



***National Textile***  
*Engineering Industries*

**FILAMENT TFO MACHINES  
(PAPER TUBE TAKEUP)**



# ABOUT US

## NATIONAL TEXTILE ENGG INDUSTRIES

Since 2004 , NATIONAL TEXTILE ENGG INDUSTRIES has a strong foothold in the textile industry, with continuous innovation approach and latest cutting edge technology upgradation within company infrastructure, we are the leading manufacturer in India possessing a vast range of 72 types of different which makes us one and only of our kind all over India. Regardless of the size and scale of your company we understand the investment in new machine is done with analyzing the viability of project, quality of product produced, durability of machine and a long term vision in mind. So Correct selection of machine can make a difference in your business.

## SELECTION OF MACHINE WITH GUIDANCE OF QUALIFIED ENGINEERS

Because we are here to make a difference in your business

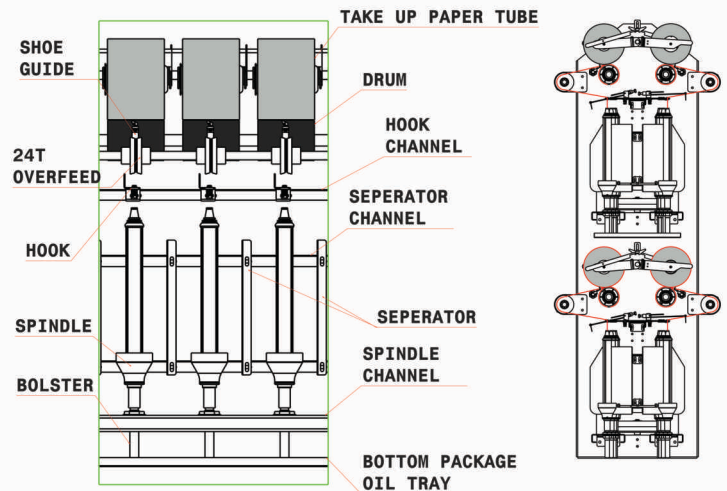
Utilizing the resources like man power, space availability, electricity consumption, operating expenses, investment and time get the most valued output promise.

National machines is right choice for fastest technology absorption, Instead its necessary in competitive market times.

## WIDE RANGE OF TWISTING, DOUBLING ,COVERING& WINDING MACHINE

- Cotton/ Spun Tfo Machine
- Industrial Yarn Tfo Machines
- Thread Doubler Tfo Machines
- Elastic Yarn Covering Machines
- Spandex Yarn Covering Machine
- Jari Doubler Machines
- Bobbin Winder Machines
- Assembly Winder Machines
- Intermingling Machine
- Filament Tfo Machines
- Ring Doubler Machines
- Jari Covering Machine
- Cabler Tfo Machines
- Snz Covering Machine
- Cone To Cone Sizing
- Cops Winder Machines
- Multiply Winder Machines
- Customised Machines
- Cone Winding Machine

# FILAMENT TFO MACHINE



National filament tfo machine are most reliable as well as economical solution for textile industry where fine deniers of yarn have to imparted with high twist for manufacturing fabrics used in sarees, dress material, pocketing fabrics, liners etc. For high twist yarn heat setting is critical to make it use in process of weaving or knitting depending on user preferences. We have multiple options for take ups from (100MM – 135MM) Roll size and (135MM – 230MM) papertube size With wide range of spindle selection size from (60MM – 310MM) and as suitable with customer requirements.

