

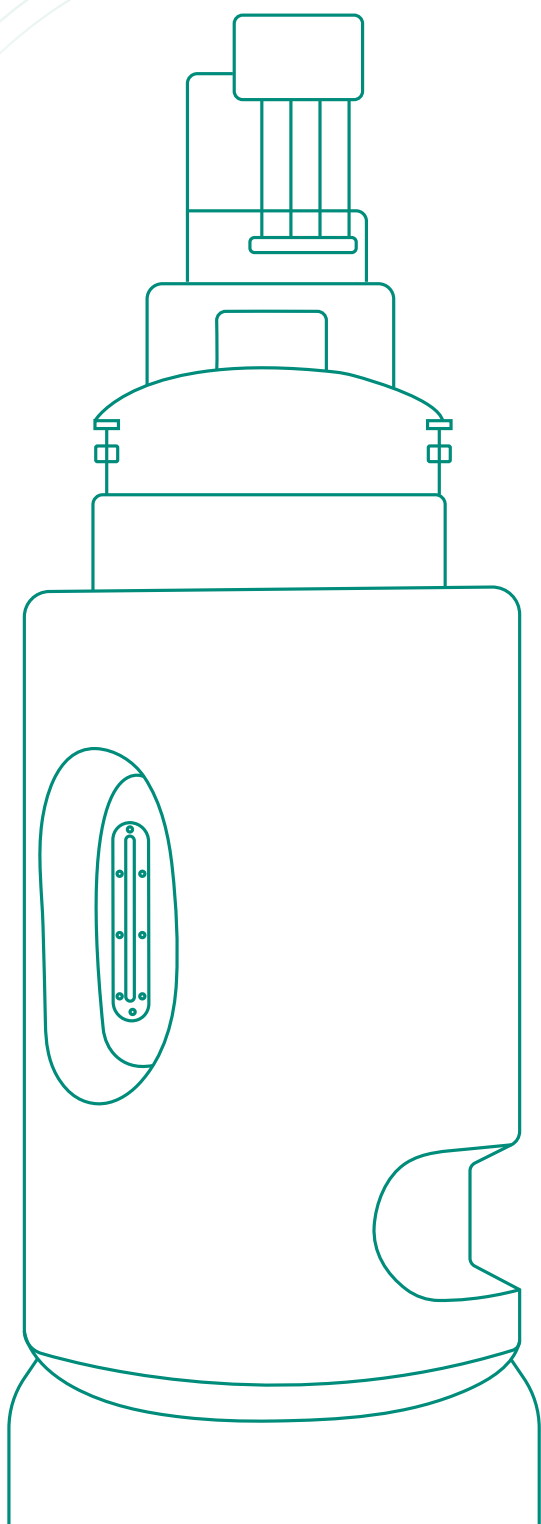
PHARMAC

珐成浩鑫...

生物 FERMENTATION
SYSTEM

发酵系统

Fermasol™



定制化
适配性
智能化

CUSTOMIZATION
ADAPTABILITY
INTELLIGENT

关于我们 ABOUT US

珐成浩鑫致力于为生物制药、日用化工、合成生物及相关行业提供**专业的洁净流体系统工程服务**。专注于推动**流体工艺技术突破**和**自主知识产权工艺装备**的打造,实现高质量、可持续的洁净流体设备**本土化制造之路**。

PHARMAC is committed to providing professional clean liquid system engineering services for the pharmaceutical, daily chemicals, food, synthetic biology and related industries. We have been dedicated to driving breakthroughs in fluid process technology and the development of proprietary process equipment in order to achieve high-quality and sustainable localized manufacturing of clean fluid equipment.

能为客户提供包括:**生物反应器、配液系统、生物发酵系统、水机及分配系统**等专业流体工艺设备。

We are capable of providing customers with professional fluid process equipment such as bioreactors, formulation systems, fermentation systems, PW & WFI generation & distribution systems.

PHARMAC, **引领洁净流体系统新方向,助力生命科学领域前行。**

Leading the way in the clean liquid system, making contributions in the advancement of life sciences.

