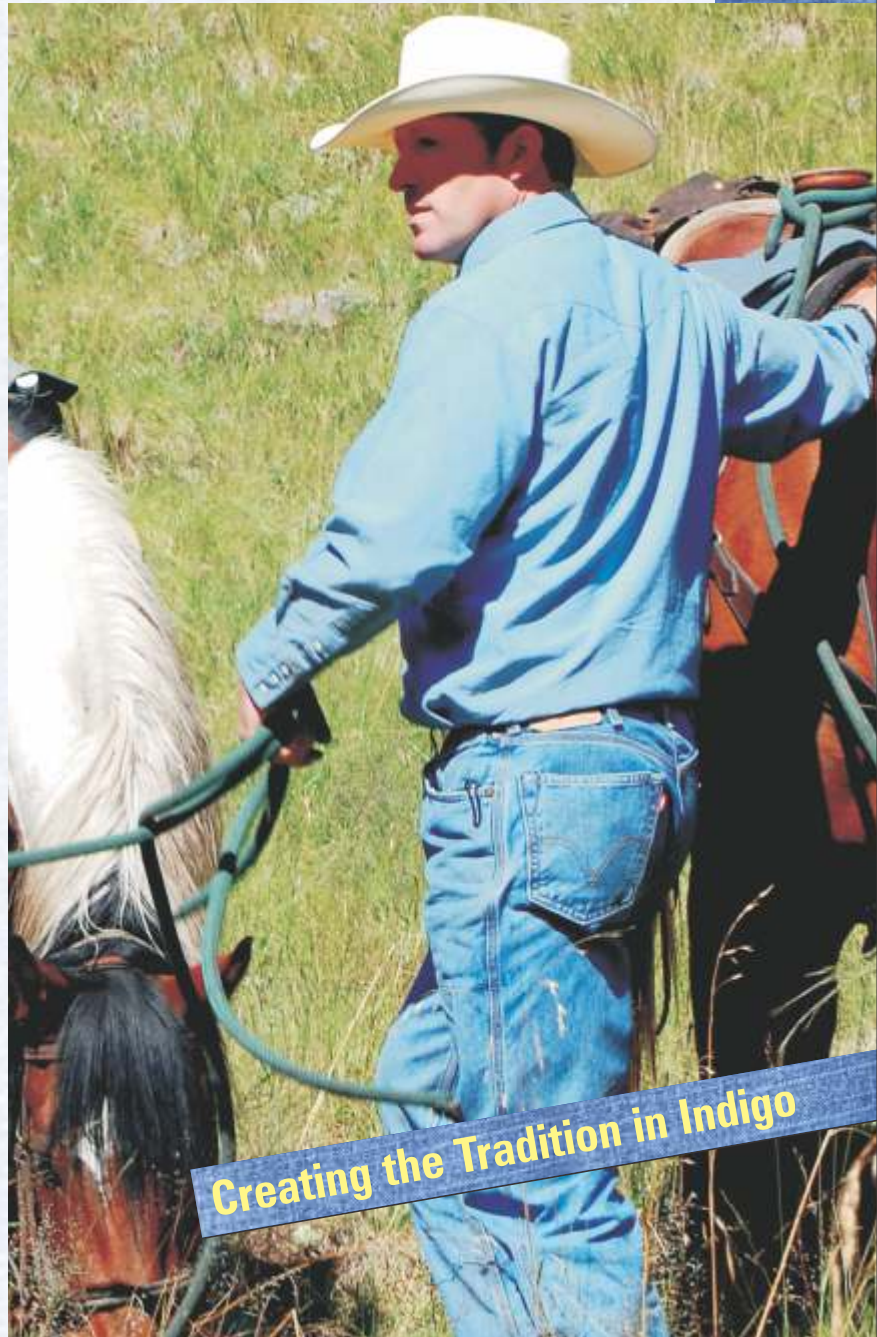


DENIM PREPARATION



TRENDSETTER MULTI COLOR SHEET DYEING RANGE

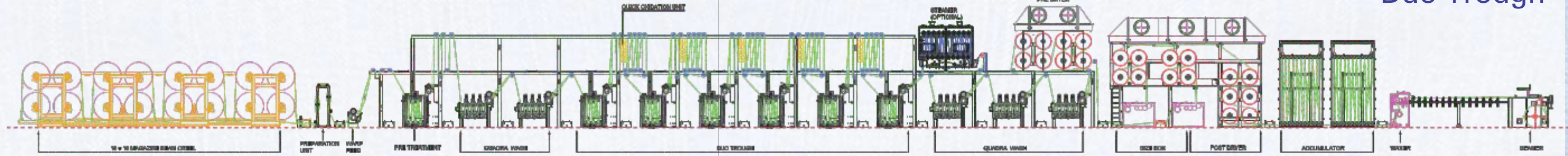


Creating the Tradition in Indigo





Multi Color Sheet Dyeing Range Duo Trough



MULTI COLOR SHEET DYEING RANGE is technologically advanced machine for Denim preparation. American technology and rich experience of 'WEST POINT' ensures the reliability of the system with uniform dyeing and good fastness. Suitable for yarn dyeing process of pure cotton and cotton blended yarn.

Today **sustainable indigo dyeing** is more important than ever. During recent years the main focus has shifted from indigo-dyed work clothes to denim fashion wear and practical leisure wear. The manufacturing of fashionable garments calls for a most flexible adaptation of the machine technology to the rapidly changing fashion trends.

By means of a new and improved '**GO GREEN NITRO**' technology, multi trough dyeing concept provides the highest quality standards in dyeing and sizing at most economical level.



Beam Creel

Ergonomic designed structure for safe and quick access. Shaft less beam support enhances beam service life. Precise beam braking system with pneumatic band brakes for uniform tension of unwinding.

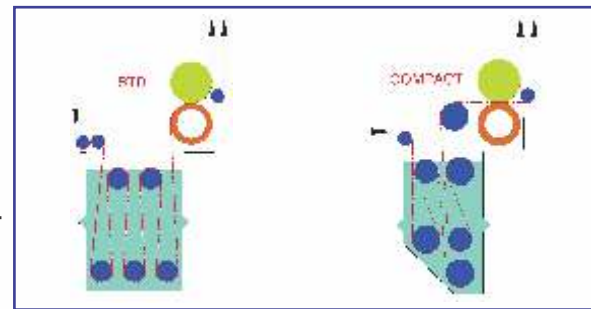
