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 85%. 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 (-85%)
   - 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:

<table>
<thead>
<tr>
<th>Throughput</th>
<th>&gt;2000 square meters per hour</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum web width</td>
<td>1.8 m</td>
</tr>
<tr>
<td>Substrate basis weight</td>
<td>100 – 800 gsm</td>
</tr>
<tr>
<td>Substrate</td>
<td>Polyester</td>
</tr>
<tr>
<td>Changeover time</td>
<td>&lt;15 minutes</td>
</tr>
</tbody>
</table>