



TD-K Twist & Dry™ High Pressure Nozzle

BETE has developed an innovative solution to expand spray dryer capacity up to 10,000 psi with our new high pressure Twist & Dry (TD-K) nozzle equipped with a PEEK (polyetheretherketone) backup ring.

Product Name:

TD-K for high pressure applications.
Includes models TD-7K (up to 7,000 psi) and TD-10K (up to 10,000 psi)

Advancements from Current Line:

New high pressure capacity; increased from 3,500 psi to 10,000 psi

Operating Conditions:

- TD-10K: up to 10,000 psi at temperatures up to 450°F; achieved with a PEEK backup ring and Duplex 2205 carrier
- TD-7K: up to 7,000 psi at temperatures up to 450°F; achieved with a PEEK backup ring

Customer Requirements:

Spray dryer operators have reported that they can increase yield by operating at higher pressures.

BETE's Solution:

By modifying the TD body to take a backup ring, BETE developed the TD-K configuration which allows leak-proof operation up to 10,000 psi.

Benefits:

- Operate at high pressures and temperatures
- Greater yield capacity
- Safe, leak-proof operation
- Minimal additional cost

Technical Questions?

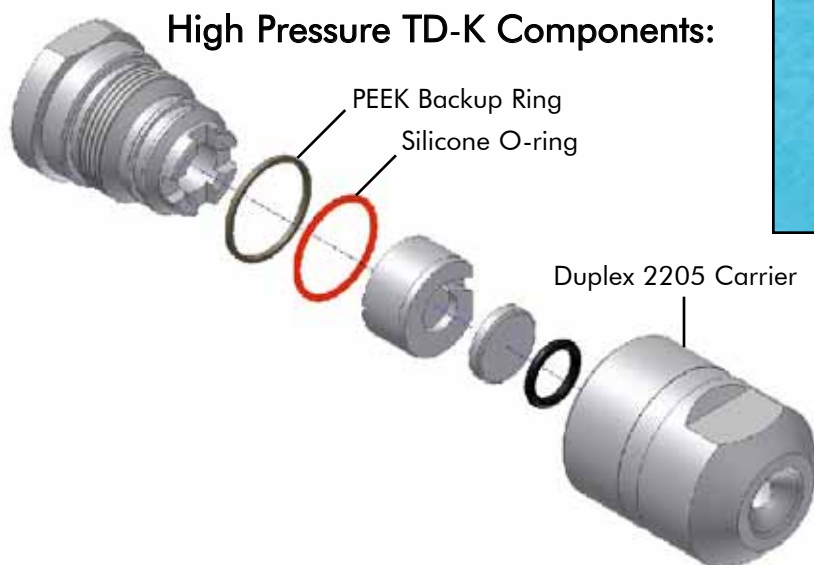
Please contact:

Jacob Callery

Applications Engineering

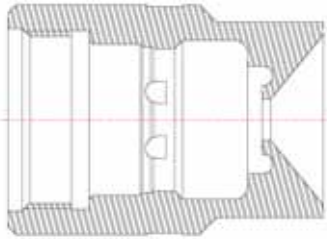
(jcall@bete.com)

413-772-2166 x 113

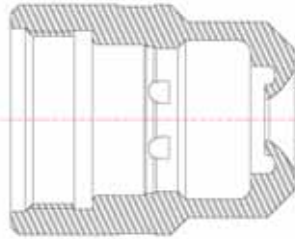


Twist & Dry Material Selection Guide

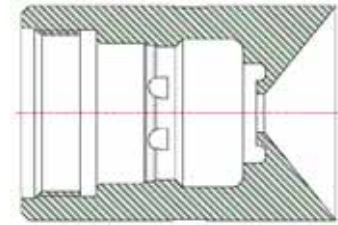
| Pressure | | Temperature | | |
|----------|--------|----------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|
| | | up to 250°F (121°C) | up to 400°F (204°C) | up to 450°F (232°C) |
| 689 | 10,000 | TD 10K Viton 90 O-ring w/PEEK Backup Ring Carrier in Duplex 2205 TD 10K only available in Carriers 5 and 11 | TD 10K Viton 90 O-ring w/PEEK Backup Ring Carrier in Duplex 2205 TD 10K only available in Carriers 5 and 11 | TD 10K Silicone O-ring w/PEEK Backup Ring Carrier in Duplex 2205 TD 10K only available in Carriers 5 and 11 |
| 483 | 7,000 | TD 7K Viton 90 O-ring w/PEEK Backup Ring | TD 7K Viton 90 O-ring w/PEEK Backup Ring | TD 7K Silicone O-ring w/PEEK Backup Ring |
| 345 | 5,000 | TD Viton 90 O-ring | TD Viton 90 O-ring | |
| 241 | 3,500 | | | |
| 55 | 800 | | TD Silicone O-ring | |



Carrier 1 (CI1) (shown)
Carrier 11 (CI11) - without lugs



STANDARD TD CARRIER
Carrier 2 (CI2) (shown)
Carrier 5 (CI5) - without lugs



Carrier 10 (CI10) (shown)
Carrier 12 (CI12) - without lugs

