

Advanced Ceramic Technologies for fluid dispensing



Machine expertise, by 🛟 BSG

- A fully integrated digital filler.
- An operator-friendly system with all the parameters controlled through an easy-to-use interface.
- Built with high-tech mechanics that are compliant with pharmaceutical regulations.

The Easy fitting® technology

- Our patented attachments and mounting device are made for easy, accessible and fast mounting of the ceramic pump.
- It only takes a minute to change the pumps!



The Naked[®] ceramic pump

- One monolithic component in contact with your products.
- Our own high grade patented ceramic materials are FDA approved.
- Tailor-made designs.
- X-change technology available (interchangeable components).





Primary usage

- Our microdosing station can be **fully integrated onto an existing filler**
- Upgrade your R&D capabilities with a flexible and easy-to-use platform

An Extended filling range

- Fill as low as 0,01 ml
- Up to 8,5 ml

Accurate & Repeatable doses

- ± 0,5% tested accuracy on a 0,05 ml water like filling
- Less than ± 0,1% tested accuracy from 0,5 ml water-like filling

A Reliable and Robust platform

Compatible with our Easy Fitting technology

- The lowest human interaction
- Compatible for full robotization, ready for gloveless isolators

(III)

Volume (

(III)

Volume (

Isolator compatible

- Our filling unit is entirely airtight and compliant to standard bio decontamination processes (ex : VHP).
- It's designed to maintain a laminar airflow.

Integrated HMI

• Operator-friendly and easy-to-use interface

Small footprint for Simple integration

Only ONE material in contact with your products, handling the most complex applications

CIP/SIP option available







Dimensions & design

Standard size of the driving system :

- Pitch: 70mm / D: 327mm
- H: 485mm / 525mm (zero position / full stroke)

Design:

- No major modification required on the filling line
- Perfect isostatism of the attachments
- The machine rounded top facilitates air laminar flow
- Resistant to VHP sterilization

A unique servicing approach

More than 30 years' experience makes us your preferred partner for complex filling applications.

- Product testing possible in our or your premises.
- Advice and strong expertise by our specialists.
- We provide easy and quick access for technical discussion.

Control of all parameters

- Take control of your machine, and your performances.
- Acceleration, deceleration, velocity: defined in standard engineering units
- Define suckbacks & inlet/outlet delays.

Take your line to the next level

- The micro dosing unit can easily be implemented into OEM lines.
- Considerably improve dosing accuracy on existing isolators.
- Personalized designs allow us to meet any customer needs.

Stand-alone version available

- A stand-alone benchtop for R&D department or pre-industrialization project.
- Create and save as many recipes as you want.
- Simulate the movement of an existing pump.
- Perfect for small batches for clinical trials.









THE solution for your most demanding and complex applications

Our High-Tech ceramics, compatible with aggressive products

- Neoceram develops unique high purity ceramics: Pharmalox[®], Pharmazirc[®]
- Ability to withstand aggressive products such as aluminum-based vaccines, hyaluronic acid, suspensions, etc.
- Chemically inert
- FDA approved materials

cGMP design and cleanability

- NO dynamic seals
- Natural sealing ensured by the micrometric clearance between parts
- Zero contact between the product and stainless steel
- Able to obtain low surface finishing (Ra < 0.4)
- High density, no porosity
- CIP/SIP solutions available

Advantages on standard technologies

- NO leachables (silicon, chromium and other covering layers)
- Experience with high viscosity range
- No need of separate adjustment between pumps

Minimal wear

- NO coating
- High mechanical properties
- Excellent resistance to corrosion and wear
- No local deformations due to the hardness
- Expected lifetime of the pump: 8 to 12 years



Images of stainless steel piston after use



Images of Pharmazirc[®] piston after use



Our Patented upgrades - Easy Fitting® system

The Easy Fitting® technology

- A specifically designed handle facilitates an aseptic plug-in pump mounting
- Zero backlash connections
- Low contamination risk
- No free parts can fall into isolator
- Improves product output, resulting in production gain
- Fast installation which will reduce machine downtime
- Our attachments are engineered for an optimal mechanical strength

Robotics integration with Easy Fitting® technology

- Use of robotic arm possible to eliminate human interaction and error
- Enhances safety standards
- Ready for gloveless isolators





www.neoceram.com

Neoceram s.a. Rue du Grand Peuplier, 1 7110 Strépy-Bracquegnies • Belgium Tel : +32 64 67 14 50 • Fax : +32 64 67 14 89 E-mail : neoceram@neoceram.com

Neoceram S.R.L. Viale dell' Agricultura 12 15067 Novi Ligure (AL) • Italy Tel : +39 0143 78538 E-mail : neoceramitalia@neoceram.com