

BRANCHES

- Shandong Tongda Textile machinery Co.,Ltd
- Qingdao Tongda Textile Machinery Co.,Ltd
- Qingdao Weaving Machine Co.,Ltd
- Shandong Tongda Nickel Screen Co.,Ltd
- Shandong Tongda Synthetic Co.,Ltd
- Shandong Tongda Textile Machinery (group) Co.,Ltd

CONTACT INFORMATION

DE Global Consulting
 (Authorised Agent for Tongda Machines)
 11/12, Pushpa Apt. Vanaj Corner Kothrud,
 Pune-38
 Phone : +918780041406;+917203018558
 email : sales@deglobalconsulting.com
 atamvir.sharma@deglobalconsulting.com
 website: www.deglobalconsulting.com
 wa.link/uy9lpa
 www.china-tongda.com



Website: www.china-tongda.com

- 浆 纱 机 **SIZING MACHINE**
- 染 浆 联 合 机 **COMBINED DYEING & SIZING MACHINE**
- 束 状 染 色 机 **INDIGO ROPE DYEING**
- 烧毛、预缩、整理联合机 **SINGEING,PRESHRINKING & FL.NISHING RANGE**



Company Introduction

Tongda Group specializes in design, manufacturing, and marketing of a wide range of Textile machinery, it has five branch companies, mainly produces blow room, cotton carding machine, draw frame, Roving frame, rotor spinning machine, ring spinning machine, water jet loom, nonwoven machinery etc. The company has built a complete infrastructure to support a full effort for product research and development to satisfy the needs of the marketplace. Production capability for cotton machinery and spinning machinery products sustains an annual quantity of 20,000 units of various models.

Tongda has been growing steadily since 1952 when the spinning machine were developed. Tongda places its focus on becoming a professional supplier of Textile machinery and new materials with continuous development of modern ergonomic designs, a reliable service support network, and an efficient global network of logistics. Today, Tongda machines are being widely used by thousands of cotton and yarn, textile manufacturers.

Along with product development, Tongda has been awarded technology patents. Special techniques in design and manufacturing have also been perfected.

Tongda is an ISO9001, ISO14001, and ISO13485 company. The products are designed to meet the technical standards of 3C and CE. All the products are certified by the Industry Administration Authority.

Tongda will continue to strive to be a stronger leader in the global market of Cotton machinery and Spinning machinery.



车 头

- 本车头适用于TD-325系列浆纱, TD-346系列双浆槽浆纱机, TD-394系列环状染浆联合机及TD-395系列染浆联合机。
- 由钢板及槽钢组成, 结构紧凑而坚固, 组合车头, 二侧为钢板罩壳。织轴支承于二侧可移动箱体上, 箱体移动由电机带动。
- 独立变频卷绕, 织轴卷绕采用变频电机实现正反卷绕, 可适应双织轴织机AB轴的要求。最大卷绕张力6KN。
- 织轴上落轴, 拍开、拍合及侧向加压, 测长辊, 加压辊加压及释压均采用气动控制。
- 伸缩箱气动升降, 全密封电动伸缩。

Headstock

- The headstock is suitable for TD-325 series sizing machine, TD-346 series double-box sizing machine, TD-394 series combined ring dyeing and sizing machine and TD-395 combine dyeing and sizing machine.
- Combined head framing is compactly and rigidly constructed of steel plate and channel steel together with side enclosures made of steel plates. Beam is supported by two housings which are driven by motor to move sideways.
- Independent frequency conversion winding system uses frequency conversion motor to realize forward and backward winding of beam so as to meet the requirements of shafts AB of two-beam loom. Maximum drag is 6KN.
- Wrap beam change, engagement and disengagement of beams and applying lateral pressure are all performed pneumatically. Pressure roller and measuring roller are all pressurized and relieved pneumatically.
- Expansion reeds can be lifted pneumatically and also extended electrically in hermetically sealed form.



