

Interlacing Jets for the Synthetic Fibre Industry









RPE Technologies GmbH

The company has been formed by former employees of TEMCO Textilmaschinen Komponenten GmbH in Germany.

The business concept is based on research and development of innovative machine components for processing synthetic yarns for all kinds of textile processes.

RPE Technologies is especially concentrating on the development, engineering, design and marketing of air interlacing jets for tangling, commingling, pre-interlacing and special applications based on customer requirements.

The main textile processes are Spinning (POY, FDY, BCF, etc.), Drawing, Draw-Texturing and Draw-Winding of synthetic yarns like Polyester, Polyamide and Polypropylene as well as glass fibres.

Our business objectives and assets are:

- Development of economic and ergonomic high tech quality components
- Customer support concerning yarn quality and energy cost
- Very competitive price value
- Quick and reliable delivery
- Know how of experts with long time experience
- Latest technology in development and production
- New ideas, patent pending
- Excellent customer service and after sales support
- Lean and flexible organisation

Customized solutions are our speciality

Our interlacing jets have the following features:

- Suitable for all kind of yarns
- Meeting all requirements of interlacing
- Low air consumption and energy cost
- Optimized geometries for less abrasion
- Easy and simple to thread in
- Easy to clean and to maintain
- Robust and long service life

Our customers are both O.E.M.'s (Original Equipment Manufacturing) who use our components in their machines as well as end users who convert their machines with our components.

...worldwide





Bluejet for DTY (Texturizing), Air Covering and Winding Machines

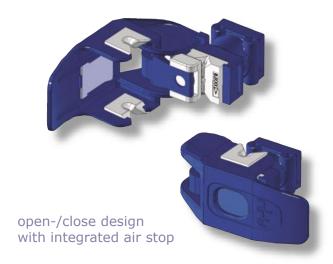
Features:

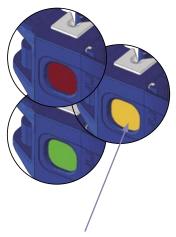
- sophisticated technology
- simple mechanism with only few parts
- robust housing
- suitable for all kind of couplings
- integrated air stop
- colored identification

Advantages:

- excellent interlacing performance
- low energy cost
- easy threading
- easy exchange without tools
- easy maintenance and cleaning
- best price value

Bluejet





optional colored plates according to customer's requirements

adaptation possibilities









Jet Type	Titer Range [dtex]			
	S soft stability	M medium stability	H high stability	
BJ11	-167	-167	-110	
BJ14	-500	-300	-167	
BJ17	-600	-400	-330	
BJ20	-800	-660	-500	
BJ25	-1200	-1000	-800	
BJ30	-1500	-1200	-1000	



SPT- Interlacing Jet for Spinning Processes

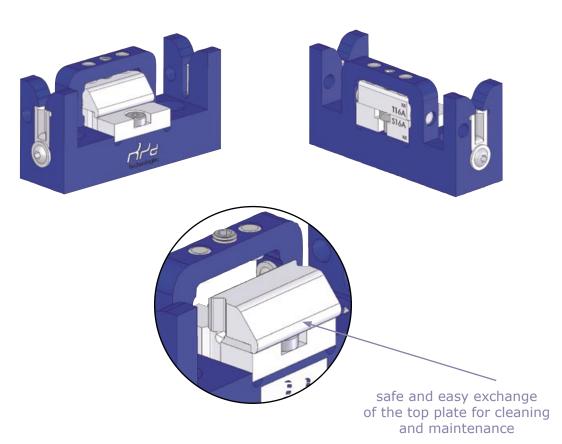
Features:

- sophisticated technology for spinning
- smooth contact surface
- simple mechanism with only few parts
- wide range of yarn denier
- flexible installation for all customer requirements low energy cost
- available with different yarn end separations

Advantages:

- excellent interlacing performance
- low filament break rate
- easy exchange of the inserts
- easy maintenance and cleaning
- best price value

"patent pending design"



Jet Type	Titer Range [dtex]	Yarn Separation [mm]
SPT-S11A	PES/PA up to 150	22
SPT-S13A	PES/PA up to 200	22
SPT-S16A	PES/PA up to 330	22
SPT-S20A	PES/PA up to 660	22



SPI- Interlacing Jet for Technical Yarn and Pre-Interlacing

Features:

- usable for spinning and migration
- simple mechanism with only few parts
- wide range of yarn denier
- flexible installation for all customer requirements easy maintenance and cleaning
- available with different yarn end separations

Advantages:

- excellent interlacing performance
- low energy cost
- easy exchange of the inserts
- best price value

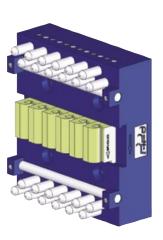
1-thread



2-thread



6-thread



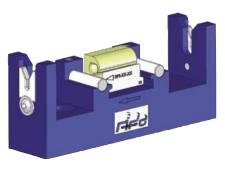
Jet Type	Titer Range [dtex]	Thread Lines	Yarn Separation [mm]
SPI-2333	PES/PA 500 - 1000 PP 400 - 800	1/2/3/4/6	min 7,5
SPI-3042	PES/PA 600 - 1500 PP 500 - 1200	1/2/3/4/6	min 7,5
SPI-3550	PES/PA 700 - 2000 PP 600 - 1500	1/2/3/4/6	min 9,0
SPI-4058	PES/PA 800 - 3500 PP 1000 - 2200	1/2/3/4/6	min 12,0
SPI-4567	PES/PA 3000 - 6000 PP 2500 - 5500	1/2/3/4/6	min 12,0

The designs are changeable according to customer requirements concerning yarn path, machine adaptation and air supply.



