

PHARMAC

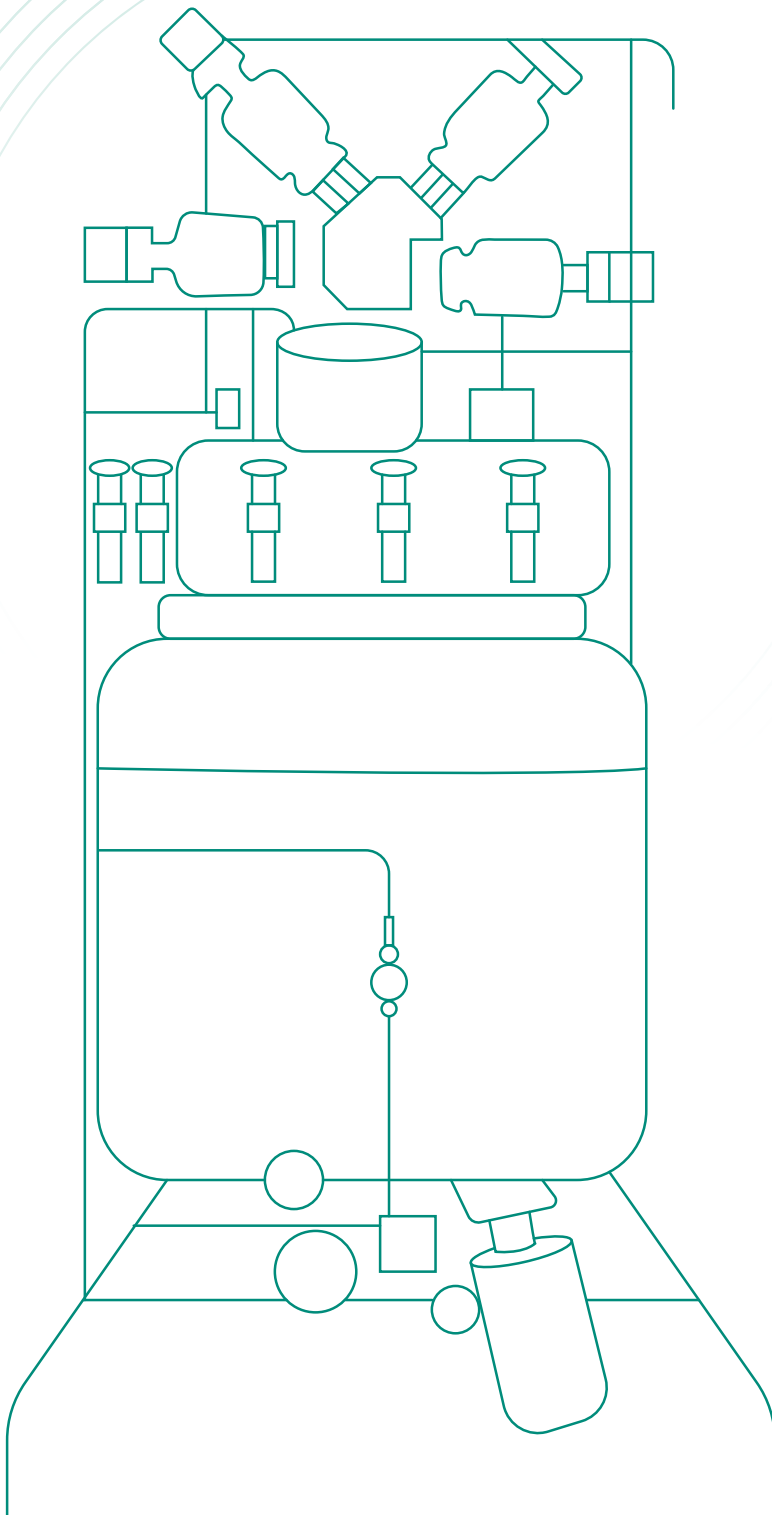
珐成浩鑫...

模块化

MODULAR MULTI-FUNCTIONAL  
PROCESS SYSTEM

多功能配液系统

Moduleultra™



多功能  
快转化  
合规性

MULTI FUNCTIONAL  
FAST CONVERSION  
COMPLIANCE

## 关于我们 ABOUT US

法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 generator & 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 contribution to the advancement in life sciences.

