

DFK

分散匀浆工作腔系统—在线式

Dispersing and homogenizing system - InLine mode

20-40 mm

定子直径

Stator diameter

5 - 45 l/min

腔体容量

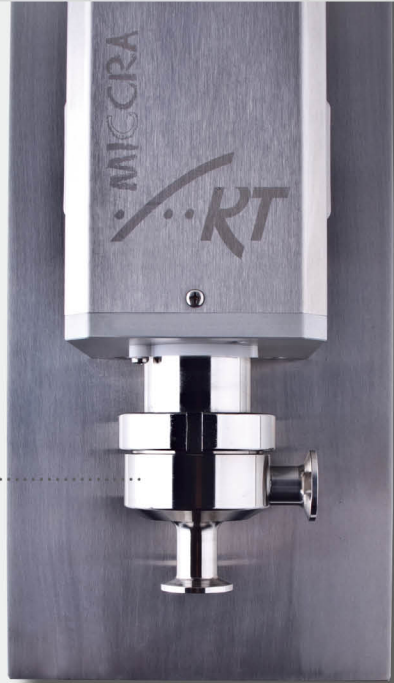
Flow capacity



DFK 1.0

这是一款为短时间连续工作提供的灵活解决方法。我们标准的实验室匀浆器 MICCRA D-15 或者 MICCRA D-9 主机即可实现。

The flexible solution for short-term operation. Our standard laboratory homogenizers MICCRA D-15 or MICCRA D-9 provide the needed drive for your work.



DFK 1.4

这是一款适用于实验室或中试实验的连续工作的循环腔系统。与高端主机 MICCRA D-27 的连接，您将获得独一无二的纳米级结果。

The flow chamber system made for continuous operation in lab and pilot plant scale. Firmly connected with our MICCRA D-27 high-end drive, you will achieve unique product results up to nanometer range.

安全、
灵活、
高效。

“MICCRA DFK Lab” 清洗简便快速，是实验室处理小量样品的高效循环腔体系统。

基于优越的模块化设计，所有批次系列的转子/定子元件都可应用于循环系统。由于不同凡响的高转速，样品的精细度可达40nm（取决于样品的特性和应用）。

迄今为止，这样的小系统从来没有其它系统可达到这样的效果。

Safe, flexible, efficient.

The MICCRA DFK Lab is an easy and quick to clean, efficient flow chamber system for your lab and small scale production purposes.

As a result of the modular construction, all known rotor/stator-components from the batch-series are uncompromisingly available for this chamber also.

Due to the significant higher circumferential speeds, end-finenesses up to 40 nm can be achieved according to product features and application.

As yet, this was not possible with such small systems.

推荐主机 | Recommended drives

Micra D-9 短时间工作 | (short-time operation)

Micra D-15 短时间工作 | (short-time operation)

Micra D-27 连续式工作 | (continuous operation)



Aufbaubeispiel DFK 1.0 mit MICCRA D-15

DFK 1.4

在线循环工作腔
InLine operated flow chamber

20-40 mm

定子直径
Stator diameter

5 - 45 l/min

循环量
Flow capacity

产品优化

DFK 1.4是小样研发循环系统的终极方案。基于MICCRA D-27的主机拥有2.7KW的动力和36000转/分钟的转速，可更高效地获得更高质量的样品。

- 试验结果是可随时重复获得，并可延伸到接下来的更大处理量。
- 混合和样品的细化是不同转子/定子优化组合得到的。
- 由于循环腔和马达驱动之间是无轴承的转动轴，使得系统非常的顺畅，也特别易于清洗和维护。

Product optimization

The inline flow chamber system DFK 1.4 is the high-end solution for continuous operation in research, development and small production scale. Based on the MICCRA D-27, the powerful 2.7 kW induction motor with speeds up to 36,000 1/min, product results with a much higher quality and efficiency are possible.

The results are reproducible at any time and a scale-up to the next higher volume areas is possible.

To mixing and size reduction effects is to optimize a wide variety of rotor / stator combinations.

Thanks to a bearingless drive shaft between the flow chamber and motor drive the system is characterized by its remarkable smoothness, and is particularly easy to clean and maintain.

Thus, the ideal combination between MICCRA D-27 and the DFK 1.4 By flow chamber system as an ideal equipment for their crossover products.



技术参数 Technical Data

DFK 1.4

刀头套件

循环量(水):
最大剪切速度:
转子直径:
定子直径:
摩氏硬度:
最大压力:
真空度:
杀菌/除污:

Tool set

Flow capacity (ref. to H₂O):
Max. peripheral speed:
Rotor diameter:
Stator diameter:
Mohs-Hardness:
Max. pressure:
Reachable vacuum:
Sterilization/Decontamination:

20 mm	30 mm	40 mm
10 l/min	26 l/min	45 l/min
30 m/s	41 m/s	46 m/s
15 mm	23 mm	36.3 mm
20 mm	30 mm	40 mm
最大 6	最大 6	最大 6
16 bar	16 bar	16 bar
1 mbar	1 mbar	1 mbar
在线清洗*	在线清洗*	在线清洗*

