

# ASPIRATORS YARN SUCTION GUNS

Wide Range of standard and custom build high performance, low consumption strings up & doffing suction (Compressed air used to develop suction, not dependent on external vacuum system for same) devices for spinning of mono / multi filament / tape yarns / BCF / staple fibers in PET - PP - PA / Nylon - etc

Superior Mechanical Design with Elegant Aesthetics - Standard metallic or special plastic thread guide holder with ceramic insert -Quarter turn rotation sleek ball valve for smooth & quick operation - Standard special plastic protective sleeve on suction pipe offering protection against possible physical contact with mating metallic parts while threading, handling, etc.

Standard high-speed range capable of sucking yarn up to 4,000 Mtrs / min even at low pressure of 6 bar at the inlet of the Gun.

Modified versions with suffix "M" having typical air nozzle configuration offers approx. 20% more yarn tension. Capable of handling yarn speed up to 5,400 Mtrs / min requiring higher air pressures.

Easy Trouble-Free Maintenance - All threaded joints have '0' Ring seals eliminating need to apply adhesives for sealing, enabling dismantling & assembly several times without damaging threads / parts. All individual spares & dismantling tool available.

# **HIGH SPEED RANGE - For POY Applications**

Air Pressure	:	6 to 18 bar (kg/cm). For standard high-speed range recommended at Least 6 bar at the gun. For higher efficiency & hose length more than 5 mtrs, Increased pressure will be necessary, obviously leading to Higher air consumption. Normal Air consumption: 165 to 240 (depending on model) Nm <sup>3</sup> /hr at 6 bar	
Air Connection	:	3/4" Ball Valve.	
		Inlet Pipe-20mm I/D Hose. Outlet (Waste) Pipe - 30mm I/D Hose.	
Overall Length	:	Approx 425mm.	
Weight	:	0.9 - 1.05 Kgs, depending on model with protective sleeve on suction pipe.	

### Model: AEC- 500

Yarn Speed Suction Pipe

Denier Range : 2,000 Dtex Total. : 4,800 Mtrs / Min. : 5 mm I/D

: 4,000 Mtrs / Min.

: 7 mm I/D

Model : AEC- 1000 Denier Range

: 10,000 Dtex Total. : 3,700 Mtrs / Min. : 10 mm I/D

### Model : AEC - 750

Denier Range : 4,000 Dtex Total. Yarn Speed Suction Pipe

Model : AEC- 1250

Yarn Speed Suction Pipe

Yarn Speed

Suction Pipe

Denier Range : 12,000 Dtex Total. : 3,500 Mtrs / Min. : 12 mm I/D

#### DETACHABLE EXTRA SUCTION ATTACHMENT For catching threads in the traverse range of Take-up

SPECIAL LOW CONSUMPTION VERSIONS WITH MODIFICATIONS IN VALVE SIZE & INLET PIPE CONFIGURATION AVAILABLE SUITABLE FOR STANDARD 20 MM ID HOSE OR SMALLER ID HOSE

### MODIFIED CONFIGURATION HIGH SPEED RANGE - For FDY Applications

Offers approx. 20% more yarn tension than standard high-speed range can handle Yarn Speeds upto 6,000 m/m requiring higher operating pressures

Model : AEC- 500 M Denier Range Yarn Speed Suction Pipe

Model: AEC - 750

Denier Range

Yarn Speed

Suction Pipe

: 2,000 Dtex Total. : 5,400 Mtrs / Min. : 5 mm I/D

: 4,000 Dtex Total.

: 5,400 Mtrs / Min.

: 7 mm I/D

Model : AEC- 1000 M Denier Range Yarn Speed Suction Pipe

Model: AEC- 1250

Denier Range

Yarn Speed

Suction Pipe

: 10,000 Dtex Total. : 4,800 Mtrs / Min. : 10 mm I/D

: 12,000 Dtex Total.

: 4,200 Mtrs / Min.