谁更需要我们 WHO NEEDS THIS SYSTEM



生物制药

Biopharmaceuticals



API原料药

API raw materials



新材料

New materials



食品

Food



农业及新能源

Agriculture and new energy

我们提供什么 WHAT DO WE OFFER

珐成浩鑫的**Fermasol系列**生物发酵系统,致力于为客户提供完整的用于细菌/细胞培养的发酵系统解决方案,可以根据细菌、酵母、真菌、放线菌等微生物和产品类型进行定制化设计,以满足不同客户群体差异化需求。

The Fermasol series biological fermentation system from Phamac is committed to providing customers with a complete fermentation system solution for bacterial/cell culture. It can be customized according to microorganisms and product types such as bacteria, yeast, fungi, actinomycetes, etc., to meet the differentiated needs of different customer groups.

Fermasol系列生物发酵系统**质量可靠,自动化程度高**,生物表达量高,在优化设计过程中,我们引入**CFD仿真模拟技术**等先进手段,确保发酵系统性能及附件的结构满足培养需求。各子系统设计合理,运行可靠。

The Fermasol series biological fermentation system has reliable quality, high automation level, and high biological expression level. In the optimization design process, we introduce advanced methods such as CFD simulation technology to ensure that the performance of the fermentation system and the structure of its accessories meet the cultivation requirements. Each subsystem is designed reasonably and operates reliably.

经典项目案例

CLASSIC PROJECT CASES

珐成浩鑫的Fermasol系列生物发酵系统完成国内外生物发酵项目的设计成功案例**100余个**

More than 100 successful design cases of domestic and international biological fermentation projects have been completed for the Fermasol series of Pharmac.

- 为**国内首创人工熊胆粉转化吨级生产技术**企业
提供**30,000L种子、发酵系统若干**

Pharmac have provided several sets of 30,000L seeds and fermentation systems to an anonymous client has pioneered bulk production technology for conjugate animal extracted enzymes in China



- 为**致力于推进可持续生物制造的全球工业合成生物技术**企业
提供**30L-60L-150L-500L-1,000L 种子、发酵系统若干**

Pharmac have provided several sets of seed and scale up fermenters (30L-1,000L) to a global biomanufacturing client focused on providing synthetic biotechnological solutions



- 为**全球唯一能够工业化生产具有全长、稳定三螺旋结构的重组III型人胶原蛋白**企业

提供**50L-700L二级发酵系统若干**

Pharmac have provided 50-700L scale up fermentation systems to an anonymous client is a world leader in the manufacture of recombinant type III human collagen protein in a stable triple helix structure

已服务客户

SERVED CUSTOMERS

ASYMCHEM

Bota

金宇生物
JINYU BIO-TECHNOLOGY

极泽
KINBEAR

申联生物
SHENLIAN BIOMEDICAL

NANJHU
LABORATORY

AHB

Jinhe
金河生物

...

我们的最优解
OUR OPTIMAL SOLUTION

标准化
STANDARDIZATION



经过验证和持续优化的设计

Verified and continuously optimized design



项目执行的标准化和稳定性

Standardization and stability of project execution



更低的成本、更高的效率和更快的交付

Lower costs, higher efficiency, and faster delivery



备件的通用性

The versatility of spare parts

定制化
CUSTOMIZATION



根据客户特殊菌种的需求定制发酵罐, 包括工作参数、材质、清洗、曝气、换热结构等

Customize fermentation tanks according to the specific needs of customers' bacterial strains, including working parameters, materials, cleaning, aeration, heat exchange structures, etc



多策略搅拌系统

Multi strategy mixing system



多策略控温系统

Multi strategy temperature control system



多策略进气及曝气系统

Multi strategy intake and aeration system



多策略清洗/灭菌系统

Multi strategy cleaning/sterilization system



多策略补料系统

Multi strategy feeding system



根据产品性能为客户提供布局等优化建议

Provide customers with optimization suggestions such as layout based on product performance

产品可视化
SYSTEM VISUALIZATION



5L-1,000L标准不锈钢发酵系统
5L-400KL定制不锈钢发酵系统
上游成套设备解决方案

5L-1,000L standard stainless steel fermentation
5L-400KL customized stainless steel fermentation
Upstream complete equipment solution

