









Constant improving values and consistently giving back to the society

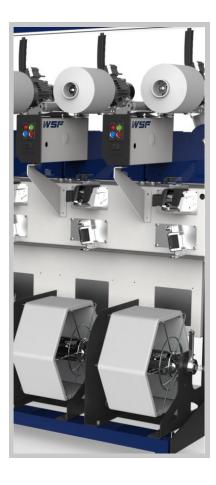


# WSF200A >>>

**Precision Winder(Hank to Cone)** 



WSF200A Precision Digital Winder is the ideal machine and a perfect solution for yarns that require active unwinding procedure. It is freely programmable and equipped with real time digital winding system which can set all winding parameters according to clients' requirements. With the most advanced active unwinding technology and programmable tension system, clients can accurately set yarn tension and make it consistent or variable throughout the winding process. Meanwhile, the electronic traverse system offers highest flexibility and productivity.



#### **Basic Configuration**

A central control system includes

- touch screen
- central settings
- single spindle settings

Digital length measuring system

Yarn breakage/full package detection

Electronic yarn detector

Real-time digital tension system

Suitable man-machine operation

Dual purpose design

#### Options

Active unwinding device with

- stationary hank
- expanding hank with spring
- dye tube

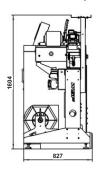
Oiling device

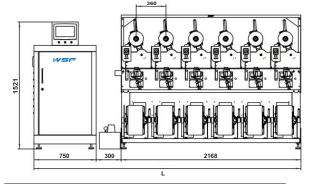
Tube shape

- Advanced real-time digital tension system for yarn quality
- Digital winding system and precision winding technology

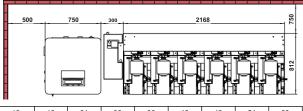
  Reasonable yarn path arrangement
- ▶ Sensitive feedback system to ensure yarn package
- Independent motor drive and optional unwinding device for the quality of yarn winding
  Optimal design for space utilization and cost

### ▶ WSF200A Layout





Weight	
Head	~210 kg
Section	~520 kg



spindles	6	12	18	24	30	36	42	48	54	60
length[mm]	3218	5386	7554	9722	11890	14058	16226	18394	20562	22730





Б (	
Parameters	
Type of winding	Digital or Precision
Mechanical speed	up to 1000 m/min (depend on yarn)
Package shape	freely programmable
Traverse	25~260 mm
Package diameter	up to 280 mm
Package weight	up to 5 kg
Yarns	textured or flat filaments, elastic yarns, silk, fine technical yarns
Yarn count	10~7000 dtex
Take-up tubes	Tube or Cone
Layout	single sided
Spindle number per section	6
Number of spindles	Min. 6/Max. 60
Gauge	360 mm
Drive	individual per spindle
Installed power	~350 W per spindle



# WSF200B >>>

## **Precision Winder(Cone to Cone)**



WSF200B Precision Digital Winder is a new modular winding platform for all kind of staple and filament yarns suitable for dye package winding, warping preparation and rewinding with or without lubrication or waxing. This machine is freely programmable and equipped with real-time digital tension system, which provide a comprehensive tension control to improve yarn quality and production efficiency.



#### Options

Oiling device

Tube shape

#### Basic Configuration

A central control system includes

- touch screen
- central settings
- single spindle settings

Digital length measuring system

Yarn breakage/full package detection

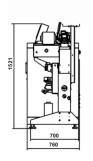
Electronic yarn detector

Real-time digital tension system

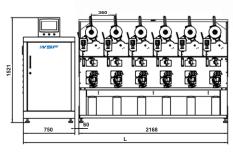


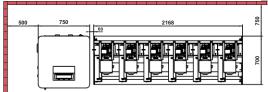
- Advanced real-time digital tension system for yarn quality
   Digital winding system and precision winding
- technology
- ▶ Reasonable yarn path arrangement
- ▶ Sensitive feedback system to ensure yarn package density
- Independent motor drive and optional unwinding device for the quality of yarn winding
   Optimal design for space utilization and cost

