



**PRINT HEADS FOR
EXTRUSION-BASED
BIOPRINTING – SIMPLE
AND PRECISE.**



reddot winner 2022

**PURE
DYNE**

by ViscoTec

THE FUTURE

MEETS PROGRESS

We will guide you on your next step to superior process control in bioprinting.

The progressive cavity technology is predestined for volumetric dispensing of low to high viscosity biomaterials. Precision, repeatability, process reliability and intuitive handling are the core competencies of our technology.

We offer the simple solution for extrusion-based bioprinting you've been waiting for! Materials of different viscosities are

dispensed reliably and precisely and you get a perfect print result.

Due to our technology, environmental influences no longer play a major role in the printing process. Thanks to the dispensing geometry, a constant volume per revolution is always conveyed and precisely applied. The programmable suck-back ensures clean start and finish points.

You can focus on the application itself and move on to the next hurdles in bioprinting.



Multi-Use print head

The compact printhead is mounted as a multi-use component on your 3D printer or bioprinter. A stepper motor ensures simple control. An additional control is not required.

Technical features

Our technology offers you numerous advantages: Integrated compressed air supply, easy connection to bioprinters, fast adaptation of single-use caps, compact design and more.

Optional: Heating and cooling

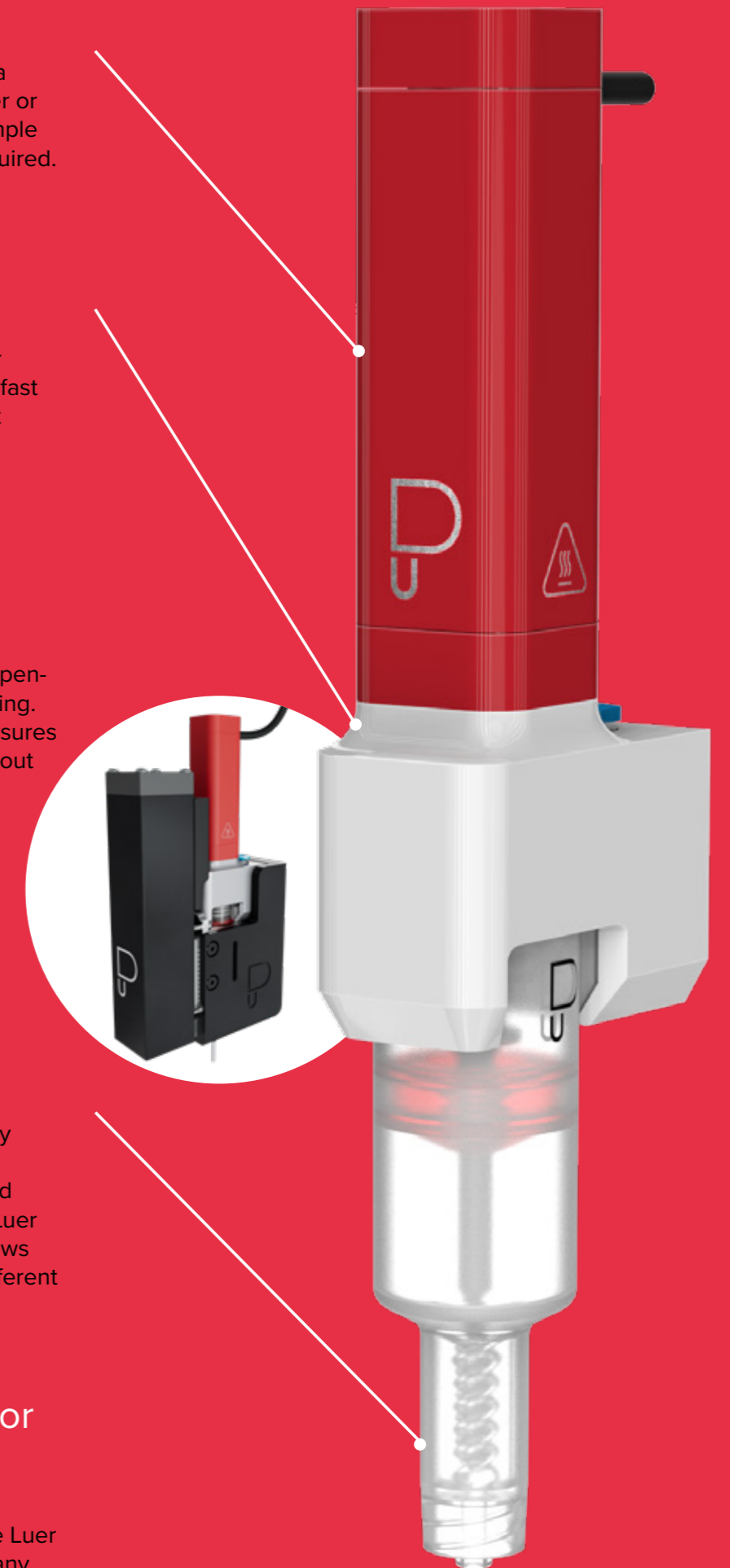
Temperature control of organic cell suspensions is a key success factor in bioprinting. Puredyne's heating and cooling unit ensures optimal cell survival conditions throughout the process.