自控画面
OPERATOR CONTROL SCREEN

- ✓ (自动)CIP/SIP功能
- ✓ (自动)控压功能
- ✓ (自动/关联)溶氧控制
- ✓ (自动/关联)补料控制
- ✓ 防止培养基返流功能
- ✓ 自动接种功能
- ✓ 自动提升功能
- ✓ 模块化设计
- ✓ 冗余设计
- ✓ 自动控温功能
- ✓ (自动)消泡功能
- ✓ (自动/关联)pH控制
- ✓ 多种补料策略
- ✓ 防止尾气过滤器堵塞功能
- ✓ 自动放料功能
- ✓ 防错防呆功能
- ✓ 标准化设计

- ✓ (Automatic) CIP/SIP function
- ✓ Automatic temperature control function
- ✓ (Automatic) pressure control function
- ✓ (Automatic) defoaming function
- ✓ (Automatic/Associated) Dissolved Oxygen Control
- ✓ (Automatic/Associated) pH control
- ✓ (automatic/associated) replenishment control
- ✓ Multiple feeding strategies
- ✓ Function of preventing backflow of culture medium
- ✓ Function to prevent clogging of exhaust filters
- ✓ Automatic seed transfer function
- ✓ Automatic feeding function
- ✓ Automatic lifting function
- ✓ Error prevention and error prevention function
- ✓ Modular design
- ✓ Standardized design
- ✓ Redundant design

控制系统
CONTROL SYSTEM

- ✓ PLC或DCS
- ✓ ISA S88
- ✓ 审计追踪功能
- ✓ 实时/历史曲线查询功能
- ✓ 批报表自动生成功能
- ✓ PLC or DCS
- ✓ ISA S88
- ✓ Audit tracking function
- ✓ Real time/historical curve query function
- ✓ Batch report automatic generation function
- ✓ 上位机(选项配置)
- ✓ 多级权限管理功能
- ✓ 自动报警功能
- ✓ GAMP5
- ✓ 配方管理功能
- ✓ Upper computer (option configuration)
- ✓ Multi level permission management function
- ✓ Automatic alarm function
- ✓ GAMP5
- ✓ Formula management function

- 过程开发, 流程优化, 高低档不同配置
- 满足ISPE/ASME BPE 等标准
- 设计压力-1~3bar, 设计温度150°C, 可接受定制参数
- 高径比2~4:1
- 多种换热结构
- 自动定容功能
- 气体流量(自动)控制

- Process development, process optimization, different configurations for high and low levels
- Meet ISPE/ASME BPE and other standards
- Design pressure -1~3 bar, design temperature 150 °C, customizable parameters acceptable
- Height to diameter ratio 2~4:1
- Multiple heat exchange structures
- Automatic constant volume function
- Gas flow (automatic) control

搅拌器可选择
BLENDER SELECTABLE

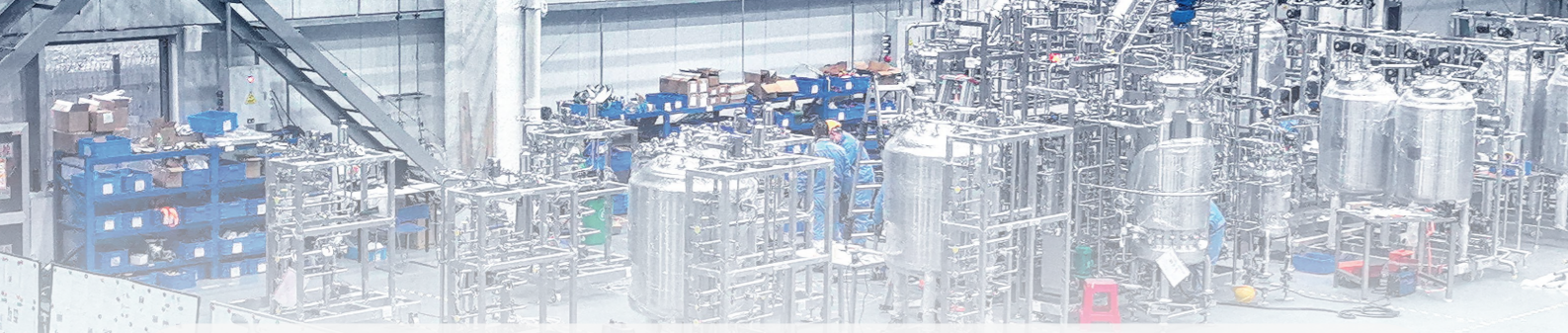
- 上机械搅拌
MECHANICAL MIXING
- 上磁力搅拌
MAGNETIC STIRRING ON TOP
- 下机械搅拌
MECHANICAL MIXING