#### ▶ WSF200B Layout









spindles	6	12	18	24	30	36	42	48	54	60
length[mm]	2918	5086	7254	9422	11590	13758	15926	18094	20262	22430





Parameters	
Type of winding	Digital or Precision
Mechanical speed	up to 1000 m/min (depend on yarn)
Package shape	freely programmable
Traverse	25~260 mm
Package diameter	up to 280 mm
Package weight	up to 5 kg
Yarns	textured or flat filaments, elastic yarns, silk, fine technical yarns
Yarn count	10~7000 dtex
Take-up tubes	Tube or Cone
Layout	single sided
Spindle number per section	6
Number of spindles	Min. 6/Max. 60
Gauge	360 mm
Drive	individual per spindle
Installed power	~300 W per spindle



WSF200C

**Precision Winder(Hank to Cone)** 



WSF200C Precision Digital Winder is a new modular winding platform for all kind of staple and filament yarns suitable for dye package winding, warping preparation and rewinding with or without lubrication or waxing. This machine is freely programmable and equipped with real-time digital tension system, which provide a comprehensive tension control to improve yarn quality and production efficiency.



#### **Basic Configuration**

A central control system includes

- touch screen
- central settings
- single spindle settings

Digital length measuring system

Yarn breakage/full package detection

Electronic yarn detector

Real-time digital tension system

Suitable man-machine operation

Dual purpose design

#### **Options**

Active unwinding device with

- stationary hank
- expanding hank with spring
- dye tube

Oiling device

Tube shape

- Advanced real-time digital tension system for yarn
- quality

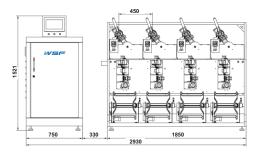
  Digital winding system and precision winding technology

  Reasonable yarn path arrangement
- ▶ Sensitive feedback system to ensure yarn package
- density
  Independent motor drive and optional unwinding device for the quality of yarn winding

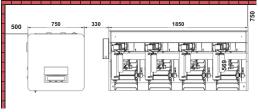
  Optimal design for space utilization and cost

#### ▶ WSF200C Layout





Weight	
Head	~210 kg
Section	~450 kg



1	spindles	4	8	12	16	20	 48	52	56	60
	length[mm]	2930	4780	6630	8480	10330	 23280	25130	26980	28830



Parameters	
Type of winding	Digital or Precision
Mechanical speed	up to 1000 m/min (depend on yarn)
Package shape	freely programmable
Traverse	25~260 mm
Package diameter	up to 280 mm
Package weight	up to 5 kg
Yarns	textured or flat filaments, elastic yarns, silk, fine technical yarns
Yarn count	10~7000 dtex
Take-up tubes	Tube or Cone
Layout	single sided
Spindle number per section	4
Number of spindles	Min. 4/Max. 60
Gauge	450 mm
Drive	individual per spindle
Installed power	~350 W per spindle



## **WSF200E** >>>

**Precision Winder(Hank to Cone)** 



WSF200E Precision Digital Winder is the ideal machine and a perfect solution for yarns that require active unwinding procedure. It is freely programmable and equipped with real time digital winding system which can set all winding parameters according to clients' requirements. With the most advanced active unwinding technology and programmable tension system, clients can accurately set yarn tension and make it consistent or variable throughout the winding process. Meanwhile, the electronic traverse system offers highest flexibility and productivity.



### Basic Configuration

A central control system includes

- touch screen
- central settings
- single spindle settings

Digital length measuring system

Yarn breakage/full package detec-

Electronic yarn detector

Real-time digital tension system

Suitable man-machine operation

Hank upper design

#### **Options**

Active unwinding device with

- stationary hank
- expanding hank with spring
- dye tube

Oiling device

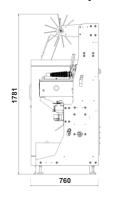
Tube shape

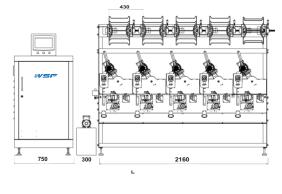
- Advanced real-time digital tension system for yarn
- Digital winding system and precision winding technology