TD-325 Serial Sizing Machine TD-325系列浆纱机

本系列浆纱机适用于纺织工业前织准备上道工序，适应有梭及无梭织机的配套需要，满足淀粉浆、化学浆及混浆对纯棉、麻及其混纺织物，化纤及其混纺织物的经纱上浆。

主要组成:

经轴架

● 双层双排四只经轴一组组合式轴架，三组共十二只经轴，每轴架设有操作通道。(可根据用户需要增加轴架)

● 经轴退卷张力手动调节或电一气自调控制系统，具体由用户选择。

浆槽

● 双浸双压浆槽，最大压强15KN或30KN。
● 浆槽容积：主浆槽100L，辅助浆槽80L。
● 压浆辊经专门设计成均匀轧辊，压强可随车速无级加压使上浆均匀。

烘房

● 采用Ø800mm平封头不锈钢烘筒十二只(也可根据用户需要增加)

● 烘筒分三组传动，其中肆只分层预烘，烘筒采用链条，无齿链轮半积极传动，表面喷涂聚四氟乙烯。其余采用链轮，链条积极传动。

烘房湿热空气采用风机直排。

车头

● 主传动变频调速。
● 织轴卷绕采用变频卷绕。
● 织轴空轴抬起与拍合，卷绕织轴的加压，及满轴的脱离与落轴，均为气动加压。
● 各段经纱张力均由XP1变频器调节或变频调节。

主要技术参数

- 车头公称宽度 220、250、280、300、320、360
- 织轴最大卷绕直径(mm) Ø 805、Ø 1016、Ø 1200
- 最小卷绕直径(mm) Ø110
- 最大卷绕张力(N) 6000
- 工作速度m/min 80

TD-325 serial sizing machine is suitable for use in weaving preparatory sizing process in textile industry. As auxiliary equipment with both shuttle and shuttleless looms, it is applied for starch sizing, chemical sizing and mixing-sizing of warp yarns of cotton, linen, and chemical fibers and blended fabrics.

Main component parts:

Beam creel

● 12 warp beams arranged in 3creel shelves, each shelf can bear 4 beams in two layers and two rows passages for operator are constructed between creels.(More beam creels can be supplied according to user's demand).

● Beaming tension manual adjusting unit or electric-gas automatic control unit(selectable)

Size box

● Double-dip-double-nip, Maximum squeezing pressure 15KN or 30KN
● Capacity: Main box 100 liter; auxiliary size box 80 liter
● Squeezing rollers are specially designed for getting uniform squeezing pressure. Squeezing pressure can be changed steplessly with main speed, or shifted between two stages when main speed changes between crawl speed and working speed.

Drying unit

● Eight flat head-sealed stainless steel cylinders of Ø 800mm (More cylinders can be provided at option.)
● Cylinders are driven in groups. Four pre-drying cylinders coated with Teflon are semi-positively driven by chain and toothless chain wheel. The others are positively driven by chain and chain wheel. Moisture and hot air are all directly exhausted from drying chamber by ventilator.

Headstock

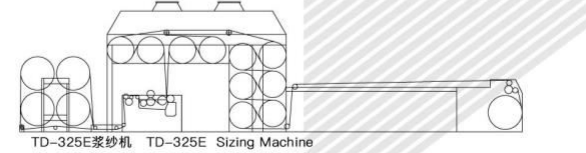
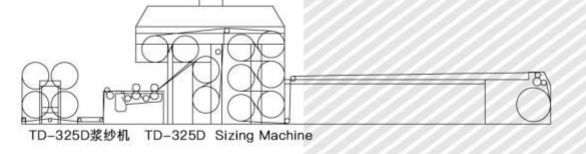
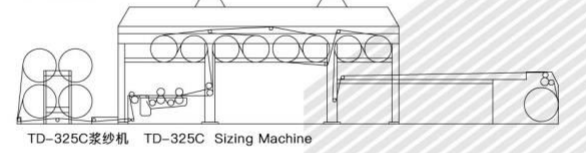
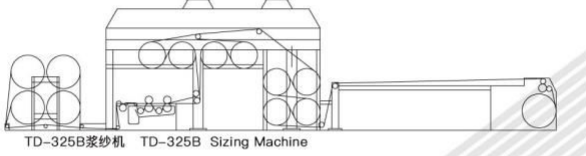
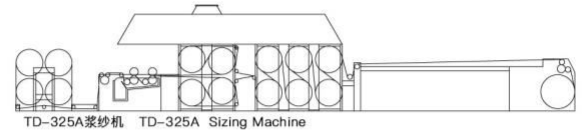
● Frequency-converting speed-regulating AC motor used for main drive.
● Frequency-converting AC motor drive used for winding, Beam(PUX3/PUX4 drive at user's option.)
● Pneumatic control for lifting, engagement of empty beam, pressing winding beam, disengagement and doffing of full beam.