- 直叶涡轮桨
- 抛物线桨
- 其他定制化桨叶
- 斜叶涡轮桨
- 箭叶桨
- 半圆管桨
- 四宽叶桨
- Straight blade turbine propeller
- Parabolic propeller
- Other customized propeller blades
- Inclined blade turbine propeller
- Arrow blade paddle
- Semi-circular propeller
- Four wide blade propeller

在线检测与控制
ON-LINE DETECTION AND CONTROL

- pH
- 压力
- 称重和/或液位
- 浊度检测(选项配置)
- 质谱仪(选项配置)
- 拉曼光谱(选项配置)
- DO
- 温度
- 消泡检测
- 尾气分析仪(选项配置)
- 甲醇浓度等(选线共配置)
- 流量计或流量控制器
- PH
- Pressure
- Weighing and/or liquid level
- Turbidity detection (option configuration)
- Mass spectrometer (optional configuration)
- Raman spectroscopy (optional configuration)
- DO
- Temperature
- Defoamer detection
- Exhaust gas analyzer (optional configuration)
- Methanol concentration, etc. (shared configuration for line selection)
- Flow meter or flow controller

定制化服务, 标准化交付
Customized services, standardized delivery



我们的制造能力

OUR MANUFACTURING CAPACITY

- 制造始于1995年
Our history of manufacturing can be traced back to 1995
- 20年+, 洁净容器/换热器/模块设计及加工制造历史
20+ years' experience in clean vessel/heat exchanger/module design and manufacturing
- 容器及模块制造工艺的过程控制
Process control of vessel and module manufacturing process flow
- 国内少有可生产钛材/哈氏合金等特材压力容器的厂家
One of the few domestic manufacturers with the capacity to produce pressure vessels made of special materials such as titanium and Hastelloy

认证

AUTHENTICATION

- 压力容器特种设备生产许可证
- ASME (美国机械工程师协会)U钢印授权证书
- 压力设备(PED) 认证
- 可提供满足 GMP、CFDA、FDA、EMA、WHO等体系的文件
- Pressure Vessel as Special Equipment Production License
- "U" Steel Seal Certificate of Authorization from ASME
- Pressure Equipment Directive (PED) Certification
- We can provide documents that meet the requirements of GMP, CFDA, FDA, EMA, WHO and other systems



合成生物学应用

APPLICATION OF SYNTHETIC BIOLOGY

什么是合成生物学

WHAT IS SYNTHETIC BIOLOGY

合成生物学 (Synthetic Biology) 是基于现代基因工程技术, 融合了多种生物技术应用的一个领域。它是一种理性改造生物的技术应用, 通过工程学原理对生物体进行有目标的设计、构造或创造, 赋予其非自然功能, 进而实现所谓的“人造生命”。

Synthetic Biology is a field that integrates various biotechnology applications based on modern genetic engineering technology. It is a technological application of rational modification of organisms, using engineering principles to design, construct, or create organisms with targeted goals, endowing them with non natural functions, and thus achieving so-called "artificial life".

我们的服务

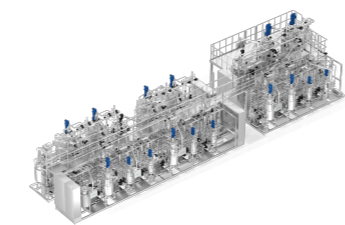
OUR SERVICES

珐成浩鑫致力于为**合成生物学领域**的企业提供专业的**洁净流体工艺设备**, 广泛涵盖**生物制药、新材料、食品、农业及新能源**等多个行业。珐成浩鑫为合成生物企业商业化提供从**研发、中试到放大生产的一站式**解决方案, 助力企业顺利实现技术转化与产业化进程, 推动其迈向商业化发展道路。

Pharmac is committed to providing professional clean fluid process equipment for enterprises in the field of synthetic biology, covering a wide range of industries such as biopharmaceuticals, new materials, food, agriculture, and new energy. Pharmac provides a one-stop solution for the commercialization of synthetic biology enterprises, from research and development, pilot testing to large-scale production, helping enterprises smoothly achieve technology transformation and industrialization processes, and promoting their path towards commercial development.