  Hank upper design
- Sensitive feedback system to ensure yarn package density

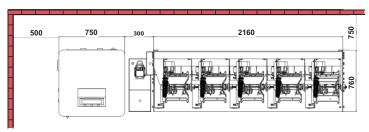
  Independent motor drive and optional unwinding device
- for the quality of yarn winding
- Optimal design for space utilization and cost

## ▶ WSF200E Layout









spindles	5	10	15	20	25	30	35	40	45	50
length[mm]	3210	5370	7530	9690	11850	14010	16170	18330	20490	22650

Parameters	
Type of winding	Digital or Precision
Mechanical speed	up to 1000 m/min (depend on yarn)
Package shape	freely programmable
Traverse	25~260 mm
Package diameter	up to 280 mm
Package weight	up to 5 kg
Yarns	textured or flat filaments, elastic yarns, silk, fine technical yarns
Yarn count	10~7000 dtex
Take-up tubes	Tube or Cone
Layout	single sided
Spindle number per section	5
Number of spindles	Min. 5 Max. 50
Gauge	430 mm
Drive	individual per spindle
Installed power	~350 W per spindle



## **WSF200G** >>>

**Precision Winder(Cone to Cone)** 



WSF200G Precision Digital Winder is the ideal machine and a perfect solution for yarns that require active unwinding procedure. It is freely programmable and equipped with real time digital winding system which can set all winding parameters according to clients' requirements. With the automatic doffing system and programmable tension system, clients can accurately set yarn tension and make it consistent or variable throughout the winding process. Meanwhile, the electronic traverse system offers highest flexibility and productivity.



#### **Basic Configuration**

A central control system includes

- touch screen
- central settings
- single spindle settings

Digital length measuring system

Yarn breakage/full package detection

Electronic yarn detector

Real-time digital tension system

Suitable man-machine operation

Auto doffing system

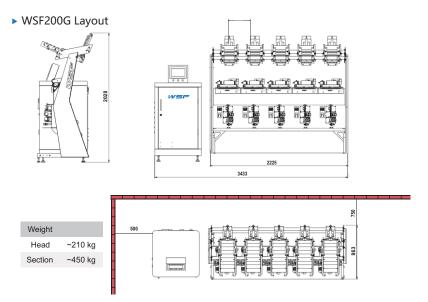
#### Options

Oiling device

Tube shape

- Advanced real-time digital tension system for yarn
- Digital winding system and precision winding technology
   Auto doffing system
- ▶ Sensitive feedback system to ensure yarn package density
- Independent motor drive and optional oiling device for the quality of yarn winding

  Optimal design for space utilization and cost



spindles	5	10	15	20	25	 45	50	55	60
length[mm]	3075	5300	7525	9750	11975	 20875	23100	25325	27550

Parameters	
Type of winding	Digital or Precision
Mechanical speed	up to 1200 m/min (depend on yarn)
Package shape	freely programmable
Traverse	100~163 mm
Package diameter	up to 250 mm
Package weight	up to 8 kg
Yarns	textured or flat filaments, elastic yarns, silk, fine technical yarns
Yarn count	40~6000 dtex
Take-up tubes	Tube or Cone
Layout	single sided
Spindle number per section	5
Number of spindles	Min. 5 Max. 60
Gauge	415 mm
Drive	individual per spindle
Installed power	~360 W per spindle



# WSF200H >>>

**Precision Winder(Hank to Cone)** 



WSF200H Precision Digital Winder is the ideal machine and a perfect solution for yarns that require active unwinding procedure. It is freely programmable and equipped with real time digital winding system which can set all winding parameters according to clients' requirements. With the most advanced active unwinding technology and programmable tension system, clients can accurately set yarn tension and make it consistent or variable throughout the winding process. Meanwhile, the electronic traverse system offers highest flexibility and productivity.