● Warp tension of each section regulated by XP1 speed regulator.

Main technical parameters

- Nominal width of headstock: 220/225/280/300/320/360 mm
- Maximum beam winding diameter: Ø805 or Ø1016mm
- Minimum winding diameter: Ø110mm
- Maximum winding tension: 6000N
- Working speed: 80m/min

Process Flow Chart of TD-325 Serial Sizing Machine TD-325系列浆纱机工艺流程图



TD-346 Serial Double-box Sizing Machine TD-346系列双浆槽浆纱机

本系列浆纱机主要是为了适应无梭织机配套需求，高密度的棉及棉与化纤混纺织物，麻及其混纺织物的经纱的配套需要。

本系列产品分为基本型二元传动，五单元传动及七单元传动。

特殊要求可根据用户需要设计定制。

主要组成

经轴架

● 双层双排四只经轴一组组合式轴架，四组共十六只，每轴架架架之间设有操作通道。(可根据用户需要增加)

● 经轴退绕手动控制或电气自动控制。

浆槽

● 双浸双压浆槽，最大压强30KN。
● 浆槽容积：主浆槽100L，辅助浆槽80L。
● 压浆辊经专门设计的均匀轧辊，压强可随车速自动调整，使上浆均匀。
● 浆槽温度自控。

烘房

● 采用Ø800平封头不锈钢烘筒十二只。
● 烘筒分三组传动，每轴肆只，其中二组预烘烘筒表面喷涂聚四氟乙烯，采用无齿链轮，链条半积极传动，链条采用气动张紧。
● 预烘及合并烘干采用温度自控。
● 烘房湿热空气采用风机直排。

车头

This series are mainly used in association with shuttleless loom for sizing warp of high-density, and broad cotton fabric, cotton-chemical fiber blend fabrics, linen and linen-chemical fiber blended fabrics.

This series can be classified into 3 types according to driving mode: dual-unit drive, 3-unit drive and 7-unit drive. Our company also can design machine according to customers' requirements.

Main component parts

Beam creel

● 16 warp beams are arranged in 4 creel shelves, and each shelf can bear 4 beams in two layers and two rows. Passages for operator are constructed between creels.(More beam creels can be supplied according to user's demand).

● Beaming tension manual adjusting unit or electric-gas automatic control unit(selectable)

Size box

● Double-dip-double-nip, Maximum squeezing pressure 30KN
● Capacity: Main box 100 liter; Auxiliary size box 80 liter
● Squeezing rollers are specially designed for getting uniform squeezing pressure. Squeezing pressure can automatically change with main speed to ensure uniformly sizing.

● Automatic heating control for preheating and combined heating cylinders.

Drying unit

● 12 flat head-sealed stainless steel cylinders of Ø 800 mm (More cylinders can be provided at user's option.)
Cylinders are arranged into three sets. Among them four pre-drying cylinders coated with Teflon are semi-positively driven by chain and toothless chain wheel. Chain is tensioned pneumatically.

● Automatic temperature control for preheating and combined heating cylinders.

● Hot air and moisture are exhausted from drying chamber by a fan.