我们的产品矩阵

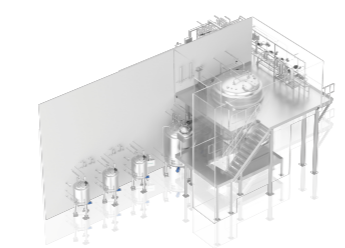
OUR PRODUCT MATRIX



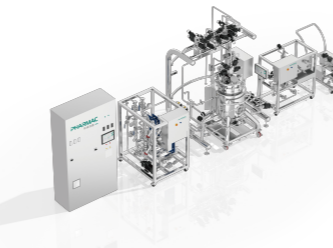
Fermasel™
生物发酵系统
FERMENTATION SYSTEM



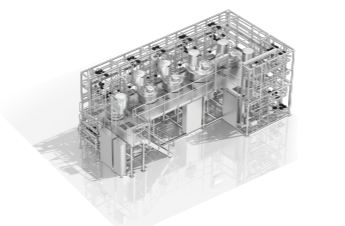
Biocell™
平行生物反应器
PARALLEL BIOREACTOR



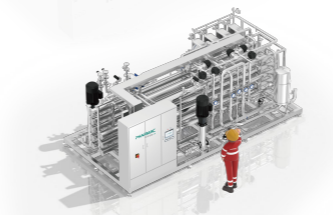
XBior™
不锈钢生物反应器系统
STAINLESS STEEL BIOREACTOR SYSTEM



Moduleultra™
模块化多功能配液系统
MODULAR MULTI-FUNCTIONAL PROCESS SYSTEM



配液系统
MEDIA AND BUFFER SYSTEM



管道工程&水机
CLEAN UTILITY

我们的工艺技术

OUR PROCESS TECHNOLOGY

“产品-工艺-工程-装备一体化”设计理念, 细胞生理代谢、工艺和装备研究相结合



The design concept of "product process engineering equipment integration" combines cell physiological metabolism, process and equipment research.

携手华东理工大学国家生物反应器重点实验室, 共同创立“华东理工大学-沃钛思, 生物反应器过程控制和智能制造联合技术创新转移中心”



Joining hands with the National Key Laboratory of Bioreactors at East China University of Science and Technology, we have jointly established the "East China University of Science and Technology WotiSi, Bioreactor Process Control and Intelligent Manufacturing Joint Technology Innovation Transfer Center"

打造国际领先的**PAT平台**, 提供一站式软硬件解决方案



Build an internationally leading PAT platform and provide one-stop software and hardware solutions

自主开发**拉曼光谱**预测模型及大型数据库, 搭建多目标全参数驱动的生物发酵系统**CFD模拟平台**



Independently develop Raman spectroscopy prediction models and large-scale databases, and build a multi-objective, fully parameter driven CFD simulation platform for biological fermentation systems.

建立生物发酵系统理性设计与放大技术, 研发**高端国产生物发酵系统及配套装备**



Establish rational design and scaling up technology for biological fermentation systems, and develop high-end domestic biological fermentation systems and supporting equipment.





扫一扫 阅无限
WeChat Account



扫一扫 知产品
Product Encyclopedia

法成制药系统工程(上海)有限公司

Pharma Champ Pharmaceutical Engineering (ShangHai) Co., LTD.

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10F, Bldg.3A Tianhua Information Park, No.299, Longcao Road, Xuhui District, Shanghai

+86-21-3356 0662

200235

广州市浩鑫洁净工程技术有限公司

Haoxin Sanitary Technology Engineering (Guangzhou) Co., LTD.

生产基地:广州市南沙区珠江工业园美德二路7号

Production Site : No.7 Meide Er Rd, Zhujiang Industrial Zone, Nansha District, Guangzhou

+86-20-2869 2128

511462

法成制药设备(浙江)有限公司

Pharma Champ Pharmaceutical Equipment (Zhejiang) Co., LTD.

生产基地:浙江省嘉兴市海宁市海昌街道石泾路46号

Production Site : No. 46, Shijing Road, Haichang Street, Haining City, Jiaxing City, Zhejiang Province

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PHARMAC-2503-CE800-20250330