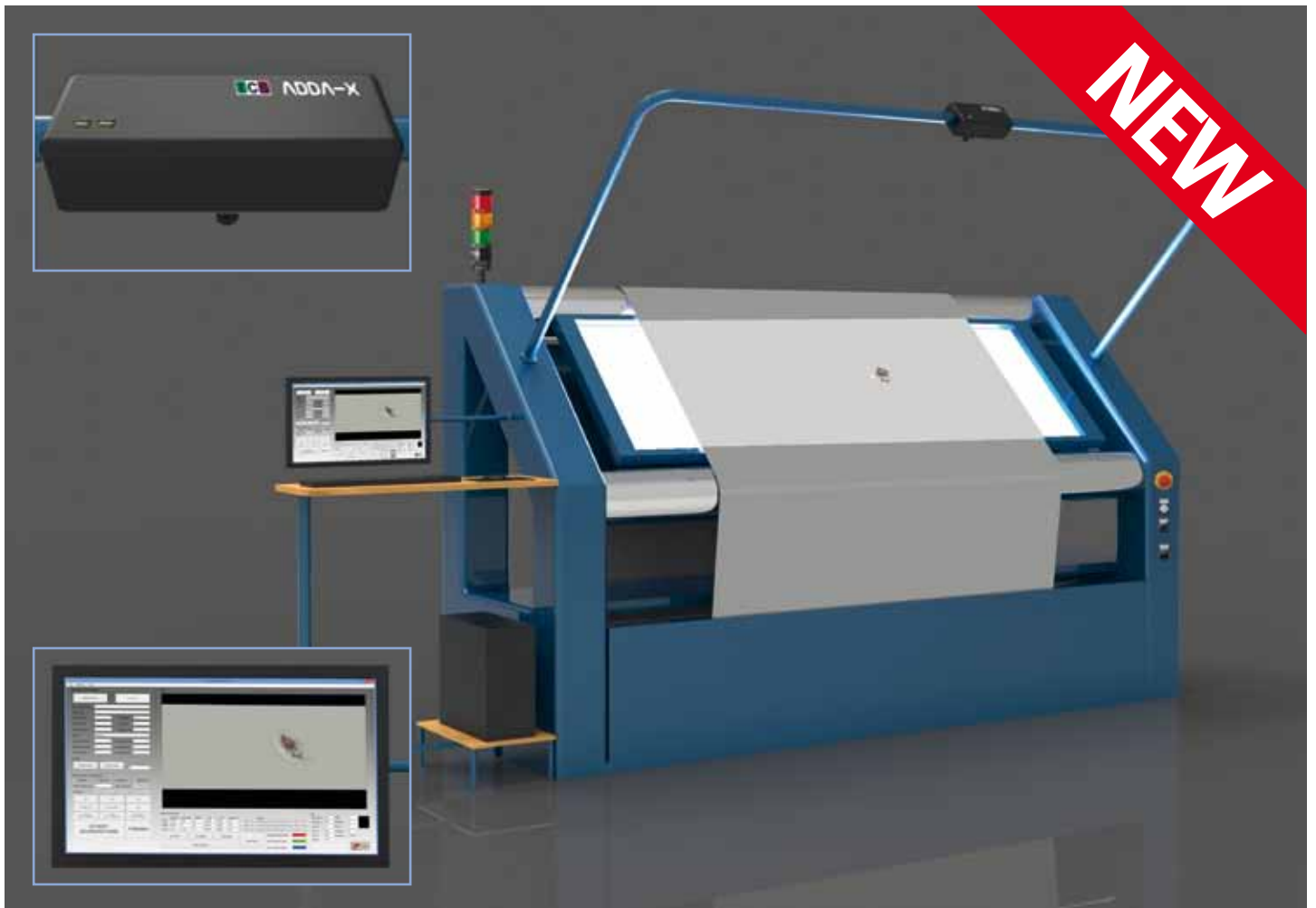# ΛDDΛ-X

ICS ITALIAN COLOR SOLUTIONS

Optical digital system for on-line defect detection for tubular raw fabrics and open width webs
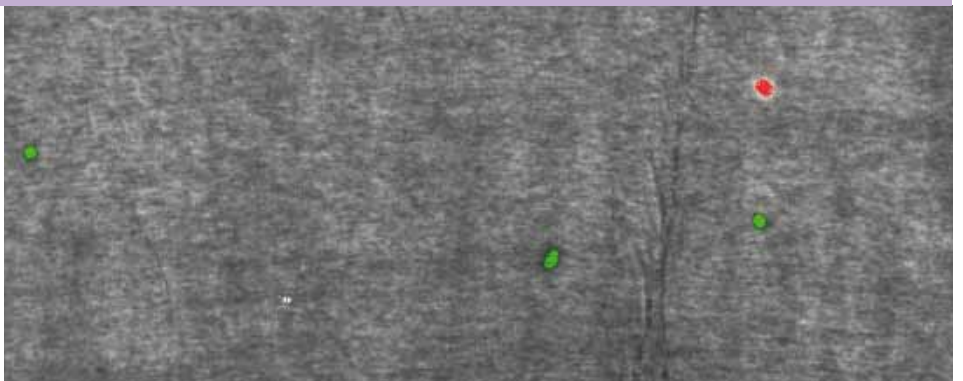
用于在线缺陷检测的光学数字系统
适用于管状原料织物和开幅织物

NEW

Fast and accurate inspection for "first-quality" products
"第一质量"产品的快速准确检验

Raw fabric
原织物

Digital map of revealed hole (red) and stain (green)
显示孔（红色）和污点（绿色）的数字地图

REAL-TIME INSPECTION

ADDA-X is the new advanced optical system aimed at on-line recognition of physical defects of textile fabrics. It is based on latest CMOS Technology and yields an accurate detection, classification and grading of a wide variety of spatial defects such as holes, stains, and warp/weft faults. Thanks to innovative image processing algorithms based on statistical approach, ADDA-X represents a break-through innovation in inspection technology for tubular as well as open width raw fabrics.

OPTIMIZED PRODUCTIVITY

The technological concept of ADDA-X eliminates slow and costly manual inspection of fabrics. Digital maps of revealed defects are provided and a quality control QC report resumes classification and grading of fabrics. Claims and disputes are reduced thanks to the quantitative analysis (detection, classification and grading) of fabrics, and profitability is maximized.

VERSATILE USAGE

Due its simple design, ADDA-X can be tailored to meet any requirements regarding web width, web speed and defect size (resolution). It can be used in a variety of positions in the majority of manufacturing equipment for rolling, cutting and