Warp Feed

Feeding of warp ends by means of a soft-rubber coated drive roller. Regulation of the yarn tension by load cell or angle sensor.

Pretreatment Trough

Warp dyeing unit designed in modular system offers several possibilities of pre-treatment:

- Simple pre-wetting of the yarn.
- Sulphur dyeing of warp for obtaining a special effect of black-blue.
- Mercerizing to enhance color brilliance and for achieving a reinforced ring-dye.

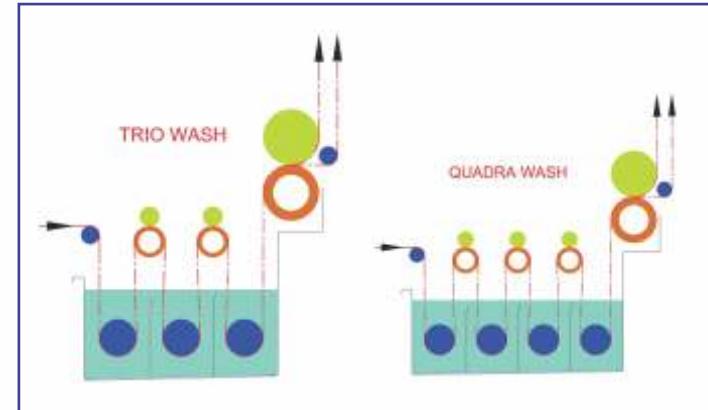


Dwelling Cylinder

Used for interim drying in different executions after pretreatment and dyeing as well as for obtaining various color effects.

Dryer

Depending upon the configuration, dye range is equipped with 20 to 24 drying cylinders in the unit. 16 to 20 cylinders of Ø800mm are teflon coated. 5 to 6 temperature control groups in dryer unit.



Washing Trough

Choice from two type of troughs available:

1. TRIO wash
2. QUADRA wash

It is equipped with short free-running warp lengths and interim squeezing units, ensuring a highly-efficient washing performance. In this way, it is possible to adjust the pH-value of the warp to the optimum value required by the dyeing and sizing process. Wash troughs are designed with counter flow arrangement and water spray to minimize water consumption.

