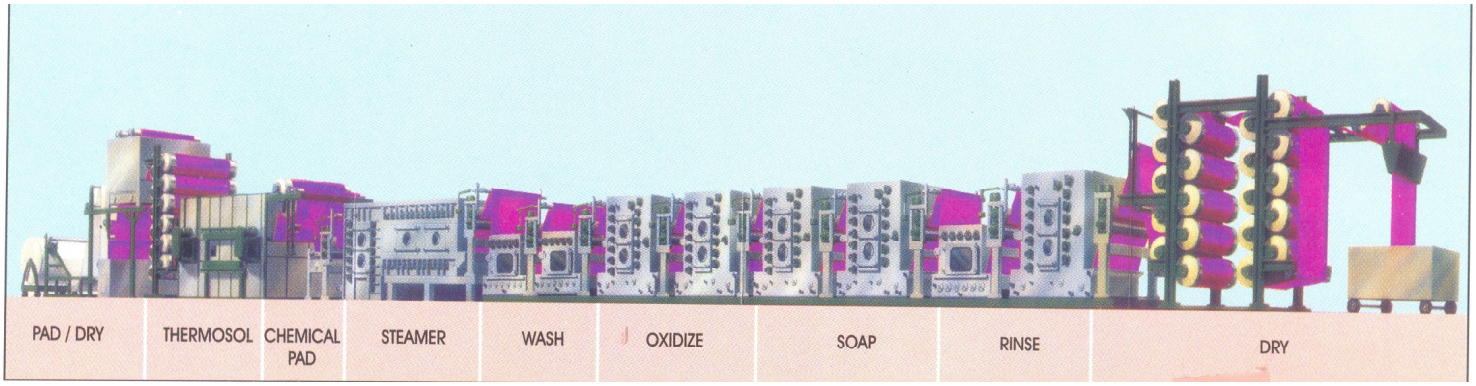
NEW DYEING/PRINTING TECHNOLOGY

- CONTINOUS UNIVERSAL DYEING PLANT (WITH MINERAL KHAKI ARRANGEMENT) FOR ALL COLORS OF YAMUNA, INDIA
  (Rs.5 - 6 Crore against Rs.18 cr of Imported)
- NEW ANJ DTRD H.T.H.P. RAPID DYEING MACHINE WITH NEW CHAMBER DESIGN OF ANJANI, INDIA (Rs.30 - 50 Lakh)
- VENUS JET DYEING MACHINE WITH 'TWIN SOFT FLOW' OF SCLAVOS, GREECE (Rs.60 - 70 Lakh)
- INNODYE ROPE AND OPENWIDTH DYEING MACHINE WITH INNOVATIVE MOBILE BASKET OF BRAZZOLI, ITALY (Rs.1.5 - 2 Crore)
- 'DREAM' INKJET PRINTING MACHINE OF REGGIANI, ITALY (Rs.1.5 - 2 Crore)

CONTINUOUS UNIVERSAL DYEING PLANT OF YAMUNA, INDIA



Salient Features of Continuous Universal Dyeing Plant of Yamuna, India

- Plant designed by the author for continuous dyeing using all types of commonly used colors: vats, reactives, sulphurs, naphthos, pigments, mineral khaki (mk) and disperse dyes
- Single or doublecolor padding with a scray in between for dwellof fabric (for color penetration and economy for mk)
- Predrying with ir heaters to prevent color migration and for higher dryer productivity
- Three pass,four section float dryer for drying & thermosoling of disperse dyes
- Chemical treatment (development) compartments
- Chemical pad with two bowl mangle & jacketed shallow trough for continous pad-liquor feeding arrangement
- Steamer with steam lock at entry and water lock at delivery with control of temperature, speed and fabric tension

- Eight compartment range for washing, oxidizing; closed ones for soaping and rinsing with proper sqeezes in between
- Double stalk clinder drying range with expander assembly at entry and batching or plaiting at exit

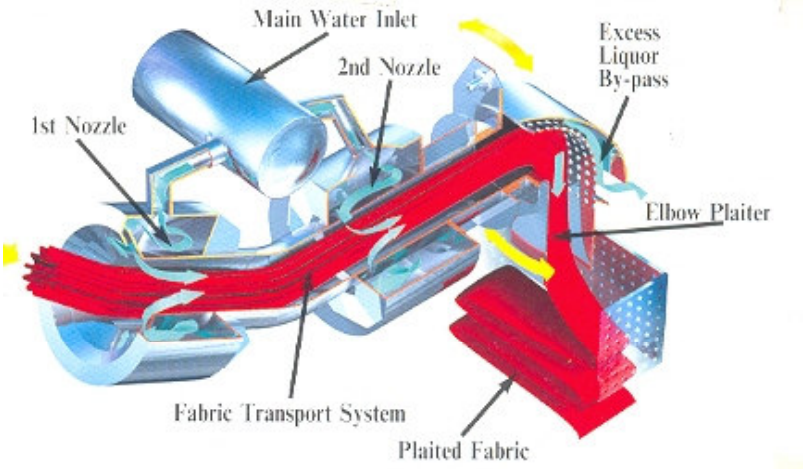
NEW ANJ-DTRD H.T.H.P. RAPID DYEING OF ANJANI, INDIA