packing. A white light source panel is employed for illuminating the fabric while it is moving within the field of view of camera. ADDA-X may remotely sense tubular fabrics and open width web with maximum height of 160 cm at a max line-speed of 140 m/minute.

REMOTE ASSISTANCE

ADDA-X is entirely controlled by our SW procedure that is hosted on a Personal Computer running under the MS-Windows OS. Remote access via Internet for system maintenance and software upgrades is provided by well-skilled technicians of ICS team.

实时检查

ADDA-X是一种全新的先进光学系统 用于纺织品物理缺陷的在线识别 。它基于最新的CMOS技术，准确的检测和分类各种空间缺陷，如孔、污点和经纱/纬纱故障。感谢创新的图像处理算法和统计方法，在检测管状和开幅的原料织物方面，adda-x实现了一个突破性的创新.

优化生产力

ADDA-X的技术概念消除了手工检查织物的速度慢且成本高的通病。数字提供显示缺陷的地图和质量控制报告分类和分级织物。通过定量分析（检测、分类和面料的等级），达到利润最大化。

多用途

由于其简单的设计，adda-x可以满足任何门幅，速度和检测尺寸（分辨率）。它可以用于大多数制造业中的各种位置，轧制、切割和包装设备。白色光源面板用于照明织物在照相机视野内移动。ADDA-X可以远程感应管状织物以及最大宽度为160 cm的开幅织物，最大线速达140米/分钟。

远程协助

ADDA-X完全由我们的软件程序控制并 运行在Windows操作系统。可以通过互联网远程访问对于系统维护和软件升级，ICS团队技术人员提供技术支持。

型号	ADDA-X
探测器/传感器/	CMOS 2/3", 2448 x 2048, binning, auto-exposure, global-shutter mode
目标焦距	8mm
帧速率	75fps
空间分辨率	0.5mm (50dpi) @distance of 1200mm
最大线速度	140 m/minute
最大织物高度	1600mm
数字化精度	10 bit, monochrome
增益范围	0 to 47dB
整合时间范围	40 µs to 30s
通信接口	USB 3.1 Gen.1
PC 电源（摄像头	5VDC through UBS3 interface, max 3W
PC 处理器（最小	MS Windows 10 OS, 64-bit, n.2 USB 3.0 port, n.2 USB 2.0 port, DVD driver, keyboard PS/2, Mouse, Ethernet board
显视器（最小	Intel i7 Processor @3.4GHz, 8 GB RAM
硬盘（最小	22" – 1920 x 1080 (Full HD) or greater
	1000 GB SSD (solid state disk)

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