

Raca International

Product Brochure

Your partner in Spray Drying Solutions

spraydryingnozzles.com





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With over 35 years of global experience, Raca International is a trusted partner in spray drying technology. We supply durable, high-quality nozzles for industries such as food, dairy, and pharmaceuticals.

Our strength lies in technical expertise, service, and custom solutions.

Under the Fyrtex® brand, we offer reliable and flexible components that support uptime and consistent product quality.

All our nozzles are compatible with major brands. Whether you need replacements or expert advice, our team is here to support you.

Raca International is ISO 9001 certified, ensuring consistent quality and full traceability from design to delivery.

Erik Sanders & Quinten Minck Raca International B.V.

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Solutions Overview

Fyrtex 01

The Fyrtex 1 is a durable and proven spray dry nozzle designed for high-pressure and high-temperature spray drying. This classic 8-part nozzle features a stainless steel body and up to three tungsten carbide wear parts: an orifice disc, a swirl chamber with a separate round end plate or a combined swirl chamber. Fully compatible with **Delavan SDX®/ Type 1**. Click for product specifications or scan QR-code.



Fyrtex 03

The Fyrtex 3 is a simplified version of the Fyrtex 1 nozzle, developed for tool-free assembly and easy maintenance. It is commonly used in spray drying processes where frequent wear part replacement and operator friendly design are essential. Like the Fyrtex 1, it features high-quality tungsten carbide wear parts and full compatibility with the **Delavan SDX® III system**. Click for <u>product specifications</u> or scan QR-code.



Fyrtex 05

The Fyrtex 5 is one of the latest additions to our spray dry nozzle line-up, based on the modernized **Delavan SDX® V** design. It features a simplified internal configuration with only two tungsten carbide wear parts, providing outstanding durability and easy maintenance in high-performance spray drying systems. Click for <u>product specifications</u> or scan QR-code.



Fyrtex Mini

The Fyrtex Mini is one of the smallest spray dry nozzles in our range, designed for applications requiring fine droplet size and low throughput. Ideal for low-flow high precision drying. Based on the **Delavan SDX® Mini design**, this compact nozzle excels in small-scale production or highly precise drying processes, such as pharmaceuticals or pilot batches. Click for <u>product specifications</u> or scan QR-code.







Durable tungsten carbide wear parts



Multiple orifice and swirl sizes available



Fyrtex TD

The Fyrtex TD is a rugged, efficient spray dry nozzle modeled after the **BETE TD series**. It shares the same core implementation as the Fyrtex 1, 3, and 5 nozzles, but features a distinct one-piece swirl chamber geometry. The nozzle is designed for high wear resistance and ease of maintenance in large-scale spray drying operations. Click for product specifications or scan QR-code.



Fyrtex SK

The SK nozzle contains two tungsten carbide wear components: a core and an insert. Both are available in various configurations and multiple grades of tungsten carbide (M-carbide for wear resistance or Y- and Z- carbide for abrasive environments), ensuring optimal longevity and performance under harsh conditions. Designed to be drop-in replacements for **Spraying Systems SK nozzles**. Click for <u>product specifications</u> or scan QR-code.