Headstock

- 主传动采用变频无级调速。
- 织轴采用变频卷绕，可进行正反卷绕，以适应A、B轴生产。
- 最大卷绕张力600kgf。
- 织轴空轴抬起与拍合、卷绕织轴的加压，及满轴的脱离与落轴，均为气动控制。

● Frequency-converting stepless speed-regulating AC motor used for main drive.

● Frequency-converting AC motor drive used for realizing forward and backward windings selected for A/B beam winding.

● Maximum winding tension: 600kgf



与落轴，测长辊的加压与释压均为气动控制。

● 织轴由左右移动的箱体支承，由电机驱动。

主要技术参数

- 车头公称宽度: 320、360
- 织轴最大卷绕直径 (mm) Ø550-Ø 805或Ø550-Ø 1016、Ø550-Ø1200。
- 最小卷绕直径 (mm) Ø110
- 最大卷绕张力 (N)6000
- 工作速度 (m/min) 80

● Lifting, engagement and doffing of full beam are all controlled pneumatically. Pressure roller and measuring roller are all pressurized and relieved pneumatically.

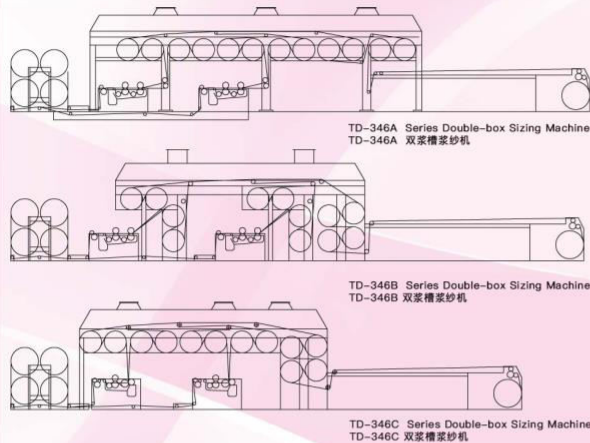
● Beam is supported by right- and left-moving housings and driven by motor.

Main technical parameters

- Nominal width of headstock: 320, 360mm
- Maximum beam winding diameter: Ø 550 - Ø 805 or Ø 550 - Ø 1016mm
- Minimum winding diameter: Ø110mm
- Maximum winding tension: 6000N
- Working speed: 80m/min



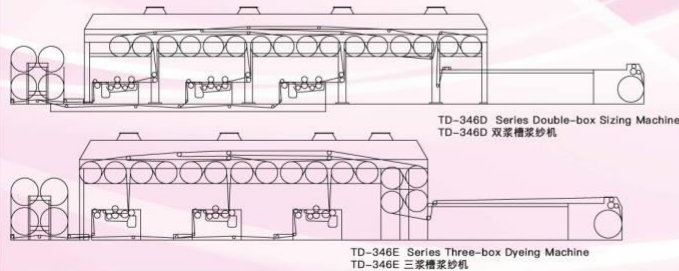
Process Flow Chart of TD-346 Series Double-box Boxing Machine
TD-346系列双浆槽浆纱机工艺流程图



Process Flow Chart of TD-346D, E Series Three-box Dyeing Machine
TD-346D、E系列三浆槽浆纱机工艺流程图

根据布品种不断的发展(特别是浆纱的头份已接近或超过20000头份时,我们也为用户设计了三个浆槽的浆纱机,工艺流程图如下:

With constant development of cloth varieties (Especially when the sized heads have approached or exceeded 20000, three-box dyeing machine is designed for customers. Its process flow chart is as below:

