

EFI Reggiani Bolt

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Abstract

The EFI Reggiani BOLT is a breakthrough single-pass digital textile printing solution that is revolutionizing the world of printed fabrics. It is the only digital printer that can print as fast as 90 meters/minute (295 feet per minute) on fabric, significantly raising the economic crossover point between analog and digital printing technologies. BOLT has a print width of up to 1.95 meters. It can also include two analog rotary stations to add embellishments such as metallic inks. As with all digital printing technology, BOLT has minimal setup waste, uses no toxic chemicals, and seamlessly switches between jobs even when runs are as short as one meter or less. To facilitate an all-digital workflow, an accompanying EFI Reggiani BOLT Capsule printer enables perfect proofing of BOLT print results for fast and affordable sampling.

Although the BOLT has a large footprint (10 meters x 6 meters x 4 meters), it is still 30% smaller than the most compact printer in its class currently available on the market. It initially runs with water-based, eco-friendly pigment and reactive inks, with further ink types coming soon. The EFI Reggiani BOLT houses up to eight colors. Thanks to its cutting-edge printhead concept and high-performance ink delivery system, BOLT is minimizing time and ink spent for printer maintenance. It features high-end imaging in drop sizes from 5 to 30 picoliters, and also provides premium-quality 600 x 4,800 maximum-dpi resolution printing, allowing customers to address their full range of design needs.

The BOLT printer offers an innovative, low-maintenance, fast-startup recirculation printhead that delivers more-uniform, high-quality printing. Users can reduce the cost per meter of digitally printed textiles with the Reggiani BOLT while creating a broader range of designs quickly and efficiently. It can be configured with two to six drying sections, and heating sources can be gas, oil or steam. Combined, all of these elements make BOLT an extremely sustainable digital fabric printing solution compared to other high-volume analog printing technologies in the market, using less water and energy and producing less waste.

EFI; InterTech Award Recipient

Developing the BOLT involved a total company approach to incorporate the latest technologies and innovations in the EFI portfolio, including the printer's advanced Fiery digital front end. The Reggiani team visited 20 customers around the world to get feedback on their wish lists for single-pass printing. Customers were looking to eliminate barriers to digital, including cost of and life of printheads, overall printer reliability, cost of ink, and downtime issues. They wanted to get at least as good quality and color gamut as rotary printing. And in bringing BOLT to market, these objectives – and more – have been achieved.

To date, three BOLT printers have been installed, one in Italy and two in Pakistan, with one more installation in progress in Pakistan. In the first year BOLT presses were in operation, they produced more than 10 million linear meters of printed fabric.

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