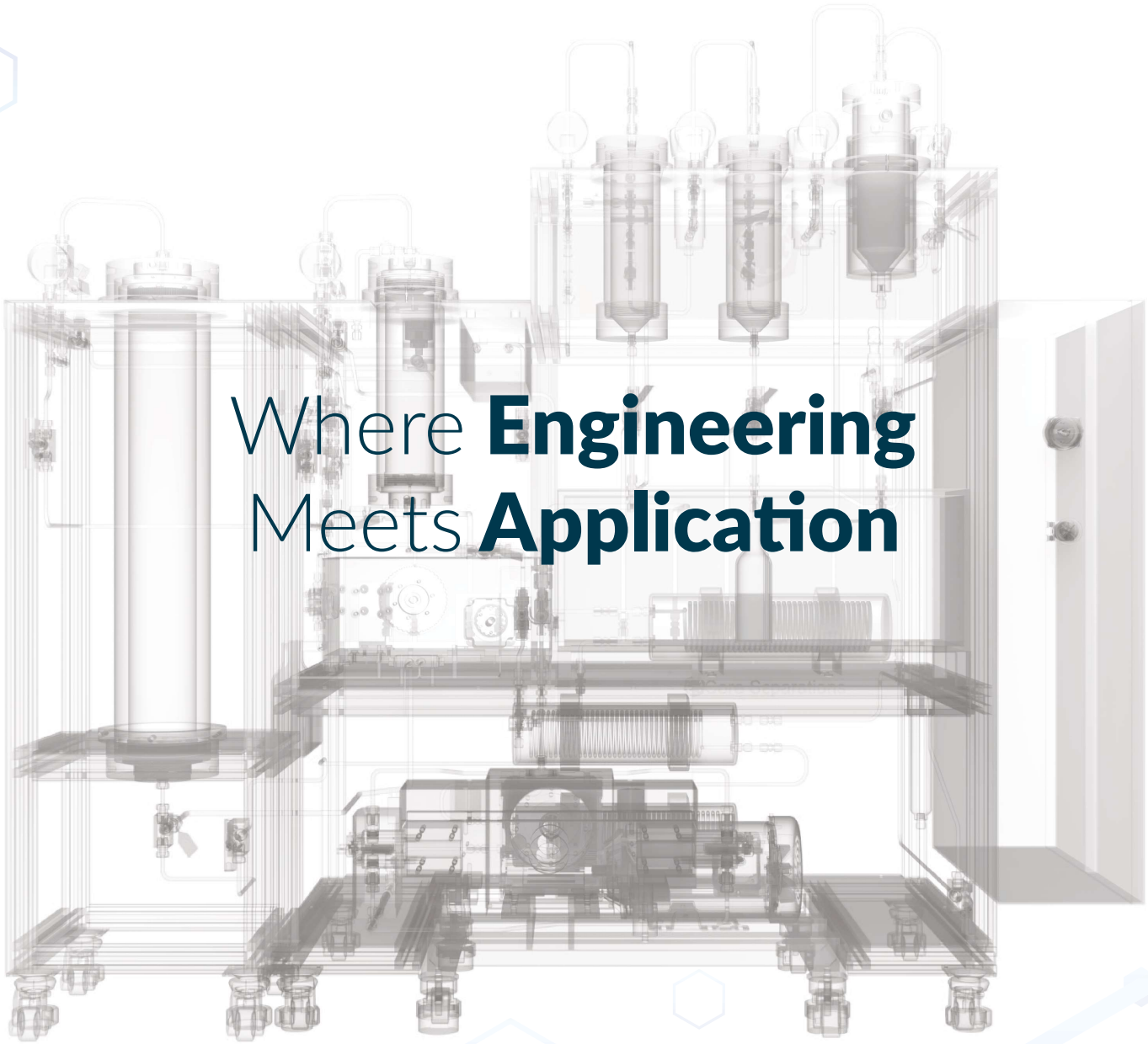

Where **Engineering**
Meets **Application**

Core | **Catalogue**

2022 v1.4

SciMed™
Core Separations

08. Core | **Pumps (CI & CU series)**

upto 1000 bar

Core industrial pumps (CI Pumps) are engineered to operate with the highest level of performance and precision. Designed using a combination of a fixed stroke piston and variable frequency drive technology, we accurately control the delivery of high-pressure fluids including CO_2.

Our Industrial series pumps are highly energy efficient and have a proven long service life for all mechanical components. Combined with particularly low maintenance and operating costs, our pumps are well suited for the conditions required in manufacturing environments.

Core | **P1K Pump**

Using the same core design as our P500 pump, the **P1K** delivers a increase in performance without compromising reliability. Delivering 1kg/min at pressures upto 400 bar this pump is suitable for reactors upto 25L.

Flow Rate: 100 – 1000g/min
Maximum Discharge Pressure: 400 bar (design)
Power: 208-240 V, 13 A

Core | **P500 Pump**

Pilot scale manufacturing needs a pump with a robust design with capable of delivering high flow rates. The **P500** can deliver 500g/min at 689 bar and can be integrated into a new system or as an upgade to a current SFE system. Suitable for reactors upto 10L.

Flow Rate: 50 – 500g/min
Maximum Discharge Pressure: 689 bar (design)
Power: 208-240 V, 13 A

Pressure, bar	Flow Rate g/min	Media	Head Material	Number of Heads
upto 1,000	**upto 1,000**	**CO_2, Solvent**	**316**	**2**

Core | **P251K Pump**

Designed to deliver liquids including CO2 into extremely high pressure enviroments upto 1000 bar. Built from the ground up the P251K can deliver 250g/min at 1000 bar utilising a highly efficient Core Separations designed check valve.

Flow Rate: 25 – 250g/min
Maximum Discharge Pressure: 1000 bar (design)
Power: 208-240 V, 13 A

Core | **Features**

Core | **Production**

Our Industrial pumps are designed for high flow, high pressure and robust operation. Used in our Core | **Systems** to ensure reliability and high throughput.

Core | **Design**

Dual cam driven pistons designed to reduce pulsation during operation.

Sealed for life bearings removing the requirement for an oil pan reducing the required maintenance over the lifetime of the pump.

Core | **Precision**

Use of high purity ceramic pistons increases the durability of the pump at high pressures, allowing them to be used not only with CO2 but a number of organic solvents as well.

For more infomation: contact@coreseperations.com

Type	Piston Material	Control	Mount	Certification
Piston	**Ceramic**	**Standalone, System**	**Wheels**	**ASME, PED, UKCA**