Product Data Sheet
产品数据表

ST700

STATIONARY INSPECTION LED UV LAMP
吊顶式LED黑光灯

The ST700 is an inspection-grade overhead LED UV flood lamp with high-intensity UV-A illumination for non-destructive testing examinations such as fluorescent penetrant and magnetic particle testing.

ST700是美国磁通新一代吊顶式LED黑光灯，提供高强度、大范围的紫外光，专为无损检测行业的荧光渗透探伤和荧光磁粉探伤而设计。

The ST700 projects an ultra-wide, even beam of UV-A light straight onto the inspection area, allowing for quick examination of parts with minimal part handling. The high intensity beam makes indications stand out bright and clear, speeding up the inspection process. Proprietary optics and integrated filter minimize visible light emission and prevent decline of UV intensity over time.

ST700能够以宽阔且强度均匀分布的紫外光覆盖检测区域，以尽可能最少的工件移动次数来缩短检测时间。高强度的紫外光使缺陷显示明亮清晰，加快检测进程。独有的透镜及一体化滤镜将可见光亮度降至最低，并且在长时间照射后不会降低紫外光强度。

Designed to stand up to harsh inspection environments, the ST700’s durable aluminum construction prevents accidental damage to the light. A range of mounting and angling options allow it to be set up anywhere in the inspection process – from mag benches and inspection booths to wash stations.

ST700为在严苛环境下使用而设计，采用高强度铝制结构避免灯具发生意外损坏。高度灵活的安装位置和角度，保证黑光灯可以安装在检测过程中的任何位置—从卧式磁探机到清洗站。

The ST700 is certified to NDT standards for LED UV lamps and certified for Aerospace Prime and OEM specifications for emission spectrum and beam profile. Each unit is shipped with a manufacturer’s certificate of conformance which meets or exceeds all current specifications for use with fluorescent liquid penetrant and magnetic particle testing.

ST700已经通过无损检测LED黑光灯标准，航空航天及OEM光谱与光束强度分布认证。每一台设备发货时都附带其符合或超过所有现有的荧光渗透和荧光磁粉探伤标准的制造商合格证。

MAGNAFLUX

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产品数据表

Benefits 优势

Speed up the inspection process
加快检测进程

- Inspect more of the part at once thanks to the ultra-wide, 50x66 cm beam when mounted at a working distance of 91 cm.
  凭借更大的辐照范围，单次可检测更多工件。在91厘米工作距离处，辐照范围可达50 x 66厘米。
- Eliminate additional steps and equipment involved with using a secondary hand-held inspection lamp.
  不再需要另外一台手持式黑光灯进行额外的补充检查。

Minimize risk of missing indications
减小漏检的风险

- Make indications stand out bright and clear thanks to the high-intensity LEDs – 7,000 µW/cm² at 38 cm.
  38厘米处的辐照强度可达7,000微瓦/平方厘米，使缺陷指示明亮清晰。
- Mount the light out of the way, up to 117 cm above the inspection surface while still maintaining inspection level intensity.
  悬挂的安装方式不会妨碍操作，最高可悬挂至被检表面上方117厘米处，且仍能保证检测所需的辐照强度。

Maximize range of inspections
最大化应用范围

- ASTM and RRES certified lamp for use in virtually any fluorescent NDT inspection.
  符合ASTM和RRES标准，适用于几乎所有荧光无损检测。
- Custom UV-A filters eliminate glare to increase contrast.
  定制的紫外光滤光片能将白光降至最低，达到理想的对比度。
- Multiple mounting and angling options to adapt to your inspection environment.
  多种可选的安装方式和角度，满足您的检测环境需求。

Real-world reliability
前所未有的可靠性

- Fully sealed construction prevents dust and water damage.
  全密封结构，隔绝灰尘和水汽。
- Maintain UV intensity and coverage over time with non-clouding, proprietary lenses
  独有的防雾化透镜，保证辐照强度和范围。
- Rugged, impact resistant metal construction designed for NDT environments.
  坚固的抗冲击金属结构，专为无损检测而设计。

Work in comfort
舒适的工作环境

- Keeps inspection booths cool thanks to the fan-less, LED technology.
  LED技术，无需风扇散热，保持暗房内温度适宜。
- Eliminates hazardous mercury vapor for safer working conditions and better EHS compliance.
  摒除有害的汞蒸气灯，创造更加安全的工作环境以及更好的EHS标准。
- Easily maintain and changeover equipment with built-in white light.
  内嵌的白光照明，让维修和调整设备更简单。

Features 特性

- 7,000 µW/cm² high intensity UV-A illumination
  7,000微瓦/平方厘米高强度紫外光
- 50 x 66 cm wide, uniform beam at working height
  50 x 66厘米辐照范围 (91厘米距离处)
- Sealed construction prevents damage from water, vapor or dust
  密封的结构有效防止水汽与灰尘带来的损坏
- 4 independent LED modules
  4个独立的LED模块
- Angled mounting brackets
  角度可调的安装支架
- No hot-spots in the beam profile
  辐照光束均匀，无耀斑，无盲区
- Rugged, durable design
  坚固耐用性设计
- No internal fan
  无内置风扇
- Low energy consumption
  低能耗
- Aerospace prime and OEM certified
  航空航天及OEM认证
- Improved operator and environmental safety
  提高操作者及工作环境的安全性
- Certified to ASTM, AITM, RRES and Nadcap
  ASTM, AITM, RRES及Nadcap认证

Part Number 件号

631327	ST700吊顶式LED黑光灯

Specifications Compliance 符合规范

- Airbus AITM6-1001
- ASTM E2297
- ASTM E3022
- ISO 3059
- Rolls Royce RRES 90061

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Properties 参数

UV-A Coverage 紫外光辐照范围

	Beam Dimensions 光斑参数	Max UV-A Intensity 最大紫外光辐照强度
UV-A Beam Profile at 38 cm 紫外光参数-距离38厘米	30 x 61 cm oval 30 x 61 厘米的圆角矩形	7,000 µW/cm²
Working Distance UV-A Beam Profile at 91 cm 工作距离紫外光参数-距离91厘米	50 x 66 cm oval 50 x 66厘米的椭圆形	3,000 µW/cm²
Max Inspection Area UV-A Beam Profile at 117 cm 最大检测范围紫外光参数-距离117厘米	56 x 64 cm oval 56 x 64 厘米的椭圆形	> 1,000 µW/cm²

Product Properties 产品参数

Peak UV-A Wavelength 紫外光峰值波长	365 ± 5 nm
Inspection Working Distance 检测工作距离 ASTM E3022 RRES 90061	 ≤ 25 cm 58-137 cm
Stabilization Time 稳定时间	10 min
Visible Light in UV Mode 黑光模式下可见光强度	≤ 2 fc / 20 lux
Visible Light in Visible Light Mode 白光模式下可见光强度	60 fc / 600 lux（距离91 cm处）
Control Cord Length 控制器线缆长度	3 m
Power Supply Cord Length 电源线长度	3.6 m
Dimension 尺寸	50*30*25 cm (L x W x H)
Weight 重量	11 kg
Power In 电源输入	100-240 VAC, 50/60 Hz, 2A max

Use Recommendations 使用推荐

NDT Method 无损检测方法	Fluorescent Penetrant Testing and Fluorescent Magnetic Particle Inspection 荧光渗透检测和荧光磁粉检测
Recommended Accessories 推荐附件	UV-A Meter 紫外光辐照计 （件号：625024） Visible Light Meter 可见光强度计 （件号：622338） UV-A Safety Glasses 紫外光防护眼镜 （件号：640066）