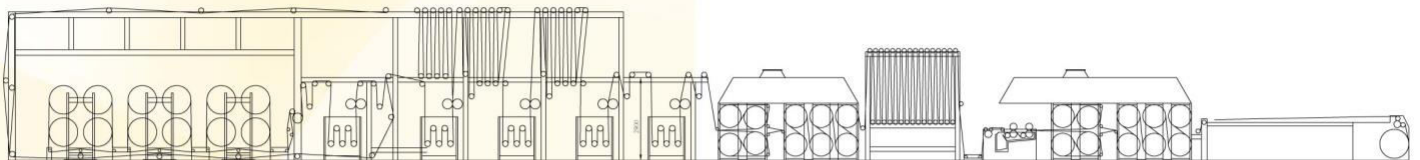


TD-394 Serial Combined Ring Dyeing and Sizing Machine
TD-394系列环染浆联合机

- TD-394 环状染浆联合机是将靛蓝冷染工艺用于纯棉[Ne6-40] 纱片的连续染色并直接进行上浆的工艺过程。
 - 以一组靛蓝染色槽、一组轧辊及一组氧化架替代六组靛蓝染色槽、六组气动轧辊及六组单独氧化架,即称为“一代六”环状染色。
 - “一代六”环状染色技术在染色牢度,织物性能及品种适应性方面比传统片状染浆工艺具有明显优点。
 - “一代六”环状染色具有较少占地,动力及化学物料消耗减少,由于多层轧压具有高而均匀轧液效果,使氧化充分,染色牢牢而无色差,品种适应性广且更换方便等优点。
- 主要组成
经轴架
- 双层双排组合式轴架三组共十二只,每组间设有操作通道。
 - 经轴退绕采用电一气自动控制。
- 染色
- 一对引纱气动轧车及气动张力架。
 - 二组煮炼槽, 二组气动轧车及二组气动张力架。
 - 一组染色槽, 一组气动轧车, 一组环状氧化架
 - 一组硫化槽, 一组气动轧车, 一组氧化架及一组气动张力架
 - 二组水洗槽, 二组气动轧车及二组气动张力架。
 - 染色循环系统, 及染液供应系统。
 - 8只烘筒的染色烘房, 前四只表面涂聚四氟乙烯, 后六只烘筒采用积极传动。
 - 五对轧车及烘房后四只烘筒均采用变频传动。
 - 储纱长度约100m, 储纱量在车头采用模拟显示。
 - 浆纱部分同TD-325浆纱机或TD-346浆纱机。

- TD-394 combined ring dyeing and sizing machine is designed for continuous cold indigo dyeing and direct sizing of cotton yarn sheet [Ne6-40]. Instead of 6 sets of indigo dyeing bathes, pneumatic squeezing rollers and skyings each, ASLGA394 series uses only one single set of indigo dyeing bathes, rollers and skyings each, hence it is called "1 for 6" ring dyeing.
 - The "1-6" ring dyeing technology ensures much better color fastness, better fabric performances and suitability of yarns than the conventional sheet dyeing and sizing process.
 - Small area covering, lower consumption of power and chemical additives, better oxidization and color fastness resulted from good multilayer squeezing as well as better suitability of yarns and convenient replacement, all these are extinguishing features of ring dyeing technology.
- main components parts
beam creel
- 12 warp beams arranged in 3 creel shelves, each of which has a passage for operator
 - Electrical-pneumatic automatic control for unwinding warp beam.
- dyeing unit
- A pair of pneumatic padders for yarn delivering and pneumatic tension frames
 - One set of boiling troughs, pneumatic padders and pneumatic tension frames each.
 - One set of dyeing trough, pneumatic padders, ring skyings and pneumatic tension frames each.
 - One set of dyeing troughs, pneumatic padders and ring skyings each.
 - 2 set of wash troughs, pneumatic padders and pneumatic tension frames each.
 - Circulating type dyeing system and dye liquor supply system
 - 8 drying cylinders for dyeing, among which the front 4 cylinders are coated with Teflon and the rear 6 cylinders driven by main drive.
 - 5 pairs of padders and the rear drying cylinders are all driven by frequency-converted motor
 - Total length of storage yarn is about 100m. yarn storage on headstock is monitored electronically.
 - Sizing unit is identical to that in TD-325 or TD-346.

