficiently meet the process development and research needs of both commercial entities and academic institutions. The Hope series excels with its seamless automation, intelligent design, and outstanding cost-effectiveness, making it an ideal choice for a wide range of applications.

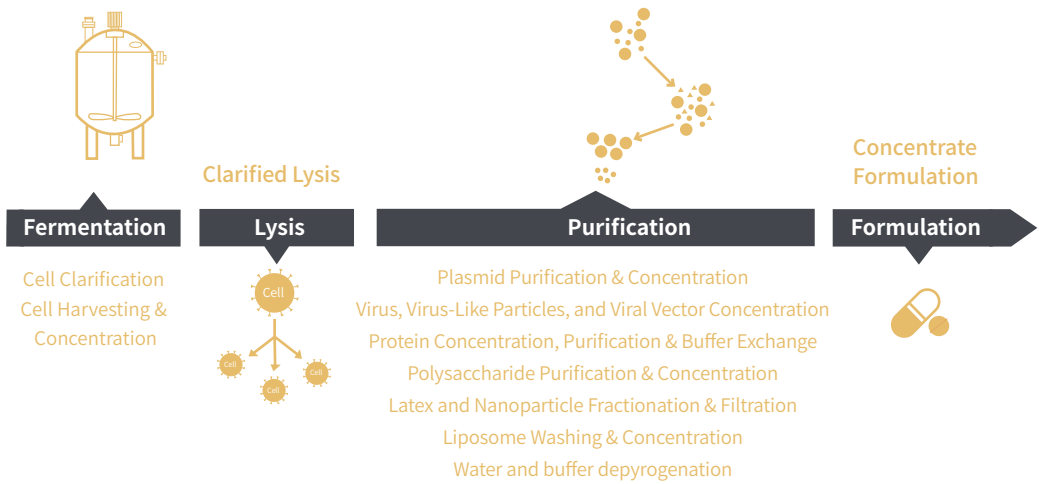


Product Features



Application Scenarios

Throughout the entire bioprocess workflow



01

A good partner for process exploration

With stability that rivals industrial production systems and highly flexible functionality, it empowers users to efficiently and effortlessly conduct process exploration.

03

Electronic Data Recording and Intelligent Data Processing

Automatically record all key operational data (including but not limited to flow rate, TMP, and flux). With the intelligent data analysis module in the software, corresponding charts and comparative data parameters can be generated at any time and easily exported. The data is comprehensive, and reports can be generated with a single click.

05

Suitable for multiple membrane filtration processes

Compatible with mainstream brands of hollow fiber membranes and plate-type membrane package. By replacing the tubing, it can accommodate a wider membrane area.

02

Intelligent, automated operation for easy-use and highly efficient

The system is designed with a range of modules, making it user-friendly and featuring several built-in method modes. Users also have the flexibility to create custom methods manually, which can be executed automatically, facilitating fully automated operations throughout the entire experiment.

04

Various fields application

Application: biopharmaceuticals, food industry, environmental water treatment, and membrane process validation...

06

Compact and streamlined design

The shell is made of high-performance ABS material, which is corrosion-resistant, simple in design, compact, lightweight, aesthetically pleasing, and easy to operate and clean.

Challenge Hope 1P



Item	Description	Specifications or Descriptions	
Filter	Filter type	Hollow fiber	Plate-type Membrane Package
	Recommended sample processing volume	20ml-2L	20ml-2L
	Filter Recommended membrane area	50cm²-0.1m²	50cm²-0.1m²
Basic Accessories	Main pump	peristaltic pump, with a maximum flow rate of 1 LPM, compatible with silicone tubes of sizes 13#, 14#, 16#, and 25#.	
	Pressure sensor	PEEK material, pressure range 0-145 psi (0-10 bar)	
	HMI	Microsoft Surface tablet pre-installed with Challenge Navigator control software	
	Automatic back pressure valve	TMP control can be automated according to predefined parameters	
	Weighing unit	Main circulation weighing range: 0-10 kg, permeate end weighing range: 0-20kg, with a visual reading of 0.1 g (*multiple ranges available)	
	Magnetic stirring	Integrated with the main circulation weighing system, adjustable speed, real-time parameter recording	
	Container	Replaceable PSU hygienic liquid container with no residue	
	Pipe	Compliant platinum-cured silicone tubing, thermoplastic piping, etc., based on process requirements	
	Bracket	Integrated hollow fiber membrane support, compact and spacious design	
Optional Accessories	Replenishment pump	peristaltic pump, with a maximum flow rate of 1 LPM, compatible with silicone tubes of sizes 13#, 14#, 16#, and 25#.	
	multi-channel liquid inlet valve	Options for multi-channel liquid inlet valves to enable automatic switching of sample inflow	
	pH	0-14	
	Conductivity, and temperature sensors	Equipped with temperature compensation function, 0.02-200 ms/cm	
	Cassette holder	Standard hollow fiber device, with options to connect various customer-supplied plate-type membrane package	
Enviroment Required	Temperature	0-40°C	
	Humidity	10%-90%	
	Body Design	IP33, the whole machine can be wiped and cleaned	
	Power Supply	1.1A,220V,50/60HZ	
Dimension	Main Module	465x420x566(L*W*H)	
	Feed Module	175x179x102(L*W*H)	
	Filtrate Module	175x179x102(L*W*H)	
	Weight	35kg	
Supporting Services	Installation and Calibration	Installation, commissioning, and training services, lasting 1-2 days, will be conducted on-site or online.	
	Regular Maintenance	Upon purchasing an annual maintenance contract, monthly and annual maintenance online or on-site services will be provided.	

Challenge Make Achievements Attain



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Challenge Hope Series
Tangential Flow
Filtration(TFF) System