: 12 mm I/D

# ULTRA HIGH-SPEED RANGE - For POY / FDY Applications

Ultra-High-Speed Spinning with take-up speeds 8000 Mtrs/Min & multi filament yarns, requiring higher suction pow (higher operating pressures), simultaneous threading up to 12 ends / take-up or more. Does not loose yarn tension at extreme even at extreme take up speeds. BCF, Staple fibres, etc

Air Pressure	: 6 to 18	: 6 to 18 bar (Kg/cm2)						
Air Consumption	n : 360 Nr	: 360 Nm³ /hr at 8 bar						
Air Connection	<ul> <li>: 1" Ball Valve. Inlet Pipe - 25 mm or 3/4" I/D Hose with 1" BSP male threaded end connectors Outlet (Waste) Pipe - 32 mm O/D.</li> <li>• OPTIONAL Waste Pipe - 38.1 mm O/D. This increases velocity of air currents within the nozz resulting in smooth &amp; higher suction performance, as desired in specific applications.</li> <li>• OPTIONAL Off-set Adaptor for Valve, facilitates accommodating larger hose, on enlarged waste pipe as above, for specific applications.</li> </ul>							
Weight	: 1.2 - 1.35 Kgs depending on model with protective sleeve on suction pipe. Overall length : Approx. 414 mm							
Model : AEC- Denier Range Yarn Speed Suction Pipe		: 2,000 Dtex Total. : 8,000 Mtrs / Min. : 5 mm I/D	Model : AEC- 1000 U Denier Range Yarn Speed Suction Pipe	: 10,000 Dtex Total. : 7,200 Mtrs / Min. : 10 mm I/D	- ME- 1915			
Model : AEC - Denier Range Yarn Speed Suction Pipe		: 4,000 Dtex Total. : 7,500 Mtrs / Min. : 7 mm I/D	Model : AEC- 1250 U Denier Range Yarn Speed Suction Pipe	: 12,000 Dtex Total. : 6,900 Mtrs / Min. : 12 mm I/D				

# SPECIAL MODEL

#### Model : AEC - 1200-M

Denier Range<br/>Air Connection: Upto 50,000 DtexSuction Pipe<br/>Air Pressure: 3/4" Valve (Build in)Suction Pipe<br/>Air Pressure: 12.5 mm I/DInlet Pipe - 20 mm I/D Hose: 9 to 15 Kg/Cm2Outlet (Waste) Pipe - 30 mm I/D Hose



Modified special model for staple fibre tow & bulky carpet or heavy industrial yarn applications

A funnel shaped tip can be provided for ease in catching or pick up of yarn bulk / yarn

### HEAVY DUTY SPECIAL MODELS AEC - 1800 U - For PSF Applications

#### SPECIAL MODELS

- With truly majestic performance. Aspirators (Yarn Suction) Guns for customised applications.
   Specially made for spinning applications requiring high suction power such as staple fibre, advanced craft winders, ultra-high-speed spinning & winding stringing up bulky multi filament yarn & heavy industrial yarns, BCF, mono filament yarns of heavy denier, etc.
- Creates excellent yarn tension & necessary spin due to specially configured internals. As such they will not be ideal or suitable for low-speed spinning applications.
- Its funnel shaped metallic suction nozzle ensures total collection of all ends of bulky yarn/staple fibre, very efficiently & effectively. Metallic machined cylindrical suction nozzle also available.
- Successfully tested & established for extreme applications, in spinning of multiple end high Bulk yarns & very high operating pressures.

Denier Range - 20,000 Dtex or even more. It is to be noted that many factors & operating conditions like type of polymer, involved bulk, yarn speed, operating pressure at the gun, operators' efficiency, etc. greatly influence or limit the performance. Yarn Speed - 4,800 Mtrs/Min.

## Ultra High Speed Series Modified Special Models

Outlet (Waste) Pipe - 38.1 mm O/D. This increases velocity of air currents within the nozzle resulting in smooth & higher suction performance.

**Off-set Adopter** for Valve - Facilitates accommodating larger hose, on enlarged waste pipe as above, as required in certain application.