Single-Use cap

Progressive cavity technology is the key to maximum precision. The cap has a volume reservoir of 5 ml and is replaced after each dispensing procedure. The Luer Lock connection at the bottom end allows you to choose from a wide range of different dispensing needles.

Optional: Pressure sensor

The modular pressure sensor provides real-time control of your extrusion and ensures higher process safety. With the Luer Lock connection, it can be adapted to any extrusion-based technology.



WE SIMPLY COULD NOT HELP IT

For more than 25 years, we have been dealing exclusively with the precise and gentle dispensing of liquids and pastes. We are dispensing specialists!

And because we like to share our knowledge, you will benefit from our experience in the optimization of your processes!

With our technology, we enable you to process an almost unlimited range of liquid to pasty materials - a selection of applications and materials can be found on the right.



Organ models



Cancer research



Tissue



Personalized
medicine



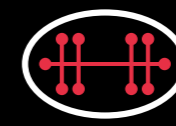
Scaffolds



Drug development /
testing



Food



Organs-on-a-chip



Cosmetics



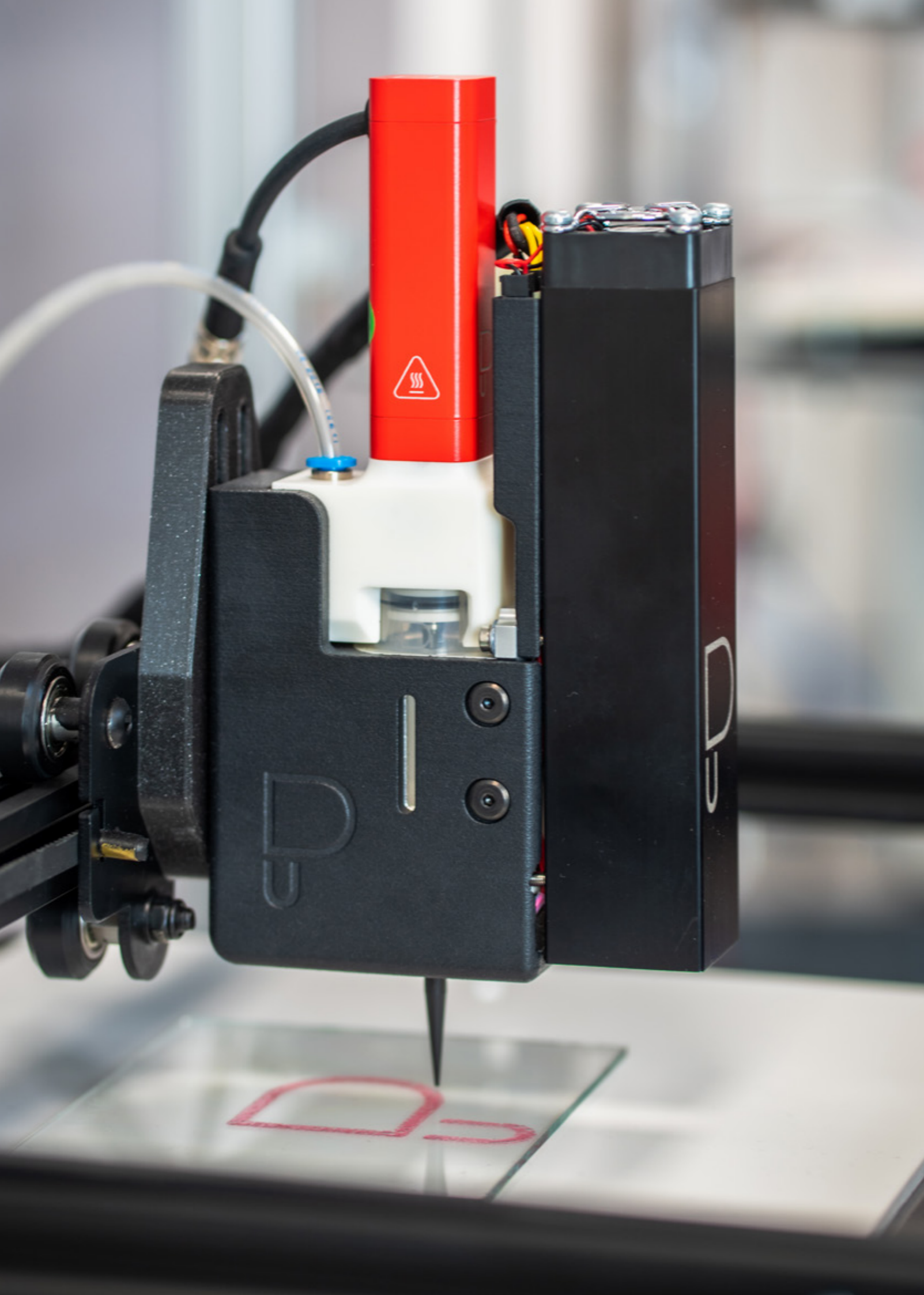
Hydrogels & cell-
laden material



Conductive inks



Ceramic pastes



SIMPLY

PROGRESSIVE.

USABLE.

PURE.

Simply progressive.

We only know one direction: Forward! We combine our experience with innovation and proven technology for best results.

Simply usable.

We offer you the simplest and fastest solution for your complex requirements. With us, you can concentrate fully on your research!

Simply pure.

Our products not only fit your requirements for purity in the laboratory. We value function and minimalistic design!

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