



New!

# ***TTS20S SPUN SIZING MACHINE***

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Dependability

Improvement

Progress

TTS20S SPUN SIZING MACHINE

Weaving quality spun fabric on a high speed loom, such as an air jet loom, requires yarns which are evenly sized, have even moisture percentage, and high elongation with little fluff or yarn breakage.

The TTS20S breaks tradition. With a new structure and control for the size boxes and drying cylinders, the TTS20S produces the best sized yarns for an air jet loom.

**Dependability** We offer dependability.

## [Ability]

- Maximum sizing squeeze pressure: 50kN
- Multi-section drive with up to 9 vector motors
- Stretch control set in units of 0.01% at minimum

## [Quality]

- Improvement in drying ability using a new cylinder-driving system and a new temperature control system
- Improvement in size-pick up ability using a new squeeze pressure control (Adjustable proportional control)
- The two vertical yarn sheet pull-out sizing systems: the dip & twin and the nip & twin

## [Productivity·Energy-saving]

- Maximum yarn speed of 150m/min is added. (Optional) (With 6 main cylinders)
- Power-saving system with the AC vector motors.
- Pre-wet device is available. (Optional)

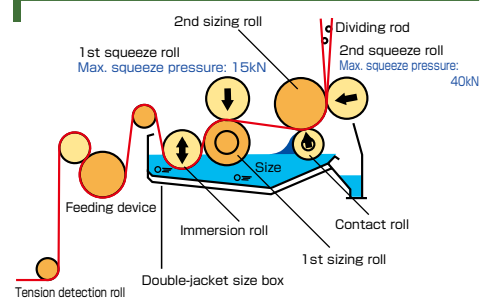
## [Operability·Safety]

- Employing the Sizing Navigation System & network availability (Production control with the T-PMS)
- A handy terminal for speed change is added.
- Safety measures, such as a cover for the sizing roller section, are improved. (Optional)

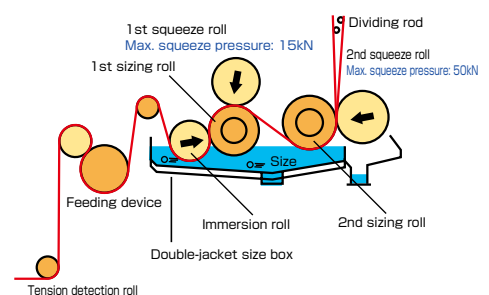
## [Maintenance]

- Hot-air chamber structure is improved for easier maintenance.
- An oil-sealed chain is employed for driving the sizing section.
- Enhanced coating is applied to printed boards for electric components.