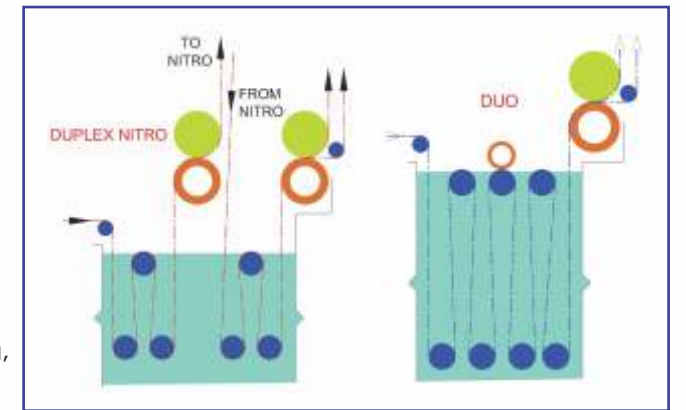
Dyeing Trough

Choice from four type of troughs available:

1. Standard 1500L
2. Compact 800L
3. Duo 1700L
4. Duplex Nitro 2400L

An important aspect when using different kinds of dye is the matching of the immersion times and of the liquor volumes to the varying dyeing requirements. The requested liquor contents and contact times are achieved by the most flexible design of the dye troughs.

Heart of the warp-dyeing unit is the dyeing trough. It ensures benefits of high liquor circulation rate, precise liquor squeezing, and reduced size liquor volume. The special shape of the trough and the cross-flow circulation ensures uniform dye concentration in all troughs.



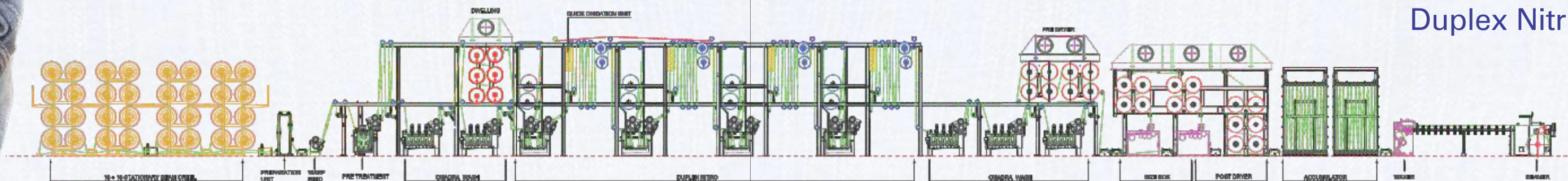
Dosing Station

PLC controlled accurate dosing of dyes and chemical is the heart of the indigo dyeing unit. Precise dosing with reduced losses during the use of dyestuffs and chemicals ensures economical and environment conscious dyeing process. Each dosing system is provided with selection of metered / level dosing in PLC.

Speed-dependent control system of the dosing station memorizes all the required setting parameters, ensuring a high degree of process reliability and reproducibility.



Go Green Nitro Dyeing Range Duplex Nitro



Compact Size Box

The yarn is twice immersed and twice squeezed with vertical exit size box. The user-friendly design of the size box facilitates easy operation from all sides of size box.

Main advantages of 'Prashant West Point' sizing machine are excellent ease of operation and perfect process control. Warp beams sized with this unit guarantee highest efficiency in weaving.

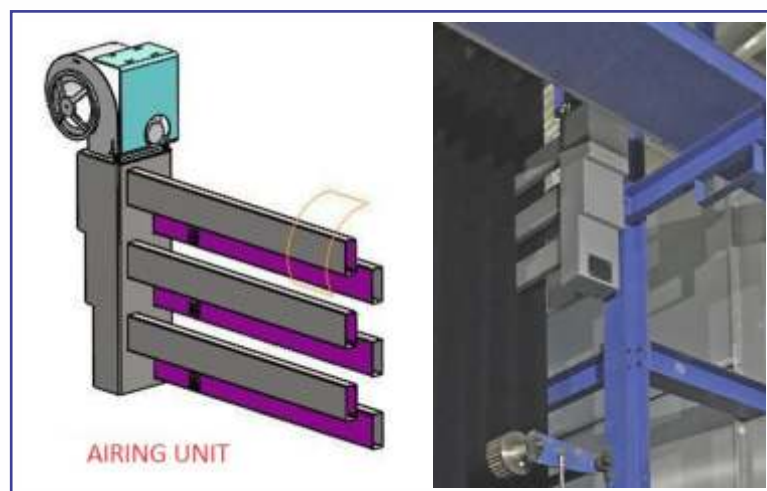


Warp Accumulator

This facility makes it possible to change the weaver's beam, without the necessity to stop the complete dyeing range at the time of weaver's beam change. Device maintains uniform tension during operation.