## **Basic Configuration**

A central control system includes

- touch screen
- central settings
- single spindle settings

Digital length measuring system

Yarn breakage/full package detection

Electronic yarn detector

Real-time digital tension system

Suitable man-machine operation

Hank upper design

#### Options

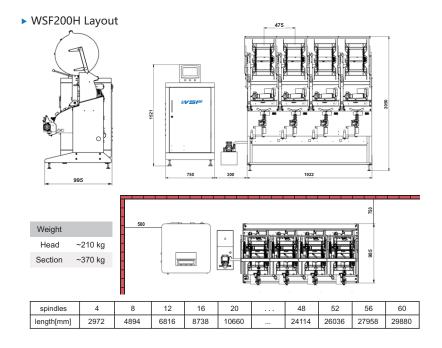
Tube shape

Oiling device

Waxing device

- Advanced real-time digital tension system for yarn quality
- Digital winding system and precision winding technology

  Expanding hank with spring upper design
- ▶ Sensitive feedback system to ensure yarn package
- Independent motor drive and optional unwinding device for the quality of yarn winding
- Optimal design for space utilization and cost



Parameters	
Type of winding	Digital or Precision
Mechanical speed	up to 1000 m/min (depend on yarn)
Package shape	freely programmable
Traverse	25~260 mm
Package diameter	up to 280 mm
Package weight	up to 5 kg
Yarns	nonelastic yarns
Yarn count	40~2500 dtex
Take-up tubes	Tube or Cone
Layout	single sided
Spindle number per section	4
Number of spindles	Min. 4 Max. 60
Gauge	475 mm
Drive	individual per spindle
Installed power	~350 W per spindle



# WSF200K >>

## **Precision Winder For Kingspool**



WSF200K Precision Winder is a new modular winding platform for sewing thread suitable for kingspool winding, warping preparation and rewinding with or without lubrication or waxing. This machine is freely programmable and equipped with real-time digital tension system, which provide a comprehensive tension control to improve yarn quality and production efficiency.



#### Options

Oiling device

Tube shape

### **Basic Configuration**

A central control system includes

- touch screen
- central settings
- single spindle settings

Digital length measuring system

Yarn breakage/full package detection

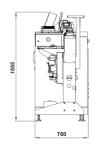
Electronic yarn detector

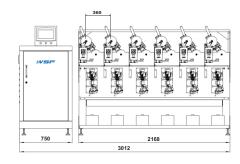
Real-time digital tension system

- Advanced real-time digital tension system for yarn quality
- Digital winding system and precision winding technology

  Reasonable yarn path arrangement
- ▶ Sensitive feedback system to ensure yarn package density
- Independent motor drive and optional unwinding device for the quality of yarn winding
- ▶ Optimal design for space utilization and cost

#### ▶ WSF200K Layout





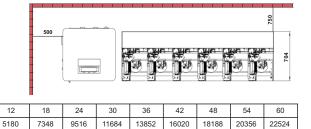


6

3012

spindles

length[mm]



Parameters	
Type of winding	Digital or Precision
Mechanical speed	up to 700 m/min (depend on yarn)
Package shape	freely programmable
Traverse	25~180 mm
Package diameter	up to 150 mm
Package weight	up to 3 kg
Yarns	Sewing thread yarn
Yarn count	10~7000 dtex
Take-up tubes	Kingsool
Layout	single sided
Spindle number per section	6
Number of spindles	Min. 6/Max. 60
Gauge	360 mm
Drive	individual per spindle
Installed power	~300 W per spindle



## WSF200V >>>

### **Precision Winder For Viscose(Cake to Cone)**



WSF200V Precision Digital Winder is the ideal machine and a perfect solution for viscose rayon filament that require active unwinding procedure. It is freely programmable and equipped with real time digital winding system which can set all winding parameters according to clients' requirements. With the most advanced active unwinding technology and programmable tension system, clients can accurately set yarn tension and make it consistent or variable throughout the winding process. Meanwhile, the electronic traverse system offers highest flexibility and productivity.



