

endeavour

Waterless Smart Dyeing

The Endeavour waterless smart dyeing process is a breakthrough new manufacturing technology platform for on-demand digital dyeing of textiles. The technology delivers dramatic manufacturing cost reductions and profitability benefits. It also enables a step-change in the sustainability of textile dyeing: eliminating waste water emissions and reducing carbon footprint by over 80%. The digital on-demand process reduces minimum run lengths and enables rapid changeovers between colours and fabrics.

Benefits:

1. Elimination of waste water

2. More profitability production

- Less waste water (->95%)
- Less energy (-80%)
- Lowered materials usage (-30%)
- Lowered labour costs (-50%)

3. Digital productivity

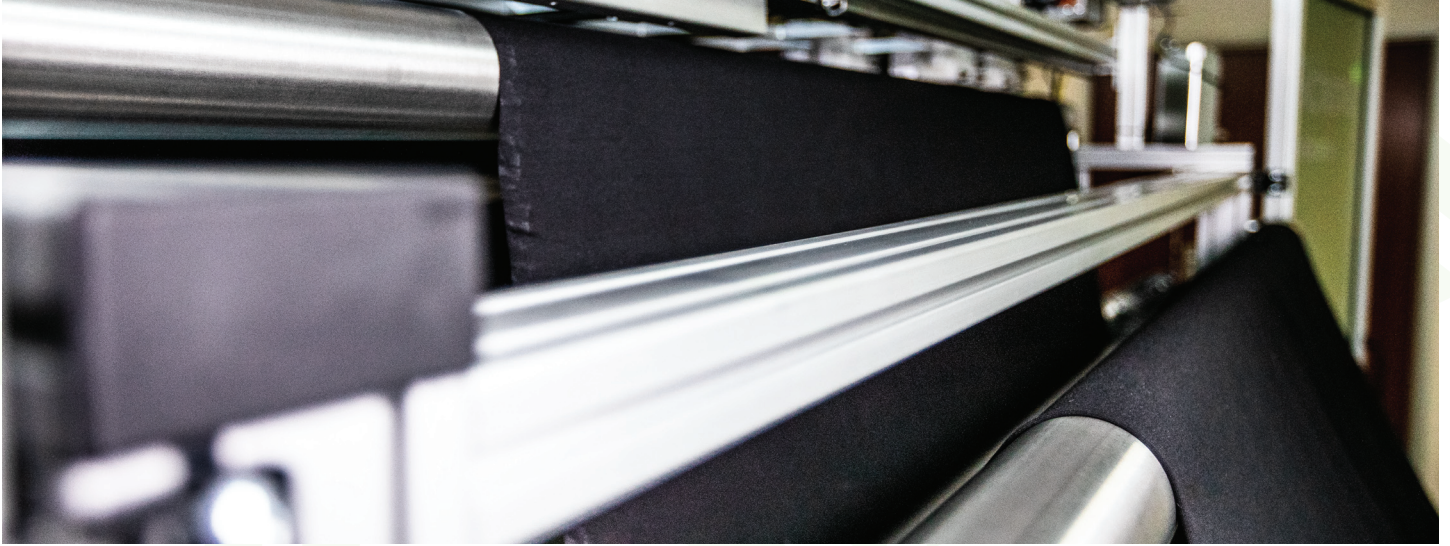
- Rapid changeovers
- Short runs at low cost
- Reduced waste



The process can be operated at throughputs of >2000 square meters per hour and is suitable for high throughput industrial production environments.

Quality:

Exceptional quality levels can be achieved, delivering excellent colour consistency (<1% variation) and the potential for value-added chemistries to be applied. The technology is capable of precision colour matching and shade control and can be used with a wide range of fabrics. The Endeavour includes a fully automated colour lab sampling system to perfectly match a customised colour in a very short time making the Endeavour system a truly “end to end” high performance sustainable dyeing solution with ultimate performance.



Technical specification:

Throughput	>2000 square meters per hour
Maximum web width	1.8 m
Substrate basis weight	100 – 800 gsm
Substrate	Polyester
Water consumption	<0.1 tonnes/tonne
Energy consumption	<10 kW
Changeover time	<5 minutes

endeavour