

iBar<sup>™</sup>

Vision Empowered Process Monitoring

## iBar - Process Monitoring System

iBar is an automatic vision based monitoring & inspection system that was developed by EVS for on loom inspection as well as for other web formation, coating & finishing processes.

iBar utilizes novel high resolution micro-cameras that were developed by EVS to operate under harsh environmental conditions. iBar takes advantage of the powerful proprietary image processing platform of **IQ-Tex4**.

iBar's micro-cameras are installed in a sealed, slim Aluminum housing. A high power LED light bar or extra thin LED matrix serves as reflective, or transmitted light sources.

### Main advantages

- Inspects directly behind the reed
- Can be fitted to any type of loom
- Suitable for process monitoring, detecting defects at origin
- Reduces defect rate by immediate alarm / stop signals
- Easy to install and operate
- Displays defect image & position in front of the operator in real time
- Self-learning & sensitivity adjustment



## **Intelligent imaging**

iBar's creative technology produces clear results regardless of vibration, machine stops, take-up mechanics, operator's presence, or any other obstacle of traditional inspection systems. All defects are detected, categorized, saved and displayed on the operator interface computer in real time.

## **Features:**

- Width up to 15,500 mm
- Inspection speed up to 20 m/min.
- Imaging resolution up to 0.1 mm/pixel
- Image High quality matrix
- Light source LED (visible, IR or UV)

# Weaving applications

- Tire cord
- Reinforcement fabrics (carbon, glass, aramid)
- Digital printing
- Automotive upholstery
- Filtration
- Technical fabrics
- Silk
- Filamentation detection

# Additional applications

- Needle punch nonwoven
- Warp knitted fabrics
- Multi-axial fabrics
- Tufting
- Pre-pregs
- Laminates
- Coating, Laquering
- Assisted manual inspection
- Copper Clad Laminates (CCL)





# **Benefits**

- Limits the length of running and repetitive defects
- Immediately alerts operator to problem
- Creates quality/defect map for each roll
- Grades rolls according to customer criteria
- Provides accurate, statistical data

# **Return On Investment**

- Maximizes raw material utilization
- Optimizes labor force
- Increases machine efficiency
- Eliminates costly add-ons to off-quality material
- Presents an accurate quality inventory

The best way to handle off-quality is simply not to make it!

## EVS - Elbit Vision systems Ltd

EVS has been pioneering the science of camera-based automatic vision inspection for textile fabrics and technical webs for over two decades. Utilizing cutting-edge computerized surface inspection and process monitoring technology, EVS provides customers with a significant increase in productivity and efficiency, by optimizing product yield and minimizing operational costs.

With hundreds of installations across five continents, EVS maintains a 24/7 customer support team that encircles the globe. Capitalizing on over 20 years of experience with hundreds of global partners, EVS has become the standard of excellence in automated textile inspection elevating this technology from "nice-to-have" to **an essential component** for modern manufacturing.

# FABRICS INSPECTED DAILY BY EVS SYSTEMS ENCIRCLE THE GLOBE!



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