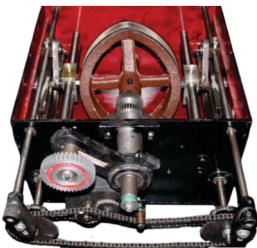
MODEL	FILEMANT TFO PAPER TUBE TAKE UP			
HFT	135 PD	155 PD	175 PD	230 PD
POT DIAMETER (MM)	70/80	70/80/90	70/80/90	70/80/90
SPINDLE DIAMETER (MM)	70/80	70/80/90	70/80/90	70/80/90
NO OF SPINDLE PER SECTION	32	28	24	20
TAKE UP SIZE	135 MM TUBE	155 MM TUBE	175 MM TUBE	230 MM TUBE
SPINDLE PITCH (MM)	165	188	205	265
SECTION LENGTH	1385	1335	1335	1440
MAX. SPINDLE RPM	UP TO 10000	UP TO 9000	UP TO 8600	UP TO 8200
DENIER RANGE	30-150	30-210	30-600	30-900
TWIST RANGE (TPM)	100-3000	100-3000	100-3000	100-3000
TAKEUP SYSTEM	SPINDLE LESSCRADLE	SPINDLE LESSCRADLE	SPINDLE LESSCRADLE	SPINDLE LESSCRADLE
M/C WIDTH (MM)	820	820	710	
M/C HEIGHT (MM)	1950	1850	1950	
DRIVE PANEL	STARDELTA	STARDELTA	STARDELTA	STARDELTA
RPM/TPM CONTROL PANEL	OPTIONAL	OPTIONAL	OPTIONAL	OPTIONAL
ONLY RPM CONTROL (INVERTER DRIVE CONTROL)	OPTIONAL	OPTIONAL	OPTIONAL	OPTIONAL
AUTOCRADLE LIFTING	OPTIONAL	OPTIONAL	OPTIONAL	OPTIONAL
SERVO TRAVERS CONTROL SYSTEM	OPTIONAL	OPTIONAL	OPTIONAL	OPTIONAL
OVERFEED DEVICE	CERAMIC TYPE	CERAMIC TYPE	CERAMIC TYPE	CERAMIC TYPE
TRAVERS SYSTEM	MECHANICAL /SERVO	MECHANICAL /SERVO	MECHANICAL /SERVO	MECHANICAL /SERVO

## SPINDLE

Dynamically balanced designed spindle available in **S.S , HARD ANODISED AND PLASMA COATING**

allows us to cater a wide range of requirement from the market. Proper size and of spindle selection is necessary to process different types of yarn & feed pack:

- + Energy efficient design spindles
- + Wide range for spindle type & size selection



## GEARBOX / CAMBOX

Auto oil circulation gearbox box with dedicated motor and pump to ensure continuous lubrication And minimize wear and tear maintenance. Fully oil immersed cambox to reduce mechanical friction, efforts and losses

- + Easy operating of gearbox with 6-8 gears covers a wide range of 100-3000 tpm in just 10 min.
- + Fully manufactured In house to ensure the life long quality performance.
- + Simple cambox setting to alter traversing and length.
- + Anti patterning settings for take up package winding

## PACKAGE

Wide range of take up option available in papertube takeupfrom 135mm to 230mm papertubeseize for final package.Direct Soft package - a special combination of gears enables soft package winding directly from the machine with edge breaking mechanism , so package can be taken for dyeing eliminating in between process. Proper selection to be done on the basis of application in industry, type of weaving machine & its speed to ensure maximum working efficiency



## PLC CONTROL SYSTEM



Plc system with touch screen HMI display to access and control machine working parameters effortlessly just with control of simple touch. Servo motor and servo systems ensures precise and steeples setting of all parameters.

- + RPM control for changing rpm for different yarn count.
- + TPM control to set and change different tpm.
- + TRAVERS Control to control cross winding angle on takeup package.





## KEY FEATURES

- Modular sheet metal structure to deliver strong mechanical support and sturdiness and stability at higher speeds.
- Yarn path is designed in a such way that it ensures minimum tension on yarn and reduce electricity consumption, which is been achieved by quality designed of machines.
- Ceramic devices and hard anodized/plasma coated spindles for handling the filament yarn delicately to ensure optimum quality.
- Complete oil immersed cambox for trouble free smooth operation and minimum wear & tear through the 20 years of life of machine.
- Auto oil circulation gearbox take cares of its own lubrication, without any regular attention of operator. Which reduces maintenance cost of machines.
- Long yarn path design for proper twist setting and control of quality.
- Overfeed system to control package density and optimize for making soft package ready for dyeing.
- Dynamically balanced precession spindles and imported nylon double sandwiched belt improves performance and reduce mechanical losses.
- Extremely lower production cost due to machine design, lower electricity consumption higher spindle speed. Which improves production with context to time.

**IF YOU ARE LOOKING TO COMPETE EXISTING TEXTILE INDUSTRY WITH PRODUCTION, QUALITY AND VIABILITY NATIONAL TFO IS RIGHT CHOICE FOR YOU. CAN EASILY GIVE YOU COMMAND OVER COMMERCIAL AS WELL AS TECHNICAL ASPECT OF TEXTILE INDUSTRY.**

**Note:-**




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*Engineering Industries*

Address :172/B, Road No.6-G,New Function Estate, Udhna, Surat-394210, Gujarat.

Contact : 9879742052 / 8128412052

Web : [www.nationaltexeng.com](http://www.nationaltexeng.com)

E-mail : [nationalexeng@gmail.com](mailto:nationalexeng@gmail.com) | [nationaltexkadir@gmail.com](mailto:nationaltexkadir@gmail.com)

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