

HEBERLEIN® DETORQUEJET-3.

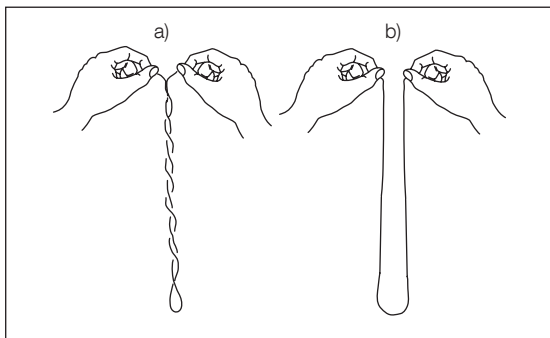
DETORQUE FOR FALSE-TWIST-TEXTURING.

COST EFFECTIVE ELIMINATION OF YARN TORQUE.

The DetorqueJet-3 is an ultra-compact device with no moving parts. Placed after the second heater, before the third feed the DetorqueJet-3 can be used for both S and Z twist yarns

Detorque

Detorque jets are used during the false twist texturing process to eliminate or significantly reduce the tendency of draw textured yarns (DTY) to torque. Using a jet of low pressured air, torque in false twist textured yarn is successfully reduced, improving down-stream processing from the creels.



a) Torque in single-ended, false twist textured yarn
b) Torque-free single-ended, false twist textured yarn



Features and Benefits

- ▶ Eliminates or significantly reduces torque in DTY
- ▶ Can be deployed for both S and Z twist yarns
- ▶ Designed and manufactured for exacting tolerances
- ▶ Designed to use less compressed air
- ▶ Performance & high-uniformity from position to position
- ▶ Only two jet sizes are necessary for the entire textile count range
- ▶ The ceramic jet core provides hard-wearing, long-lasting use
- ▶ Very compact for easy installation and operation
- ▶ Quick release coupling for simplified installation
- ▶ Easy to thread for improved efficiency thanks to the open jet design
- ▶ Easy to maintain and clean

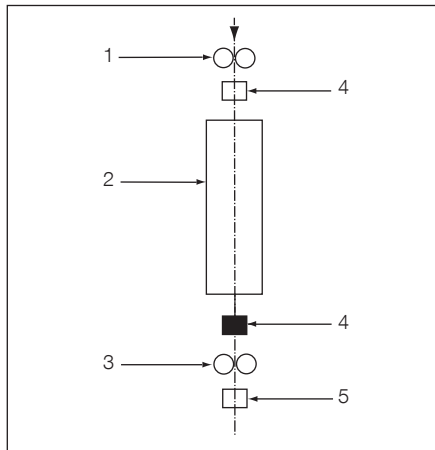
Heberlein® DetorqueJet-3

Technical Data

Jet type	Pressure range [bar]	Count range [dtex]*	Formula for the air consumption
DetorqueJet 21-3	0.5 - 2.5	20 - 167	$q_{vn} = 0.43 (p_e + 1) \text{ [m}^3\text{/h]}$
DetorqueJet 22-3	0.5 - 2.5	167 - 330	$q_{vn} = 0.86 (p_e + 1) \text{ [m}^3\text{/h]}$

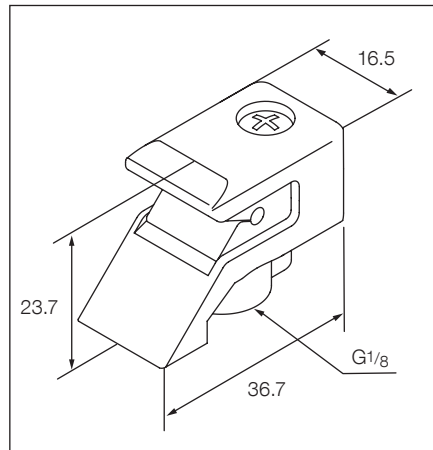
* Approximate values: dependent on the properties of the feeder yarn used, on the machine set-up and yarn guiding den = 0.9 x dtex

Mounting of the jet



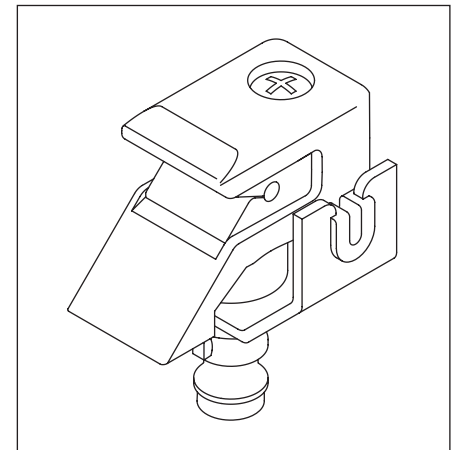
- 1 Shaft
- 2 SET heater
- 3 Shaft 3
- 4 DetorqueJet
- 5 Interlacing

Dimensions and weight



Weight 21g, dimensions in mm

Accessories



DetorqueJet with exit yarn guide

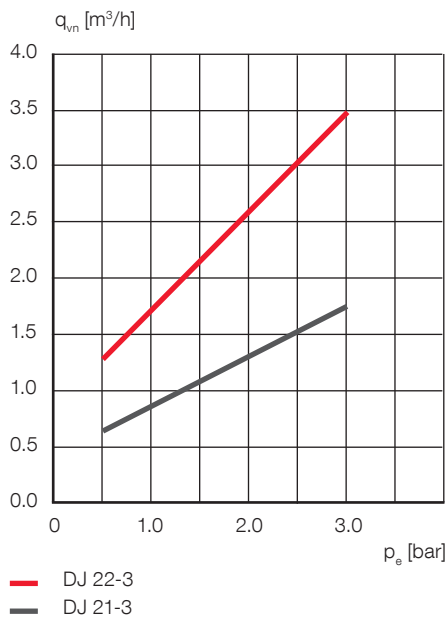
The DetorqueJet must be installed after the SET heater.

Compressed air requirements

- Max. residual oil: 0.1 mg/m³ (class 2*)
- Max. residual particles: (class 2*)
 - Particle size 1 µm
 - Particle density 1 mg/m³
- Max. residual water: (class 5*)
 - Residual water 7.732 g/m³
 - Dew point + 7 °C

* According to DIN ISO 8573-1

Air consumption



p_e = gauge pressure [bar]
 q_{vn} = air consumption [m³/h]*
 psi = 14.7 x bar
 CFM = 0.588 x m³/h

* In the normal condition as per DIN 1343:
 standard temperature = 0 °C
 standard pressure = 1.01325 bar