Examples for SPI- Interlacing Applications

SPI-23-33-1-11B



Standard SPI Interlacing single thread line

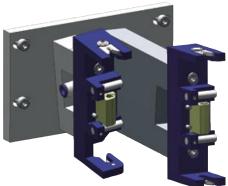
SPI-23-33-1-11A

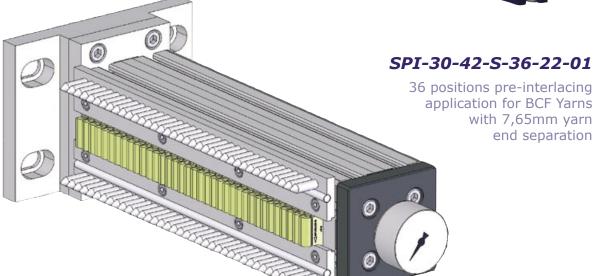


Standard SPI Interlacing single thread line with modified yarn path

ME.01BA01.01.01

Installation of a two thread line pre-interlacing application for Industrial and BCF Yarns







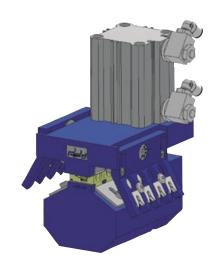
Interlacing Jets for BCF-Processes

Features:

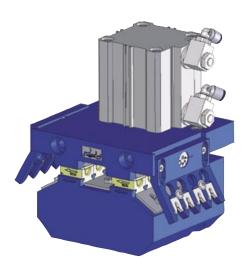
- sophisticated technology for BCF spinning
- simple mechanism with only few parts
- wide range of yarn denier
- flexible installation for all customer requirements best price value
- available with different yarn end separations

Advantages:

- excellent interlacing performance
- easy exchange of the inserts
- easy maintenance and cleaning
- low energy cost



BCF Single 4-thread lines



BCFT Tandem 4-thread lines

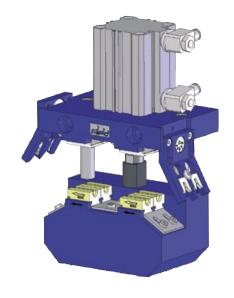
Jet Type	Titer Range [dtex]	Thread Lines	Yarn Separation[mm]
BCF(T)01	300 - 1400	1/2/3/4/6	16
BCF(T)02	700 - 2200	1/2/3/4/6	16
BCF(T)03	1000 - 2400	1/2/3/4/6	16
BCF(T)04	1400 - 4900	1/2/3/4/6	16
BCF(T)05	2200 - 6900	1/2/3/4/6	16

The designs are changeable to satisfy customer requirements according to yarn path, machine adaptation and air supply. The jet is available in single or tandem version, with or without integrated air stop.

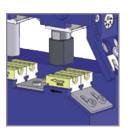


Additional features of our BCF Jets

BCTF Tandem Jet 2-thread lines



Easy to exchange inserts, only by loosening screws



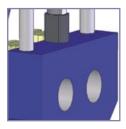
Yarn guides are not glued



Improved geometry of baffle plates for less abrasion and less "snow"



Two air connections for individual air supply



Blind inserts for changing tandem to single operation



Yarn guide`s position is easy to adjust according to insert size



Blind inserts for plying thread lines



Bottom part is moving for easier and safer threading





BCF- Interlacing Jet Inserts for exchange

RPE Technologies has developed a new patent pending jet insert for BCF-Jets with the main focus on easy exchange, maintenance and price value.

Features:

- sophisticated technology
- simple mechanism with only few parts
- no glued parts

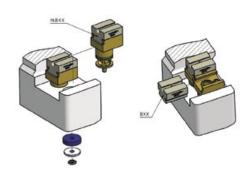


Figure 1

Figure 2

Figure 1 shows the exchange of the complete jet insert IN.BXX. After the installation only the ceramic parts BXX has to be exchanged as shown in Figure 2.

Advantages:

- easy exchange without tools
- easy and low maintenance
- best price value

BXXC

New patend pending geometries for high speed applications



BSXX

Ceramic part for smaller yarn separation



Jet insert complete	Ceramic part	Ceramic part	Air Consumption q	Ceramic part
IN.BXX	BXX III	BXXC	[Nm³/h] (p = air pressure)	BSXX
IN.B01	B01	B01C	q = 2,68*(p+1,013)	BS01
IN.B02	B02	B02C	q = 4,05*(p+1,013)	BS02
IN.B03	B03	B03C	q = 5,70*(p+1,013)	BS03
IN.B04	B04	B04C	q = 8,01*(p+1,013)	BS04
IN.B05	B05	B05C	q =10,72*(p+1,013)	BS05
IN.B06/2	B06/2	B06/2C	q = 17,88*(p+1,013)	BS06/2



About RPE Technologies

RPE Technologies is proud to develop and design high quality components that are made in Germany. Our customers can trust German quality standards.

We make the right parts, the right way, the first time.





RPE Technologies GmbH Sieboldstraße 7 D-97688 Bad Kissingen Germany

Phone: +49 971 785 7294 Fax: +49 971 699 1728 e-mail: service@rpetec.de