*根据需求 / on request

MICCRA D-27

高端匀浆器

High-end homogenizer

2,7 kW

异步马达

asynchronous motor

36.000 rpm

速度范围

Speed range



MICCRA D-27 匀浆器

MICCRA D-27 homogenizer

DFK 1.4 在线循环腔

DFK 1.4 InLine operated flow chamber

新的高端匀浆器，为研发领域更高需要而制造。

2.7KW动力，不锈钢三相异步马达，转速高达36000转/分钟，把样品推向纳米级，却只有63分贝的低噪音。

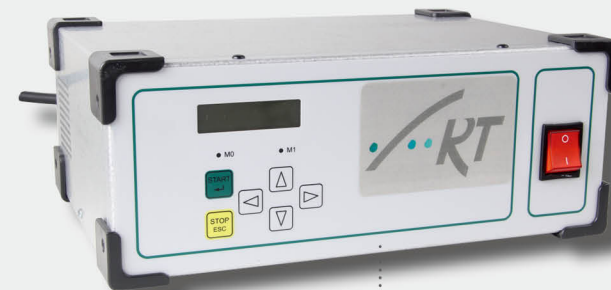
专利的独一无二悬盒式密封系统（与DFK循环腔连接），可工作于高压与真空状态，特别便利的维护设计。是实验室和中试实验在线工作的方案。

The new high-end homogenizer, built for the highest requirements in research and development.

Its powerful 2.7 kW stainless steel three-phase asynchronous motor with up to 36,000 rpm delivers product results up to nanoscale, at a surprisingly low noise rate (63 dB(A)).

The patent-pending, unique cartridge sealing system (in connection with the DFK-flow chamber) withstands also pressure and vacuum applications easily and is particularly hassle-free to maintain.*

The perfect solution for the continuous operation in laboratory and pilot plant, hands down.



HFU-27 高频转换器

HFU-27 high frequency converter

MICCRA D-27

高端匀浆器

High-end homogenizer

2,7 kW

异步马达

asynchronous motor

36.000 rpm

速度范围

Speed range

技术参数 Technical Data

MICCRA D-27 匀浆器主机 MICCRA D-27 homogenizing drive

马达类型:	Motor type:	三相异步马达	three phase asynchronous
电压:	Voltage:	185V 3~	185V 3~
电流:	Electricity:	最大 10.6A	max. 10,6 A
扭矩:	Torque:	最大 200Ncm	max. 200 Ncm
功率:	Power:	最大 2700W	max. 2700 W
频率:	Frequency:	50 – 400 Hz (600 Hz)	50 - 400 Hz (600 Hz)
速度调节:	Speed regulation:	变频器	via frequency converter
速度范围:	Speed range:	3000 –24000 rpm (可选择 36000rpm)	3.000 - 24.000 rpm. (optional up to 36.000 rpm)
外壳类型:	Housing type:	不锈钢	Stainless steel
驱动类型:	Drive type:	S1 (连续工作)	S1 (continuous operation)
安全等级:	Safety type:	IP 54	IP 54
冷却类型:	Cooling type:	一体化循环水冷	integrated water cooling circuit
密封气体:	Sealing air:	一体化压缩空气	integrated compressed air supply
密封类型:	Sealing type:	终身油脂主轴滚珠轴承	lubricated-for-life spindle ball bearing
尺寸:	Dimensions:	112 x 112 x 442mm (宽x高x长)	112 x 112 x 442mm (WxHxD)
重量:	Weight:	9.5Kg	9.5kg

HFU-27 变频器

“HFU-27”变频器专为 MICCRA D-27 异步马达设计。

紧凑耐用，可固定装置。带一体化数字显示，短路检测。使用一体化的电源供应 PFC

HFU-27 high frequency converter

High frequency converter for MICCRA D-27 asynchronous drive

Compact and resistant table and / or mounted device with integrated digital display and short circuit monitoring. Use in the public mains supply by integrated PFC (Power Factor Correction).

输入 (AC):	Input (AC):	1 x 115 bis 1x230V 50/60Hz	1 x 115 to 1x230V 50/60Hz	马达连接:	Motor connection:	6线引出端子	6-pin lead-out terminal
输出 (AC):	Output (AC):	3x 0 bis 220V	3x 0 to 220V	USB接口:	USB connection:	是	yes
输出功率:	Power output:	3,8kVA (3,8kW)	3,8kVA (3,8kW)	电源供应:	Power supply:	On-/off 开关	On-/off switch on front
模式:	Modulation:	Puls-Weiten-Modulation	Pulse width modulation			LCD状态显示, 可显示工作数据	LCD status display for displaying operational data such as:
额定电流:	Nominal current:	10A	10A			如: 参数、速度、设置值、负载、有效驱动、错误信息等	parameters, speed setpoint / actual, load indicator, active drive, error messages
高峰电流:	Peak current:	28A	28A	控制:	Controls:	LED状态显示:	LED status indicator:
安全等级:	Safety type:	IP 20	IP 20			准备、有效负载检测、工作按键、驱动选择和参数	Ready, active load detector, keypad for operation, drive selection and parameterization
环境温度:	Ambient temp.:	5 bis 40°C	5 to 40°C				
配置:	Equipment:	配连接线. Stecker-Satz	delivery with connector set				
操作类型:	Operation type:	S1 (连续工作)	S1 (continuous operation)				
外形尺寸:	Dimensions:	120x275x220mm (HxWxD)	120x275x220mm (HxWxD)				
重量:	Weight:	4,9 kg	4.9 kgs				
接口:		4x数字输出, 1x模拟输出 (5V), 9x数字输入 (10V), 1x脉冲输出-速度					
Interfaces:		4x digital-output, 1x analog-output (5V), 9x digital-input, 2x analog-input (10V), 1x pulse output - speed					