Quick Oxidation

Innovative individually controlled stainless steel quick oxidation device with twin blowers for enhanced air flow. In the quick oxidation the warp undergoes a gentle cross-blowing process with constant fresh air over the entire width, thus speeding up the oxidation. This means a shortening of the oxidation yarn passage length by 50%.



Steamer

The steam environment ensures a better penetration and fixing of dyestuff with yarn.

Steamer sides are fabricated of 3 mm stainless steel with entry and exit slots, which are coil heated at the bottom. Stainless steel enclosures are with access doors for threading and windows for visual inspection.

Beamer- MPB

Extremely robust construction with three roll concept for delivery system. Uniform winding tension across the beam enhances weaving efficiency. Reverse rotation facilitates for left and right winding beams working.

Expander Rollers

These rollers are used to optimize the shape of the yarn sheet and to prevent the width-wise shrinkage of the warp.

Remote Diagnosis

By just providing the static IP and Internet connection to machine console, customer can avail the on line service support from our team of well experienced expert.

Technical Specifications

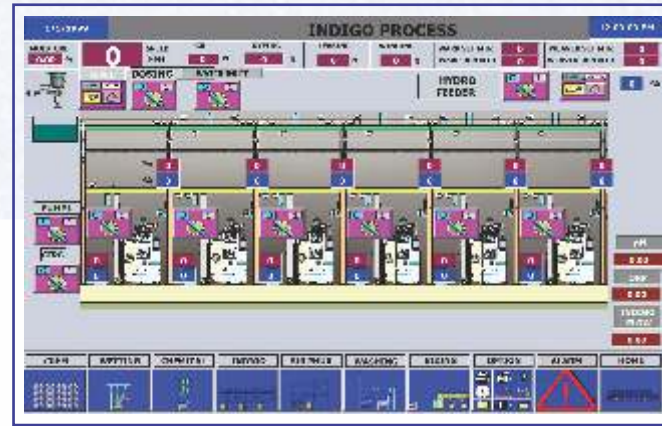
Beam creel	4-32 beams
Working width of creel	1500-2200 mm
Working width of dyeing	1600-2200 mm
Working width of size box	1800-2200 mm
Working width of beamer	2200-4000 mm
Dryer cylinder diameter	800 mm
Winding tension	5000-8000 N
Yarn tension in the range	250-2000 N
Speed of dyeing range	up to 50 mpm

Automation and Controls

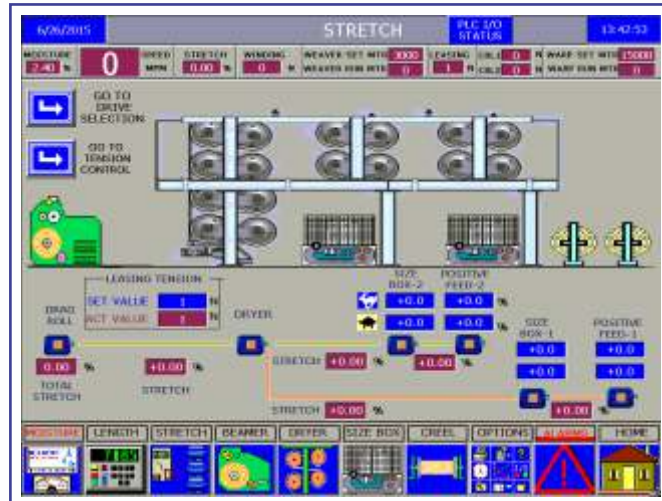
'PRASHANT WEST POINT' automation system provides at a glance all process parameter as mentioned in below graphics. All the parameters are controlled and monitored in close loop by PLC for consistence performance. Diagnostic function for control system maintenance and trouble shooting is integrated. Various reports can be generated for exporting to customer SCADA system.