## 谁更需要我们 WHO NEEDS THIS SYSTEM



### 各类化药制剂配液系统

Various chemical drug preparation liquid preparation system manufacturers



### 生物制药上下游

Upstream and downstream biopharmaceutical manufacturers



### CDMO/CMO

CDMO/CMO Manufacturers



### 产研一体化企业

Integrated production and research solution providers



批报  
BATCH REPORT

Batch Step	StepName	StepStartTime	StepEndTime	Batch Time
Step1	透视镜检查所有接管	2022/7/26 14:33:01	2022/7/26 14:35:43	00:02:42
Step2	气密性检查加压	2022/7/26 14:35:43	2022/7/26 14:35:51	00:00:08
Step3	气密性检查计时	2022/7/26 14:35:51	2022/7/26 14:36:50	00:00:59
Step4	气密性检查泄压	2022/7/26 14:36:50	2022/7/26 14:37:03	00:00:13
Step5	灭菌自排空	2022/7/26 14:37:03	2022/7/26 14:38:00	00:01:00
Step7	提示打开进液手柄	2022/7/26 14:38:03	2022/7/26 14:38:29	00:00:26
Step8	灭菌升温	2022/7/26 14:38:29	2022/7/26 14:40:08	00:01:39
Step9	灭菌计时	2022/7/26 14:40:08	2022/7/26 14:46:39	00:06:31
Step10	灭菌升温	2022/7/26 14:46:39	2022/7/26 14:47:02	00:00:23
Step11	灭菌计时	2022/7/26 14:47:02	2022/7/26 14:49:50	00:02:48
Step12	灭菌升温	2022/7/26 14:49:50	2022/7/26 14:51:44	00:01:54
Step13	灭菌计时	2022/7/26 14:51:44	2022/7/26 15:21:44	00:30:00

Batch Time	OUT101	OUT101	OUT102	OUT103
2022/7/26 14:33:01	42.3	25.5	25.3	0.0
2022/7/26 14:34:01	42.3	25.5	25.4	0.0
2022/7/26 14:35:01	42.1	25.4	25.4	0.0
2022/7/26 14:36:01	42.0	25.5	25.4	0.0
2022/7/26 14:37:01	43.4	25.5	25.4	1.0
2022/7/26 14:38:01	43.0	25.5	25.4	0.2
2022/7/26 14:39:01	45.3	121.3	43.9	1.2

多规格可选：  
100L/300L/500L/1000L/1500L, 配料范围10L~1500L

- 材质: 316L/904L/254SMO/2507/Titanium
- 表面处理: 内表面电解Ra≤0.4μm/钝化Ra≤0.8μm,外表面哑光/拉丝/镜面/喷砂
- 工作压力: 容器-1/0.3 MPa,夹套0.4 MPa
- 搅拌形式: 磁力/机械,可选分散、剪切形式
- 检测和控制: 温度/压力/液位/pH/DO/搅拌转速/循环流速
- 灭菌方式: SIP/实罐灭菌

Multiple specifications are available from 15L to 1500L

- Material:** 316L/904L/254SMO/2507/Titanium
- Surface Treatment:** Electropolishing to Ra ≤0.4μm or mechanical polishing to Ra ≤0.8μm for the process contact surfaces. Matt finish or sandblasting for non-process contact surfaces.
- Operating pressure range:** Vessel: -1/0.3 MPa, Jacket: 0.4 MPa
- Agitator:** Mechanical / magnetic, disperser, shearer or twin agitator options are available
- Measurement and control:** Temperature / pressure / level / pH / DO / TOC / mixer RPM speed / flow rate for circulation
- Sterilization:** SIP/ media sterilization

移动罐  
MOBILE TANK

TCU单元  
TCU UNIT

- 2档, 配套500L / 1500L配液站
  - 热媒换热: ±0.1°C
  - 直接换热: ±1°C
- 
- 2 Sizes, for 500L/1500L docking station
  - Media heat exchange: ±0.1°C
  - Direct heat exchange: ±1°C

Recipe ID	Recipe Name	Material	Volume	Temp	Pressure	Time
001	Media	Water	1000L	121°C	0.3 MPa	30 min
002	Media	Water	500L	121°C	0.3 MPa	30 min
003	Media	Water	150L	121°C	0.3 MPa	30 min

配方  
RECIPE

配液站  
DOCKING STATION

- 500L: 宽\*深\*高(mm) 2000\*2000\*2800
  - 1500L: 宽\*深\*高(mm) 2500\*2500\*3000
  - 标准集成接口: WFI / PW / API / 原辅料和中间体 / 纯蒸汽 / 压空或氮气 / 真空 / 非洁净公用工程
- 
- 500L: Width \* depth \* height (mm) 2000 \* 2000 \* 2800
  - 1500L: Width \* depth \* height (mm) 2500 \* 2500 \* 3000
  - Standard Integrated media: WFI / PW / API / excipients / PS PA or nitrogen / vacuum / black utilities

过滤单元  
FILTER UNIT

- 单级 / 多级过滤
  - 残料压空吹扫
  - 凝水收集槽
  - 压差控制
- 
- Single or multi filtration
  - Residual material blowing
  - Condensate collection tank
  - Differential pressure control

泵送单元  
PUMPING UNIT

- 配套500L / 1500L配液站
- Supporting 500L/1500L docking station

让生活更灵活, 更简单  
Life Science manufacture  
Delivered with flexibility, simplicity & safe!



