

Efficient printers and slides for greener labs.

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Background

In today's pathology labs, the pressure to improve efficiency, reduce errors, and meet sustainability goals is greater than ever. The operational impact of everyday consumables, like slides and labeling systems, is often overlooked. StatLab PiSmart S1 Slide Printer and KT® Premium Slides, manufactured by StatLab, both showcase advancements that support 'greener' lab operations, while also enhancing accuracy, reducing waste, and streamlining the workflow.

PiSmart S1 Slide Printers: Packaging with Purpose

The PiSmart S1 slide printer is a prime example of how thoughtful design and packaging supports more sustainable lab operations and reduces waste.

- **Recyclable content:** The internal foam used in packaging is made from over 65% recycled material
- **Fully recyclable:** Both the foam and the cardboard box are 100% recyclable, supporting closed-loop recycling systems.
- **Compact, efficient design:** Total package weight is less than 20 lbs. and box dimensions are all under 2 ft.

- **SmartSwitch Trade-in Program:** Labs can return used single hopper printers to StatLab and receive a reduced price on a new PiSmart S1 Printer. Returned units are responsibly processed through a certified recycling center, where components are diverted from landfills and recycled in accordance with environmental standards.
 - Valuable materials, such as metals and plastics, are recovered and repurposed for use in new products.
 - Hazardous materials are safely extracted and disposed of, minimizing environmental impact.
 - Conducted in compliance with local regulations.

KT Slides: Sustainability from the Source

KT Premium Slides, manufactured by Knittel Glass, a StatLab company, demonstrate how upstream production choices can support downstream sustainability:

- **Renewable energy use:** The Knittel plant is partially powered by solar panels, helping reduce reliance on traditional energy sources and lowering the carbon footprint by up to 300 metric tons/year. (see Figure 1). The Braunschweig site has a maximum power consumption of approximately 700 kW, while the solar panels can generate up to 300 kW – covering around 40% of their peak demand.

Figure 1.
Knittel Solar Panels



KT Slides: Sustainability from the Source Continued

- **Safer, greener materials:** Non-toxic paint is used for the slide's painted ends. This enhances safety for the manufacturing team and customers, particularly in labs using laser printers, which could release harmful dust particles in the air from traditional slides containing concentrated amounts of titanium dioxide.
- **Glass waste recycling:** Stringent quality standards deliver high quality slides, resulting in a significant amount of glass waste generated during production. Rather than sending slides and cover glass that don't meet specs to a landfill, they are recycled – supporting a more circular approach to resource use.

Conclusion

By adopting both slide printers and slides that prioritize sustainability, labs can reduce waste, minimize rework, and improve overall workflow efficiency. These small changes in consumables can drive meaningful environment and operational impact – helping labs meet both today's demands and tomorrow's goals.