TD-394 Process Flow chart of TD-395 Series Combined Ring Sizing Machine
TD-394 系列环状染浆联合机工艺流程图



TD-395 Series Dyeing and Ring Sizing Machine
TD-395 染浆联合机

TD-395型染浆联合机是将靛蓝冷染工艺用于纯棉[Ne6-40]纱片的连续染色并进行直接浆纱的工艺过程。

TD-395型染浆联合机适用于传统织机及无梭织机的牛仔布生产。

主要组成

经轴架

- 双层双排四只经轴一组组合式轴架, 四组共十六只, 每组轴架之间设有操作通道。

- 经轴退绕手动控制或电一气自动控制。

染色

- 一对引纱气动轧车及气动张力架。
- 二组煮炼槽, 二组气动轧车及二组气动张力架。
- 八组染色槽(或更多)、八组气动轧车(或更多)及八组气动张力架(或更多)。
- 三组水洗槽, 三组气动轧车及三组气动张力架。
- 染液循环系统及染液供应系统。
- 十只染色烘筒的烘房, 前四只表面涂聚四氟乙烯, 后六只烘筒采用积极传动。
- 十四只气动轧车及烘房后六只烘筒均采用独立变频传动。

储纱架

- 储纱长度约100m, 储纱量在车头采用模拟显示。
- 浆纱部分同TD-325浆纱机或TD-346浆纱机。
- 浆纱部分车速在正常运行的状态下, 在自动保证一定储纱量的情况下, 自动跟踪染色部分的车速。

TD-395 combined dyeing and sizing machine is designed for continuous cold indigo dyeing and direct sizing of cotton yarn sheet [Ne6-40]

ASLGA395 combined dyeing and sizing machine is applied for producing denims with conventional looms or shuttleless looms.

Main component parts

Beam creel

- 16 wrap beams arranged in 4 creel shelves, each shelf could bear 4 beams in two layers and two rows. Passages for operator are constructed between creels.

- Electrical-pneumatic automatic control for unwinding warp beam.

Dyeing unit

- A pair of pneumatic padders for yarn delivering and pneumatic tension frames.
- Two sets of boiling troughs, pneumatic padders and pneumatic tension frames each.
- 8 sets of dyeing troughs, pneumatic padders and pneumatic tension frames each.
- 3 sets of wash troughs, pneumatic padders and pneumatic tension frames each.
- Circulating type dyeing system and dye liquor supply system.
- 10 drying cylinders for dyeing, among which the front 4 cylinders are coated with Teflon and the rear 6 cylinders driven by main drive.
- 14 pneumatic padders and the rear 6 drying cylinders in drying chamber are all driven by frequency-converting motor

Yarn storage frame

- Total length of stored yarn is approximately 100m. Yarn storage can be electronically monitored at headstock.
- Sizing unit is identical to that in TD-325 sizing machine.
- During normal operation, when a certain yarn storage capacity is automatically maintained, speed of sizing unit will automatically follow that of dyeing unit.

先进的电动储纱架, 可根据不同品种的张力, 在车头操作屏中直接输入。



Advanced electronic yarn storage shelves allow operator to make direct input on the operating panel of headstock according to tensions of different yarns.



染浆联合机氧化架采用梅花辊，可以使纱线氧化更充分。同时可减少纱线的横向移动，更不易粘毛羽，减少氧化辊清洗的次数。

Combined dyeing and sizing machine uses plum blossom shaped roller to make yarn fully oxidized. At the same time, it can stop yarn moving laterally, keep yarn clean and reduce washing time of oxidized roller.

束状染色机、染浆联合机乳水槽均采用球形石墨轴承使导辊安装同心度更好，转动更灵活。

Bunch shaped dyeing machine and combined dyeing and sizing machine both use ball shaped graphite bearing making better roller installation coaxiality concentricity and more flexible movement.



二组轴架中间没有操作通道，操作更方便。

No operation passage between two shaft bracket, making operation more convenient.



高效汽蒸箱，可满足更多染色工艺的要求，后面双套径轴架及储纱架，使同一品种换缸时不用停车，减少纱线的浪费。



High efficiency gas steaming oven can satisfy more needs of dyeing crafts. The two sets of creel and yarn storage shelf make it possible to keep machine operating when producing the same products and exchanging pins, thus reducing waste of yarn.