#### **Basic Configuration**

A central control system includes

- touch screen
- central settings
- single spindle settings

Digital length measuring system

Yarn breakage/full package detection

Electronic yarn detector

Real-time digital tension system

Suitable man-machine operation

Design for viscose filament

#### Options

Oiling device

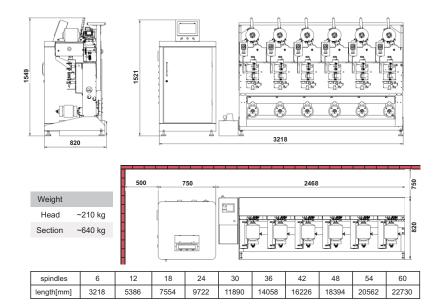
Tube shape

- Advanced real-time digital tension system for yarn quality
- Digital winding system and precision winding technology

  Reasonable yarn path arrangement
- ▶ Sensitive feedback system to ensure yarn package density

  Independent motor drive and optional unwinding device
- for the quality of yarn winding
- ▶ Optimal design for space utilization and cost

#### ▶ WSF200V Layout



Type of winding	Digital or Precision
Mechanical speed	up to 700 m/min (depend on yarn)
Package shape	freely programmable
Traverse	25~230 mm
Package diameter	up to 220 mm
Package weight	up to 3.5 kg
Yarns	viscose rayon filament, lyocell, tencel filament
Yarn count	10~1500 Denier
Take-up tubes	230mm tube or 170mm cone
Layout	single sided
Spindle number per section	6
Number of spindles	Min. 6/Max. 60
Gauge	360 mm
Drive	individual per spindle
Installed power	~350 W per spindle



# **WSF500A** >>>

**Automatic Sewing Thread Winder** 



WSF500A Automatic Sewing Thread Winder can reach max. 1000m/min production speed. The winding and traverse parts are independently controlled by two stepper motors to provide variable winding ratio for different thread shaping. The set is integrated with digital yarn length measuring system, electronic oiling device, tension controlling system, automatic doffing function, which enables a fully automatic production of thread package winding process.



#### Basic Configuration

Central terminal for parameters setting with the functions of recipe storage and production monitoring

Stepless yarn spacing adjustment system to achieve 2-4 crossover

Loop catcher

Electromagnetic tensioner

Yarn detection sensor

Automatic yarn clamping device

Digital yarn length measuring system

Synchronous winding&traverse drive system

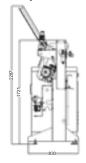
Automatic doffing system

Automatic yarn end tuck-in function

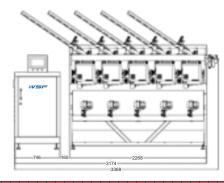
Accurate oiling system

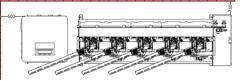
- Equipped with automatic doffing function and supply tube pre-positioning
- Equipped with automatic yarn end tuck-in function
- Equipped with a synchronized winding drive system to ensure excellent package shaping

▶ WSF500A Layout









spindles	5	10	15	20	25
length[mm]	3369	5637	7905	10173	12441

arameters	
ype of winding	precision crosswind
lechanical speed	up to 1000 m/min(depending on process parameters)
ackage shape	A Cone
raverse	76.2~152.4 mm
ake-up tubes	A cone with a conicity from 1° 30′ up to 5° 57′; tip diameter ≥ 18 mm
ackage diameter	up to 160 mm
upply package diameter	up to 320 mm
arns	spun thread/core spun,textured filament,technical thread,special thread
ayout	single sided
pindle number per section	5
umber of spindles	Min. 5/Max. 25
auge	440 mm
rive	individual two-drive-system per spindle
stalled power	~1.5 KW (5 spindles)
ompressed air	6 bar





WSF500A Automatic Sewing Thread Winder can reach max. 1000m/min production speed. The winding and traverse parts are independently controlled by two stepper motors to provide variable winding ratio for different thread shaping. The set is integrated with digital yarn length measuring system, electronic oiling device, tension controlling system, automatic doffing function, which enables a fully automatic production of thread package winding process.



