



WARP PREPARATION

## BLUEDYE

### Indigo dyeing in a nitrogen atmosphere

#### Your benefit



High dyeing efficiency – the nitrogen technology increases the pick-up in the dye vat by three times. This drastically reduces the length and the number of vats required.



Reduction in chemical and yarn waste – more than 60% saving in the consumption of hydrosulphite and caustic soda. A reduction of yarn waste because of the low number of dyeing vats.



Water saving – less water (about 50%) is needed in the final washing due to the improved dye fixation.

## Technical data

**Working width**  
1,800 mm

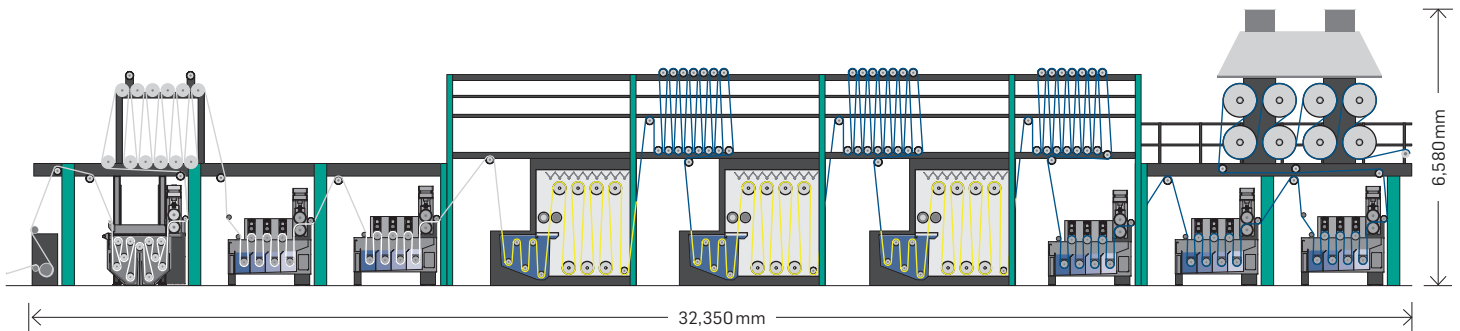
**No. of beams**  
8 to 20

**Mechanical speed**  
up to 50 m/min

**Oxidation**  
40 to 45

**Dye vat volume**  
2,000 l

**Nitrogen reactor volume**  
13 m<sup>3</sup>



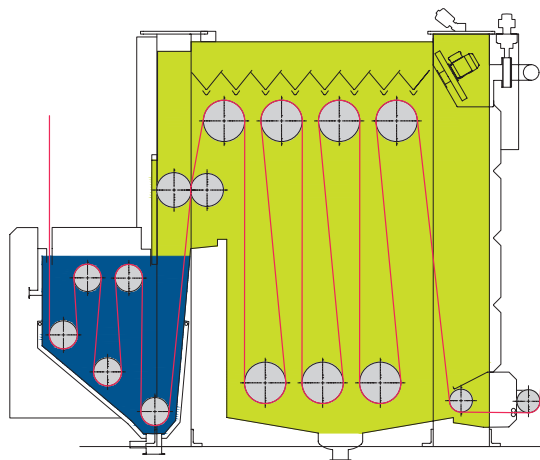
NOX – nitrogen reactor

### Reactor (18 m)

- Variable speed recirculation system to maintain perfect homogenization and inerting of the chamber to prevent any oxidation in the processing.
- Oxygen percentage always below 0.5%.
- Nitrogen consumption is minimized at 3 m<sup>3</sup>/hour for each reactor.
- Drip prevention and condensate collection system to avoid water drops from falling on the yarn sheet.
- Heated rollers to manage and regulate the penetration of the dyestuff.
- Fully accessibility and vision on the process.

### Dyeing vat (6.4 m)

- Integrated roller lifting device, easier yarn repairing, better cleaning and maintenance, less time preparation.
- Bath circulation by cross flow system for uniform dyeing result.
- Variable dwelling length (from 6.4 to 1.7 m).
- The dyeing vat is separated from the reactor to reduce the humidity in the chamber.



Dyeing vat with NOX – nitrogen reactor