Dosing Device



Indigo Process



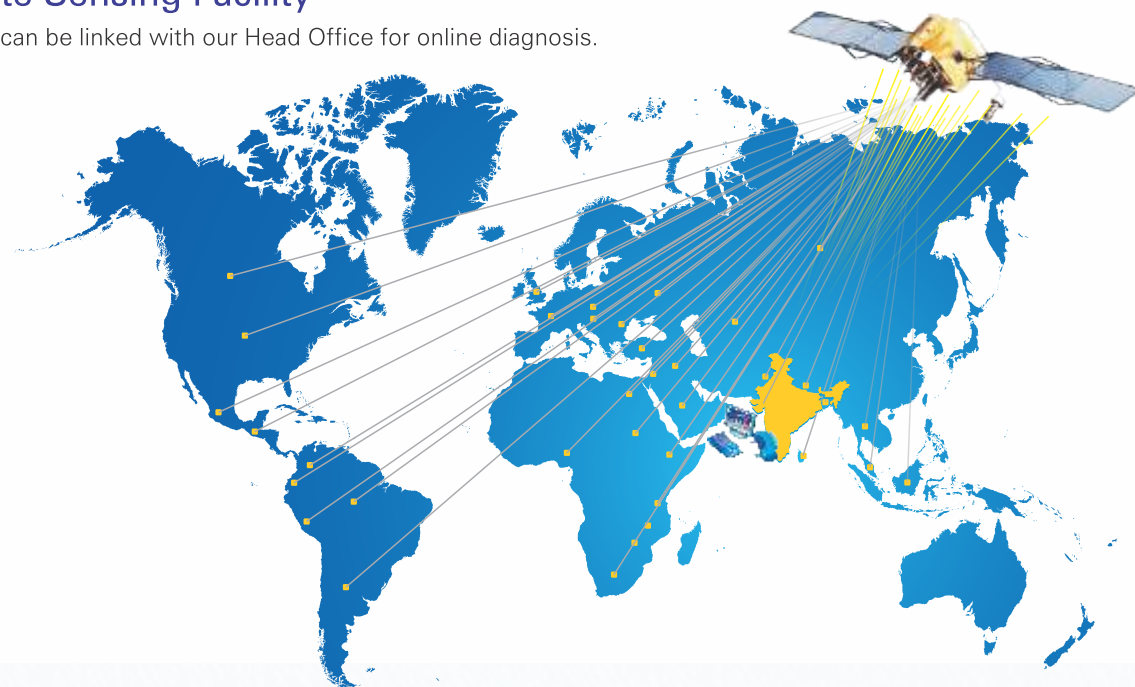
Stretch Control



Moisture Controller

Remote Sensing Facility

Machine can be linked with our Head Office for online diagnosis.



Creating the Tradition in Indigo

Advantage Prashant Nitro 'Go Green'

- Most sustainable dyeing process independent of external variables ensures consistent quality.
- Better diffusion and fixation of the indigo and sulfur dyes to the fiber increases fastness.
- Higher dyeing yield saves dyes up to 20% and hydro sulfate up to 60%
- Use of about half the number of dyeing vats reduces yarn path and yarn waste at lot change.
- Reduction in energy consumption and saving in the consumption of washing water up to 60% with remarkable less sulfites and sulfates in waste water.



Creating the Tradition in Indigo

PRASHANT GROUP established in 1975, is one of India's prominent and fast growing textile machine manufacturing company.

The group has co-operations with leading European, American and Japanese textile machine manufacturing companies which bring edge in updated technology and enhancement in products profile.

STATE-OF-THE-ART SIZING TECHNOLOGY



Width	: 1800-4000 mm
Flange Dia.	: 800-1250mm
Speed	: up to 180 mpm

GOOD WARPING IS HALF SIZING



TECHNICAL SPECIFICATION

Type	: Spindle Driven
Width	: 1400 - 2800 mm
Dia	: 800 - 1600 mm
Speed	: upto 1200 mpm



- Direct Warper and V Creel
- Spun Sizing Machines
- Denim Preparation Equipments
- Poly Beamer with unrolling creel
- Filament Sizing
- Beam to Cone Winder



- High Speed Sectional Warper & Creel
- Robotic Sectional Warper
- Sizing Winder
- Beam to Beam Warper
- Loom Printer



- Manual & Battery operated Warp Beam Trolleys
- Beam Stocker
- Inspection & Finishing

PRASHANT WEST POINT MACHINERY PVT. LTD. (An ISO 9001:2015 certified company)

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