Fyrtex SB

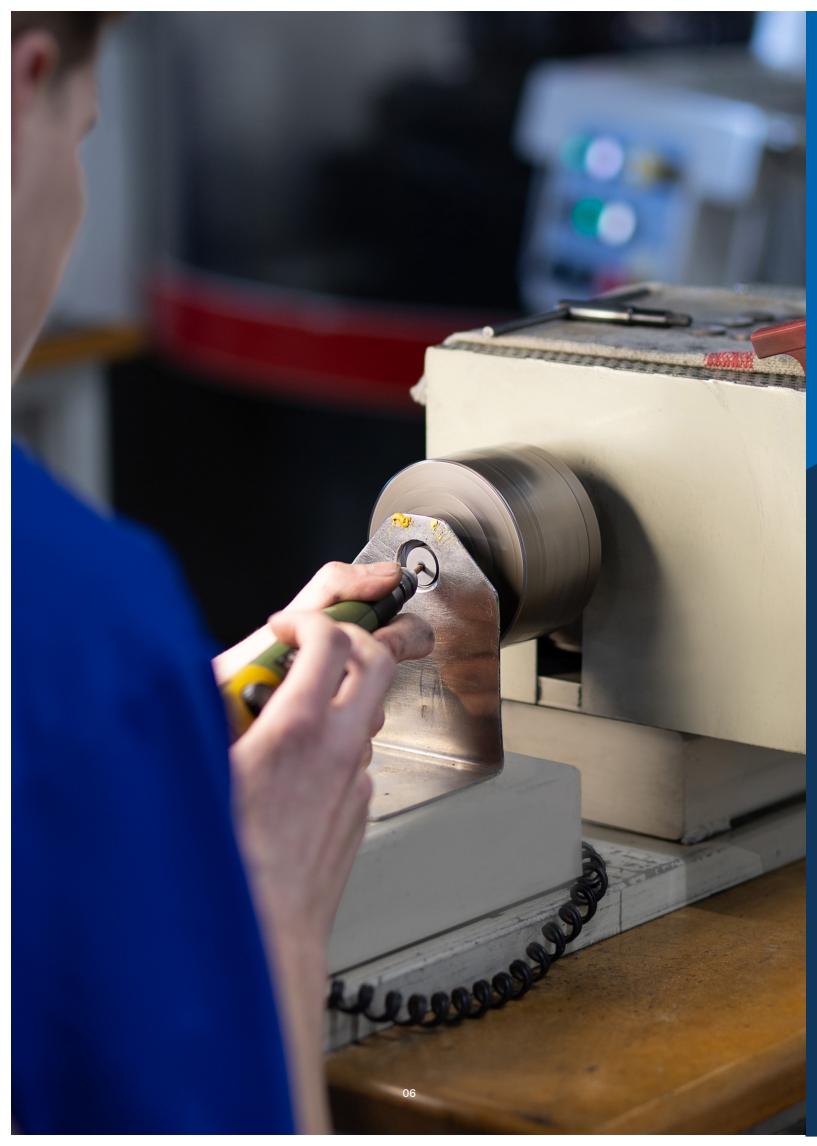
The Fyrtex SB is a versatile, mid-size spray drying nozzle designed for medium-flow operations. It replicates **Spraying Systems SB** performance and is well-suited for co-current or counter-current dryers handling viscous fluids like dairy, flavors, and food ingredients. Click for <u>product specifications</u> or scan QR-code.



Fire Safety

The Fyrtex Fire Safety Nozzle is a high-pressure atomizing nozzle built for safety-critical spray drying. It handles up to 700 bar and prevents leakage or buildup near the nozzle. Made from hardened Nitronic steel with FDA- and USDA-compliant materials. Click for <u>product specifications</u> or scan QR-code.





Specialty Components

Standard Hole Gauge

Ensure accurate nozzle setup with our Standard Hole Gauge. Designed for quick, precise measurement of orifice discs (0-5 mm), this durable tool is ideal for maintenance teams. While less intuitive than digital gauges, it remains a highly effective and reliable solution. View online or scan QR-code.

√ Quick & accurate

✓ Durable

✓ Easy to use



Double Ended Pin Gauge

Keep spray precision under control with the Double Ended Pin Gauge. This simple, no-calibration tool lets maintenance teams quickly check if orifice discs are within tolerance or need replacement; fast, reliable, and ready to use. View online or scan QR-code.

✓ Instant visual check

√ No calibration needed
√ In stock



Superior Measuring Device

Fast and precise internal diameter checks. The Superior Measuring Device delivers instant, reliable readings in just seconds. Its hardened steel plunger ensures accurate results while protecting sensitive surfaces; ideal for high-precision applications.

✓ Instant visual check

√ Fast & precise

✓ Easy to use



Ultrasonic Cleaning Device

Powerful yet gentle cleaning for spray drying components. Our Superior Ultrasonic Industrial Cleaning Device removes tough residues while protecting delicate, high-precision parts. Ensuring optimal performance and extended nozzle life. View online or scan QR-code.

√ 37kHz cleaning

√ Fast & efficient

√ Easy to use





Fyrtex 03

Exploded view









Expert Support When it matters most

Spray drying issues can quickly disrupt production. That's why Raca International gives you direct access to our in-house specialist. Ready to diagnose and solve problems like clumping, poor powder quality, or pressure fluctuations.

Why choose our specialist?

Spray drying is complex. Even with good equipment and trained staff, challenges occur. Our expert brings decades of hands-on experience across food, dairy, pharma, and chemical industries.

We help solve:

- Incomplete drying
- Clumping
- Inconsistent quality
- Clogged nozzles
- Pressure/temperature instability

Global expertise, practical support

From troubleshooting to plant setup advice, on-site or remote, we help keep your spray drying process running reliably.



Contact Information

Talk to our experts

Do you have questions, need support, or want to discuss your spray drying process? We're here to help.

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