# STATIC ASPIRATORS - Also for Bobbin Stripping

Stationary non - twisting suction of ends on multi filament yarn spinning machines, below the duct, or equipment for automatic suction of broken filaments or for stripping few layers of yarn from bobbins while packing

Type : AEC - 100 (d	overall si	ze 50 x 150 mm)
Inlet	:	3/4" BSP Connection
Outlet	:	28 mm ID hose
Air Consumption	:	120 Nm /hr at 6 bar

Type: AEC - 110 (over	all s	ize 63 x 120 x 30 mm)
Inlet	:	12 mm OD plastic pipe
Outlet	:	20 mm ID hose
Air Consumption	:	90 Nm /hr at 6 bar

Type : AEC - 120 (ov	erall size	75 x 60 x 32 mm)
Inlet	: 1	2 mm OD plastic pipe
Outlet	: 2	0 mm ID hose
Air Consumption	: 6	0 to 75 Nm /hr at 6 bar

Type : AEC - 140	(overall size 75	x 60 x 32 mm)
Inlet	: 12 mm	OD plastic pipe 📝
Outlet	: 20 mm	ID hose
Air Consumption	: 60 to 7	5 Nm /hr at 6 bar





# LOW SPEED ASPIRATORS GUNS

Low speed conventional spinning, Non Twisting Suction applications such as Flat Fibre / Tape Yarns / PSF - Non fibrillated or fibrillated tapes. Using different suction pipe profiles can be used on Zinser & Rieter draw winders, Barmag FK6 texturiser, Scragg draw texturiser, etc.

### Model : AEC - LS 250 (Non Twisting)

Denier Range	:	2,500 Dtex Total
Yarn Speed	:	2,400 Mtrs/MinMax
Air Pressure	:	4 to 8 Bar (Kg/cm2)
Air Consumption	:	120 Nm <sup>3</sup> /hr at 6 bar
Air Connection	:	1/2" Ball Valve, Inlet Pipe-12 mm I/D Hose, Outlet (Waste) Pipe-18 mm I/D hose.
Suction Pipe	:	5 mm or 7 mm I/D
Weight	:	0.750 Kg (with standard straight suction pipe & protective sleeve) Smaller, compact cast aluminum body. Overall size $365 \times 62 \times 32$ mm
AEC - LS 251	:	ZINSER DRAW WINDER
AEC - LS 252	:	BARMAG FK6 DRAW TEXTURISER
AEC - LS 253	:	SCRAGG SDS700 DRAW TEXTURISER

### Model: AEC - LS 1000 / 1500 (Non Twisting) Heavy duty

Denier Range	:	10,000 to 60,000 Dtex or more
Yarn Speed	:	2,400 Mtrs/MinMax
Air Pressure	:	4 to 8 Bar (Kg/cm2)
Air Consumption	:	210 Nm <sup>3</sup> /hr at 6 bar
Air Connection	:	3/4" Ball Valve, Inlet Pipe-20 mm I/D Hose, Outlet (Waste) Pipe-30 mm I/D hose.
Air Pressure Air Consumption	: :	4 to 8 Bar (Kg/cm2) 210 Nm <sup>3</sup> /hr at 6 bar

### Model : AEC - 300 & D - Series Models

Low speed suction device useful for medium or low denier conventional spinning air texturizing, non twisting suction applications. With modifications of suction pipe suitable for Barmag FK6 texturisers, S12 crimper & draw texturisers.

Denier Range	:	1,500 Dtex Total
Yarn Speed	:	2,000 Mtrs/MinMax
Air Pressure	:	4 to 8 Bar (Kg/cm2)
Air Consumption	:	60 Nm³ /hr at 6 bar
Air Connection	:	3/8" Ball Valve, Inlet Pipe-12 mm I/D Hose, Outlet (Waste) Pipe-18 mm I/D hose.
Suction Pipe	:	5 mm or 7 mm I/D
Weight	:	0.660 Kg (with standard straight suction pipe) Flat triangular C.I./body. Overall size - 420 x 70 x 20 mm

### Extended odd suction tube profiles for texturizing applications

AEC - 310D	:	BARMAG FK6 - 600
AEC - 311/312D	:	BARMAG FK6 - 700
AEC - 313D	:	BARMAG FK6 - 900
AEC - 315D	:	BARMAG FK6 - 999
330D	:	BARMAG FK6 - S12 (CRIMPING)





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### **AKSONS ENGINEERING LLP**

All Types of cleaning & heating Equipment for filter, Spin Pack & Spinnerets, YARN -Suction Gun, Splicer, Cutters for Textile Machinery & Lab / testing Eqpt. W - 156, S - Block, M.I.D.C., Bhosari, Pune - 411026, INDIA. Tel: +91-20-27120344, 27123186 Telefax : +91-20-27123187 Email : info@aksonsengineering.com / aksonsengg@gmail.com Web : www.aksonsengineering.com