



Defect Detection for Narrow Web application

Quality assurance for Narrow Web application:

Narrow Web or Label printing in India is a challenging, competitive and a dynamic industry.

This industry is constantly growing at the rate of 15-17% p.a. The industry expansion is happening at

3 levels, firstly the existing players are developing and advancing their infrastructure, secondly there are some existing offset printers who are turning into label printers and thirdly new entrants in the industry.

As the industry is growing, the competition in the market is also increasing simultaneously. To

generate maximum profits and/or retain customers, every converter or printer strives to achieve a perfect balance between optimum utilisation of the resources and improving quality of the products and label industry is no exception. With the help of latest technology label printers are trying to achieve this equilibrium. Hence using top quality assurance systems are equally important along with the top quality printing presses.

Quality Assurance systems and its importance in Label Industry:

Like many other large industries, the label industry too is energy and chemical intensive. But it also consumes huge amounts of water, paper, ink, adhesive and lots of other raw materials. Printers expect outstanding results in terms of quality, process and product safety. Short production cycles call for minimized set-up times hence the most suitable way to make the process perfect is to complete the jobs without wasting resources and time.

A lot of the wastage can certainly be avoided or reduced greatly during the processing or printing of the material in its various production stages. This will not only help printers to save on materials but also ensure to maintain the quality of the product. Efficiency requirements for the printing production continue to expand. Profitability can only be achieved by effectively reducing changeover times and minimizing waste. Here, Quality assurance systems play a great role for label printers.

What really matters: The aim is a flawless printing result. Only by avoiding defective products customers can be fully satisfied and economic production cycles are assured.

- **Web Guiding systems** ensure that the web does not deviate from its path while printing, lamination or being slit. This is a basic requirement in the label printing and if the substrate is not stable during the process then outcome could result in the entire roll being rejected.
- **Video web Inspection systems** ensure simple, fast and efficient monitoring of the print even at the highest web speeds. This helps operators to take corrective actions immediately during the process and any further loss/waste can be avoided then and there itself.
- **100% Print defect detection systems** Defects such as splashes, streaks or missing print can

have unpleasant consequences. A wrongly printed instruction leaflet included with a medicinal product and the possibility of a claim for damages is just one example. Complete print defect detection ensures perfect results.

- **Register Control System** Set-up times and waste are reduced considerably, resulting in an increase in the productivity of the printing press. Latest technology and real-time evaluations enable the register control systems to implement fast and reliable solutions to counter mis-registers.
- **Color Measurement System** One of the greatest challenges in printing is achieving the most



accurate color reproduction possible or accomplishing the desired color quality without wasting Ink.

For perfect print results, BST eltromat India, provides a complete portfolio for quality assurance systems and maximum productivity in narrow web applications. Our 100% print inspection systems SHARK LEX & TubeScan ensure complete monitoring of the process by reducing wastage and maintaining quality of the product.

About SHARK LEX: 100% Defect Detection. 0% Rejection. This is the strength of the SHARK LEX systems, which have been developed especially for a variety of uses in the narrow web and label printing industries. The SHARK LEX systems are characterised by their simple operation and reliably high productivity.

SHARK 4000 LEX and SHARK 1000 LEX, the 100% print defect detection systems for use on re-winders and narrow-web printing machines, stand out due to the well-engineered technology, extensive range of functions and comprehensive defect management software. You can choose from SHARK 1000LEX or SHARK 4000LEX and get the best for your requirements.

SHARK LEX is Simple, Exact & Quick! It comes with some exciting features like:

- Min. defect size: up to 0.024mm² @ max web speed: 200 meters / minute
- Web width: up to 600 mm (23")
- Camera Resolution: Colour: 4,000 pixels & Grayscale: 2000 or 6,000 pixels
- Substrates: Suitable for transparent, opaque and reflective materials.

- Other features: Flagger connection, PDF master check, Job Report, Quick job start, Label Counting, Missing Label Detection
- Optional features for Shark 4000LEX: Colour Monitoring, Bar-code Verification

Typical defects detected by SHARK

LEX: Missing print, reverse type fill-in, splash, spots, mis-register, hickeys and dirty print, web crease, wrinkles, colour variations, haze, scumming, smudges, streaks, hairs, die-cut variations, incorrect matrix removals.

BST eltromat India also has one more defect detection system in their portfolio, TubeScan Digital, 100% Defect Detection System for Narrow Web Application. LOW on Cost, High on Results!

TubeScan Digital, provides considerably higher process reliability with the base function. This system detects defects even during the printing stage and is highly recommended for all kind of narrow web applications such as, press, slitter and/or re-winder.

Salient features:

- 100% Web inspection, 100% of the time
- Min. defect size: Approx. 0.2 mm & Camera resolution up to 0.111 mm
- Detection of fine print defects, register defects & color variations
- Accurate counting of repeats, labels & missing labels for upto 20 lanes
- Job saving function for repeat orders
- Optional features: UV Illumi-

nation for monitoring security features & Job report

- Benefits of the TubeScan Digital on your Narrow Web Application:
- Cost-efficient, compact and space saving system
- Real time display of the full repeat on HD monitor
- Have multiple configurations to choose according to your requirements
- Suitable for transparent, reflective and opaque materials
- Very reliable and stable operation, even at high web speed
- Can be synchronized with a re-winder through a placement control module
- Recommended for all narrow web applications irrespective of cost, speed & resolution

Quality Assurance systems play critical role in generating more profits for printers by avoiding wastage, increasing productivity, saving in the material, time and resources, controlling the overall process and maintaining the desired quality of the output. For more details about our products, please send us mail on info@bsteltromat-india.com or call us +91-22-66860900 or please visit: www.bsteltromat-india.com.

To explore more, you may also visit us at upcoming LabelExpo India 2016, India Expo Centre - Greater Noida (Delhi NCR) from 17 – 20 Nov 2016 at Hall no. 5, Stand M-20.