可移动式车头，操作更方便。

Mobile headstock makes operation more convenient.



可移动式径轴架，减少机器的换品种的时间。

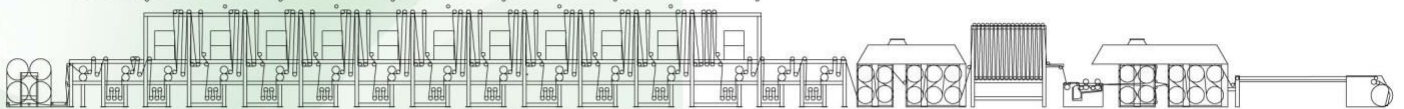
Mobile creel can reduce the time of changing products.



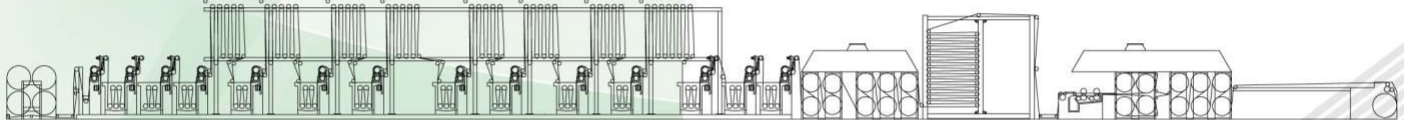
氧化架置于染槽上方，氧化更充分。

Oxidization shelf on the upper side of dyeing sink makes full oxidization.

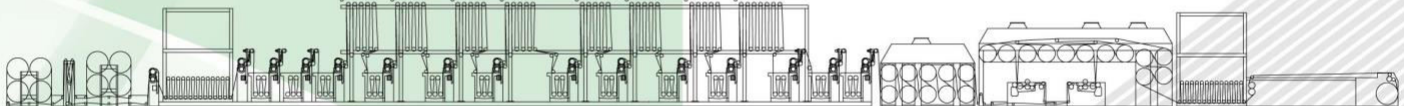
TD-395A染浆联合机



TD-395B染浆联合机



TD-395C染浆联合机



TD-638 Indigo Rope Dyeing
TD-638 束状染色机

产品用途

TD-638 束状染色机，主要适用于牛仔布经纱97tex(6s)~18tex(32s)的纯棉、棉纤混纺的纱线染色工艺。特别适用于高品质牛仔布的生产需要。

产品特点

染色速度快、产量高、染色速度可达5-36m/min。
染色质量好，色牢度好，并可彻底解决左、中、右的色差问题。
牛仔布质量好，由于染色过程特殊性，纱的圆整度好，牛仔布布面饱满。

product application

TD-638 bunch shaped dyeing machine is mainly used in color pure cotton of denim warp 97tex(6s)~18tex(32s) and yarn that blended with cotton and fiber, especially to produce denim warp of high quality.

characteristics

Fast dyeing speed and high output. Dyeing speed can be 5-36m/min.
High dyeing quality, perfect color fastness and the ability to solve the left center right color shading problem.
High quality of the denim, perfect length pellets of yarn and ample cloth cover of denim because of speciality of the dyeing process.

产品的主要技术参数

染色纱线束数:	12束	24束
染色速度m/min:	5-36	5-36
轧车压力:	5T、10T任选	5T、10T任选
蒸汽压力(Mpa):	0.36	0.36
压缩空气压力(Mpa):	0.81	0.81
整机高度m:	8.5	8.5

产品工艺过程

球经架(退绕)→酸碱处理及透风装置→前水洗→染色及氧化→后水洗→烘干→圈条落纱

main technical parameters

Bunch quantity of dyeing yarn	12	24
Dyeing speed	5-36	5-36
Pladder pressure	5T、10T	5T、10T
Vapor pressure	0.36	0.36
Air compression pressure	0.81	0.81
Height of the whole machine	8.5	8.5

processing step

Balled warp frame(unwinding)→scouring→former washing→dyeing、roll compacting、oxidizing→back washing→drying→coiling and doffing

