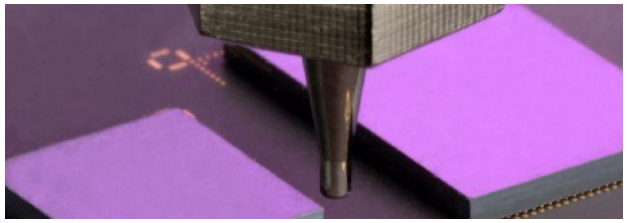
Precision Dispense Components

Components designed by engineers specifically for fluid delivery. Traditional dispensing tips are restrictive. Excessive resistance in these components raises pressure required for high flow rates. Forcing system load to increase to overcome this limitation.

Subrex relies on simulation and empirical testing to ensure optimal product performance. Products manufactured are inspected to our rigorous system of quality metrics.

An assortment of nozzles from our product line.



Close-up view of reusable hub and core.

Standard gage precision nozzles shown are 19 gage, peach hub and 20 gage, lime green colored hub. Nozzle shown with a neon blue hub is a size 06 micro precision nozzle.

Subrex

PRECISION DISPENSE COMPONENTS

- PRECISION
- PERFORMANCE
- PRODUCTIVITY

Subrex, LLC
1615 South Rancho Santa Fe Road
Suite C1
San Marcos, CA 92078-5194

Phone: +1.760.436.1521
E-mail: sales@subrex.com

ADVANCING THE SCIENCE OF FLUID DELIVERY™

Tel: +1.760.436.1521

COMPONENT SPECIFICATIONS

Subrex builds precision nozzles using a monolithic design that produces a smooth contiguous fluid path that eases restriction, is clog resistant and capable of higher flow rates at lower pressures than cannula types. A rigid thin wall does not comply under pressure, reduces facial area at the exit aperture and enables deposit of fluid closer to the target with less variation. The wall of the nozzle is substantially thinner than nozzles made using conventional machining methods. It increases exit aperture diameter for a given gage size.

STANDARD GAGE PRECISION NOZZLE SELECTION GUIDE

Hub Color	Gage Size	Nominal ID inches (mm)	Nominal OD inches (mm)
Pink	18	0.041 (1.039)	0.049 (1.240)
Peach	19	0.034 (0.859)	0.042 (1.059)
Lime Green	20	0.027 (0.681)	0.035 (0.879)
Light Blue	21	0.024 (0.610)	0.032 (0.810)
Neon Purple	23	0.022 (0.564)	0.025 (0.635)
White	25	0.017 (0.437)	0.020 (0.508)
Red	27	0.013 (0.335)	0.016 (0.406)
Black	30	0.009 (0.234)	0.012 (0.305)

*All nominal dimensions listed in tables apply to uncoated nozzles

Micro precision nozzles have the same superior performance of standard gage precision nozzles.

STANDARD GAGE PRECISION NOZZLE CORE SELECTION GUIDE

Gage Size	Nominal ID inches (mm)	Nominal OD inches (mm)
18	0.041 (1.039)	0.049 (1.240)
19	0.034 (0.859)	0.042 (1.059)
20	0.027 (0.681)	0.035 (0.879)
21	0.024 (0.610)	0.032 (0.810)
23	0.022 (0.564)	0.025 (0.635)
25	0.017 (0.437)	0.020 (0.508)
27	0.013 (0.335)	0.016 (0.406)
30	0.009 (0.234)	0.012 (0.305)

MICRO PRECISION NOZZLE SELECTION GUIDE

Hub Color	Size	Nominal ID inches (mm)	Nominal OD inches (mm)
Neon Blue	06	0.006 (0.159)	0.010 (0.244)
Neon Orange	04	0.004 (0.108)	0.008 (0.208)
Neon Yellow	02	0.002 (0.057)	0.007 (0.169)

Interior portion of a standard gage precision nozzle is a metal core. Nozzle cores are available separately. They can be used in a slip fit fashion or combined with a reusable hub. Cores can be ordered in nickel silver or phosphor bronze metals. Coated cores with coating applied to interior and exterior surfaces are available with electroless nickel, nickel PTFE, nickel polymer type SLK or parylene type C.

To find out more visit our website.

www.subrex.com

MICRO PRECISION NOZZLE CORE SELECTION GUIDE

Size	Nominal ID inches (mm)	Nominal OD inches (mm)
06	0.006 (0.159)	0.010 (0.244)
04	0.004 (0.108)	0.008 (0.208)
02	0.002 (0.057)	0.007 (0.169)

Micro precision nozzle cores can be ordered. They have all the performance characteristics of micro precision nozzles. Micro precision nozzle cores are available uncoated or with specific coatings applied down to a size of 0.004 inch diameter. *Image shown above is the tip of a 0.002 inch or 50 µm nozzle core.*

Reusable hubs are also available. A metal nozzle core is installed to form a separable nozzle assembly. It is inserted through a vertical cut away along the side. The core flange is secured by a groove inside the top portion. This is an effective way to provide a metal hub that can be used at low, ambient or elevated temperatures. Separation of hub from core reduces waste and lowers cost.

To Order:

Email: sales@subrex.com

Call: +1.760.436.1521

Subrex, LLC
1615 South Rancho Santa Fe Road
Suite C1
San Marcos, CA 92078-5194

Phone: +1.760.436.1521
E-mail: sales@subrex.com
Inquiry: info@subrex.com

All Subrex products are proudly made in the USA

US Patent No. 7434753, 7231716, 8210455 and others pending