Salient Features of New Anj-Dtrd H.T.H.P. Rapid Dyeing Of Anjani, India

- Universally applicable rope dyeing machine for wovens and knits
- New design of dyeing chamber to take two fabric ropes separated by mesh partition to allow the same liquor for the ropes as against separate autoclaves, the latter can give shade differences
- For smaller batches rope length becomes less for more rapid level dyeing
- Short fabric circulation times and with ‘flooded’ transport system, machine is suitable for dyeing crease sensitive fabrics from polyester (even unfixed), polyester blends, polyamide, microfibers, lycra blends, pile or wool fabrics

- Low liquor ratio down to 1:4; speeds up to 500 mtr/min; capacities up to 600 kg; temperature up to 140^{o} c
- Heating from 20 to 140^{o} c in 35 min and cooling from 140 to 80^{o} c in 30 min

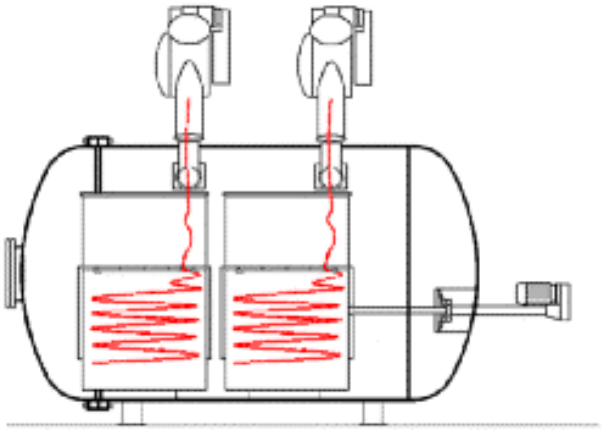
VENUS JET DYEING MACHINE WITH 'TWIN SOFT FLOW' OF SCLAVOS, GREECE-ENGLAND



Salient Features of Venus Jet Dyeing Machine With 'Twin Soft Flow' Of Sclavos, Greece-England

- 'Twin soft flow' machine; two high flow low pressure jet nozzles
- Non-stop 'thinking' rinsing – 'aquachron' systems for water & time management:
- 'Smart' control system with memory of all parameters for repeats
- 'XI', the ultimate & automated with performance guarantee to optimize & control the use of water with savings in water, steam & time
- Improved quality of dyeing
- Improved productivity
- Built-in heat recovery system claimed as the first of its kind – energy savings and economy

INNODYE OF BRAZZOLI, ITALY



Salient Features of Innodye Of Brazzoli, Italy :-

- Rope dyeing machine with innovative transitional bath motor using a mobile basket with an alternated transversal motion
- Device positioned inside machine with automatic self-adjustable system to control its speed synchronized with fabric driving wheel
- Device effects rapid and homogeneous mixing of dyes and chemicals and their rapid diffusion into the fabric: results in reduction in dyeing time, reduction in foaming and a perfect dyeing
- Innovative dosing system 'double injection' facilitates faster dosing preventing even hydrolysis of reactive dyes: better ecology and economy
- Can dye very delicate and sensitive fabrics: multi-sectional area developed longitudinally allows reduction in bath ratio and a more homogeneous contact of fabric surface to bath
- Integrated software system for programming and control of operations

'DREAM' INKJET PRINTING MACHINE OF REGGIANI, ITALY

Salient Features of 'Dream' Inkjet Printing Machine of Reggiani, Italy

- Claimed As 'The First Industrial inkjet printing machine for textile fabrics'
- Developed through combined efforts of reggiani with aprion digital and ciba speciality chemicals
- Can Meet The Growing Need In The Fashion Industry For Medium Runs And For Faster Production
- Features Two Unique Innovations:
- It combines reggiani's well known substrate conveying system holding fabric accurately in position with aprion's 'magic' six color inkjet heads
- Uses ciba's completely novel printing inks for 'this high speed system'
- Can reach a speed up to 150 sq.mtr per hr
- Designed for fabric widths up to 1555 mm