#### Basic Configuration

Central terminal for parameters setting with the functions of recipe storage and production monitoring

Stepless yarn spacing adjustment system to achieve 2-4 crossover

Loop catcher

Electromagnetic tensioner

Yarn detection sensor

Automatic yarn clamping device

Digital yarn length measuring system

Synchronous winding&traverse drive system

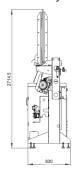
Automatic doffing system

Automatic yarn end tuck-in function

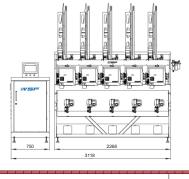
Digital oiling system

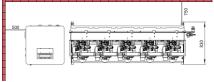
- Equipped with automatic doffing function and supply tube pre-positioning
- Equipped with automatic yarn end tuck-in function
- Equipped with a synchronized winding drive system to ensure excellent package shaping

### ▶ WSF500Y Layout



Weight	
Head	~200 kg
Section	~500 kg





spindles	5	10	15	20	25
length[mm]	3118	5386	7654	9922	12190

Parameters	
Type of winding	precision crosswind
Mechanical speed	up to 1000 m/min(depending on process parameters)
Package shape	kingspool
Traverse	38.1~101.6 mm
Take-up tubes	kingspool
Package diameter	up to 105 mm
Supply package diameter	up to 320 mm
Yarns	textured filament, filament twisted/flat, viscose rayon, special thread
Layout	single sided
Spindle number per section	5
Number of spindles	Min. 5/Max. 25
Gauge	440 mm
Drive	individual two-drive-system per spindle
Installed power	~1.5 KW (5 spindles)
Compressed air	6 bar



# WSF618B-LS >>>

**Draw Heat-setting Winder** 



# **TECHNICAL DATA**

Spindle gauge	450 mm
Number of spindles	4 spindles one machine
Traverse Length	150~210 mm infinitely variable
Take-up tubes	cylindrical
Package weight	up to 2 kg
Yarns	filament sewing thread, twisted technical yarn
Temperature range	room temperature to 300 ℃
Mechanical speed	up to 500 m/min
Installed power	1.3 kw/spindle (single heat)
Machine size	Length 2.27 m x Width 0.92 m x Heigth 1.37 m
Options	oiling device; double heat rollers

#### **Draw Heat-setting Winder**



 WSF Draw Heat-setting Winder is especially designed for twisted filament yarns such as sewing threads. It can advance properties of the yarn such as:
 elongation
 shrinkage
 tenacity

It solves several problems in traditional draw process such as uneven thickness, strength degradation and incomplete shape.

#### **Further Features**

Electronic length measuring system per spindle

Yarn breakage detection

Constant temperature closed-loop control system

Constant speed winding closed-loop control system

Single spindle drive and independent control

System for central machine control

Cross double roller drawing and heat-setting device

#### **IMPROVEMENT OF YARN**

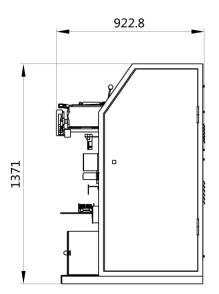
- Relax the yarn and no loop tendency
- Make yarn much straighter
- ♦ Achieve a specific yarn strength and elongation

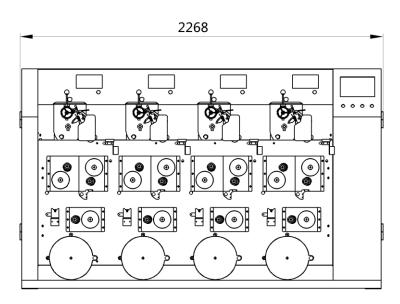




Before and After Drawing

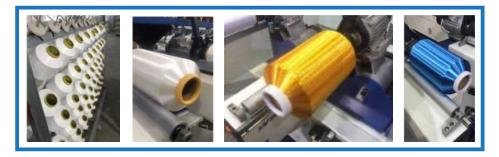
## WSF618B-LS Layout







# **▶ FDY Soft/Final Winding**



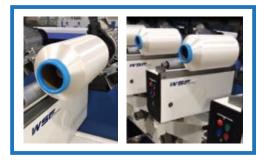
# **▶ DTY Soft Winding/Final Winding**



# **▶** Polyester/Nylon Hank to Cone Active Unwinding



# **▶** Low Melting Point Nylon/Polyester Winding



**Winding Solutions** >>>

# **▶** Cake/Muff Active Unwinding







# **▶** Embroidery Thread Package Dyeing Soft Winding









# **▶ Viscose Rayon Filament Active Unwinding**







# ► Nylon/Fluorocarbon Fishing Line Soft/Final Winding







# **Winding Machine Solution Provider**