## Dip & twin squeeze system 40kN

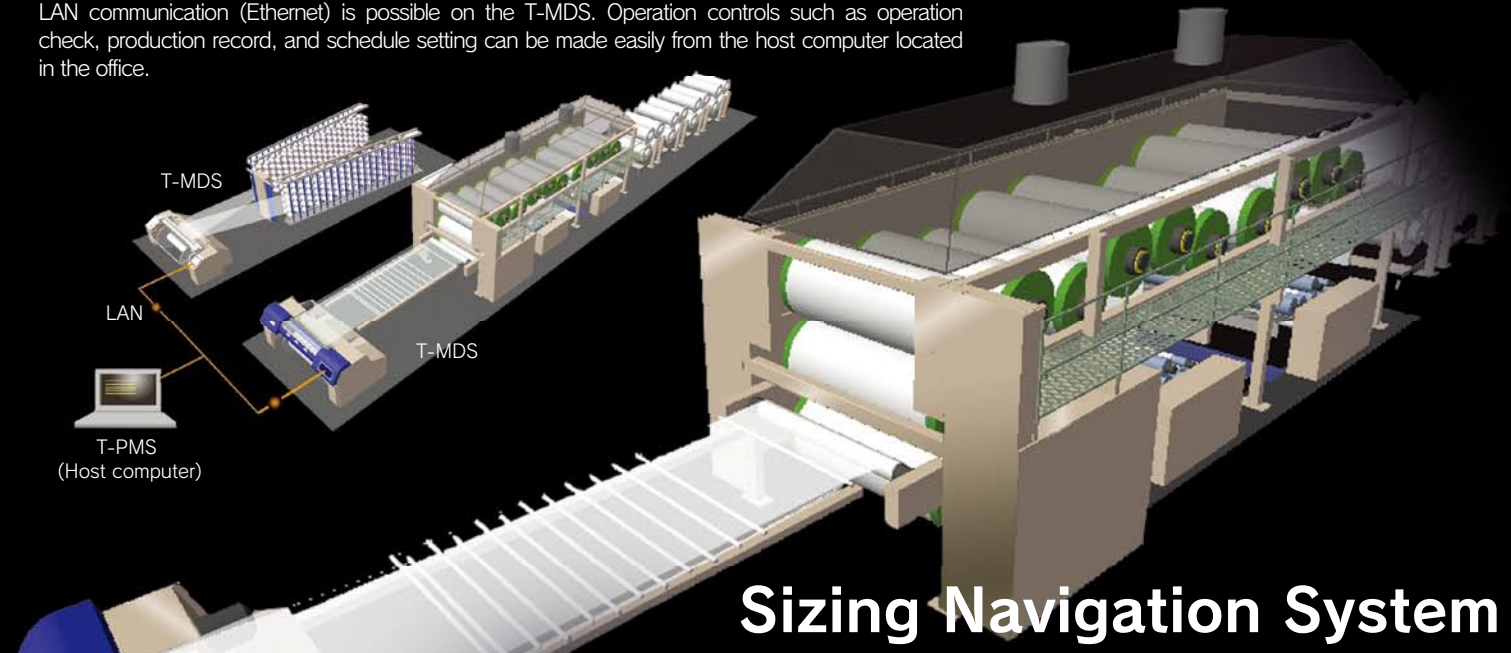


## Nip & twin squeeze system 50kN



## T-PMS (T-Tech Japan Preparation Management System) (Optional)

LAN communication (Ethernet) is possible on the T-MDS. Operation controls such as operation check, production record, and schedule setting can be made easily from the host computer located in the office.



## T-MDS (Computer control)

All the preparatory machines (sizing machines and warpers) employ the T-MDS computer control system with a full-color graphic display as standard. All the condition settings are available with a simple integrated touch-key operation. By registering a maximum of 300 styles in advance, operating conditions are integrated to avoid mis-operation.



Navi Menu



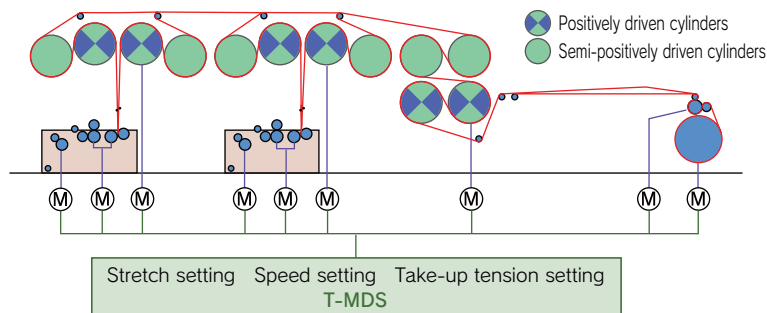
Drive Conditions



Trace Navi (Sampling)

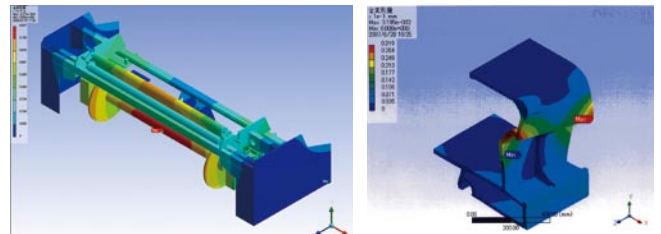
## New cylinder-driving system

Combination of a positive drive and a semi-positive drive for the pre-cylinders and the main cylinders allows quality drying keeping residual elongation high for fine to thick yarns.