产品视频  
Product Video

## 我们提供什么 WHAT DO WE OFFER

这是一套可定制模块化多功能配液系统,适用于研发、中试和商业生产。其可移动、灵活、集成化和易扩展的特点,可满足不同生产和工艺要求。

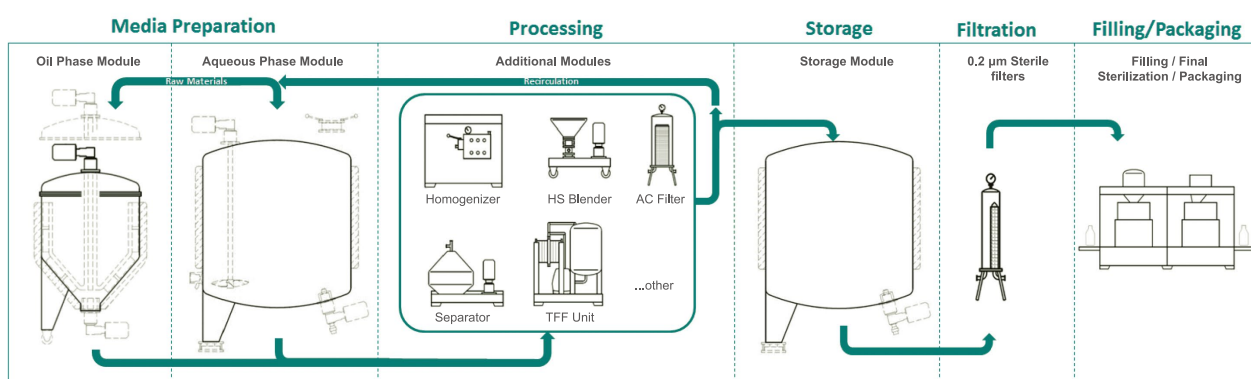
This is a customizable, modular, multifunctional process system, which is suitable for R&D, pilot and finally manufacturing. The system can conform to the requirements for different processes and process technologies thanks to the mobile, flexible, integrated and easily expandable characteristics.

该系统高度融合工艺、自控和验证等经验,保证了系统在整个生命周期内的灵活性和合规性,其简化且易于使用的操作界面,轻松满足生产控制和验证要求,实现配方化生产。

The system combines our knowledge in process, automation and validation while ensuring flexibility and compliance throughout the whole production process. With a simplified and easy to use operator interface that not only fulfills production control and validation stipulations, can competently fulfill the batch production requirements.

工艺过程被拆分成多个独立但自主的模块化单元,这些单元能根据生产需求进行组织和结构化配置。每个模块都进行特定的设计,配有自己的软件和硬件,实现有效运行。通过集成 RFID,模块间可互连,也可连接至 MES 层及 PLC 和 SCADA 系统。

This process is divided into multiple standalone autonomous modular units, which can be organized and structured in any configuration required for production. Each module is complete with its own automation software and hardware, designed for the effective operation of that specific module. Through the integrated use of RFID sensors, each module can be interconnected to other modules and also to a central MES level controlling PLC SCADA package.



基于 SQL 服务器并完全符合 cGAMP, 控制系统根据已预编程和测试的生产批次计划, 控制和协调各个模块单元的运行。它还提供现代生命科学设施在控制、验证、可追溯和数据安全方面所需的所有功能。

Based heavily on SQL servers and in full compliance to cGAMP, the control system controls and co-ordinates the individual module units programming in accordance with pre-programmed and tested production batch plans. These also provide all the functionality required in modern life sciences facility in terms of control, validation, traceability and secure data storage.



## 为什么选择我们 WHY CHOOSE US



无死角清洗和灭菌，可定制产品专用管罐

Non-dead area for cleaning and sterilization. Customized dedicated pipes and tanks are available



灵活配置、易扩展，设备和功能相同的添加模式

Flexible and easy configuration, equipment and system can be added in the same structure



便捷的配方管理，全自动、半自动、手动操作模式

Easy recipe management, auto/semi-auto/manual mode



单元自主执行，标准化控制功能模块

Unit self-execution, standardized control function modules



多种安全互锁：RFID、航空插头、程序自检

Safety interlocking: RFID, aviation plug, code interlocks



完整的审计追踪和定制化的批报告

Fully Audit Trail and customized EBR reporting



开放的第三方交互、通讯

Standard third-party interactions, communications

## 我们的最优解 OUR OPTIMAL SOLUTION

系统的生命周期内，往往不可能只生产一种产品，在有新的产品、工艺、批量需求时，模块化多功能配液系统的优势就能凸显出来。



During the life cycle of the system, it is often not possible to produce only one product, when there is a new product, process, batch demand, The advantages of Modular Multi-functional Process System can be highlighted.



提高资产利用率，  
得益于系统多适用性

Improve utilization rates from system's versatility



快速构建新系统，  
缩短交付时间

Quickly build a new system, shorten delivery time



降低合规风险，得益于持续的自动化和信息化

Reduce compliance risk by continuous automatization and informatization



降低总拥成本，  
得益于多功能和重复使用

Reduction of TCO (total cost of ownership) due to the re-use and versatility aspect



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.

上海市徐汇区龙漕路299号天华信息科技园3A座10层

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

### PHARMAC EMEA

William Craig

Polizeigasse 4, 86720 Noerdlingen, Bayern, Germany

+49 (0)160 894 8284

info@pharmac-emea.com

### PHARMAC ASIA

21 Bukit Batok Crescent #09-79, Wcega Tower, Singapore

[www.pharmachamp.com](http://www.pharmachamp.com)