## Tough frame structure

Tough frame structure based on CAE analysis is employed.



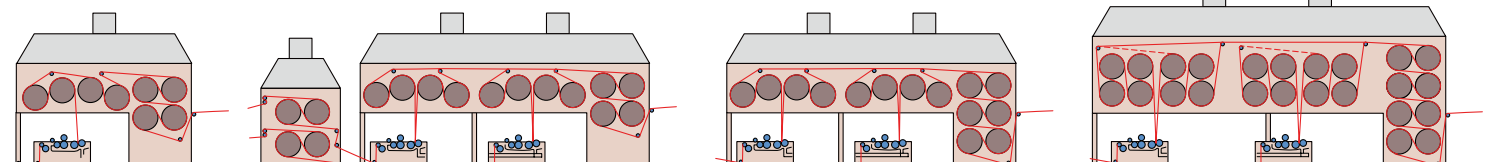
●Cylinder arrangements according to various fabric kinds. Cylinder layout can accommodate your convenience.

S1C8

S2C12+4 (For yarn-dyed fabric)

S2C14

S2C24



[Specifications]

Item		Specifications		Optional equipment
General	Model	TTS20S		
	Sizing system	"Touchfree" vertical pull-out system with 2 size boxes		
	Nominal take-up width	1900, 2300, 2800, 3600, 4000 mm		
	Sizing and drying width	1800, 2000, 2200, 2400 mm		2800 mm
	Max. yarn speed	100 m/min., 125m/min.		150 m/min.
	Stretch control system	Digital stretch control with multi-section drive system		
Beam stand	Stand type	Double deck system (Yarn feeding from the upper and the lower decks), 4-block system.		Beam stand for sectional warper
	No. of stands	12 to 32		Movable type beam stand
	Pull-out tension control	Individual pneumatic band brake system, Air pressure simultaneous control system, Feedback control, Tension control with two systems		Special ruffle
Sizing	Size box	2 size boxes, Double-jacket size box		Size viscosity monitor
	Sizing system	Dip & twin squeeze system	Nip & twin squeeze system	Size pick up monitor
	Squeezing pressure	1st squeeze roll: Max. 15kN 2nd squeeze roll: Max. 40kN	1st squeeze roll: Max. 15kN 2nd squeeze roll: Max. 50kN	Size concentration control Feeding device
	Squeezing pressure control	With SQ squeeze pressure controller Control range: 1~50 (40) kN		
Drying	Cylinder location	Located above sizing section		Combination moisture control
	No. of cylinders	Pre-cylinder: 4 x 2 units Main cylinder: 4		Main cylinder: 6
	Cylinder drive system	Pre-cylinders: Positive drive system + Semi-positive drive system Main cylinder: Semi-positive drive system + Positive drive system		
Take-up	Take-up system	AC vector drive		Operation lifter
	Waxing device	Kiss roller system (With a dissolving unit and an wax-supplying unit)		Cut mark device
	Take-up tension range	Max. 6000N (125m/min.), Max. 7500N (100m/min.)		Static electricity eliminator
	Loom beam mounting	Exclusive adapter system, With automatic loom beam doffing device using vertical lifting by hydraulic cylinder and horizontal doffing by motor, With initial winding controller		Mirror Contact bar lifting device Automatic wax supply Both-sided waxing device
	Max. flange diameter	1016 mm		1250mm
	Installed beam weight	Max. 2,500 kg		3500kg
	Safety equipment	With photoelectric beam and swinging safety guard		
Others	Operation display	T-MDS Machine Data Station		Centralized lubrication device
	Steam installation capacity	1200 kg/H (12 cylinders)		
	Electrical installation capacity	30kVA		
	Special design	Pre-wet sizing		

Note 1: Drawings, data, and photos in this brochure are subject to change without notice for improvements.

Note 2: The photos in this brochure partly include options.

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