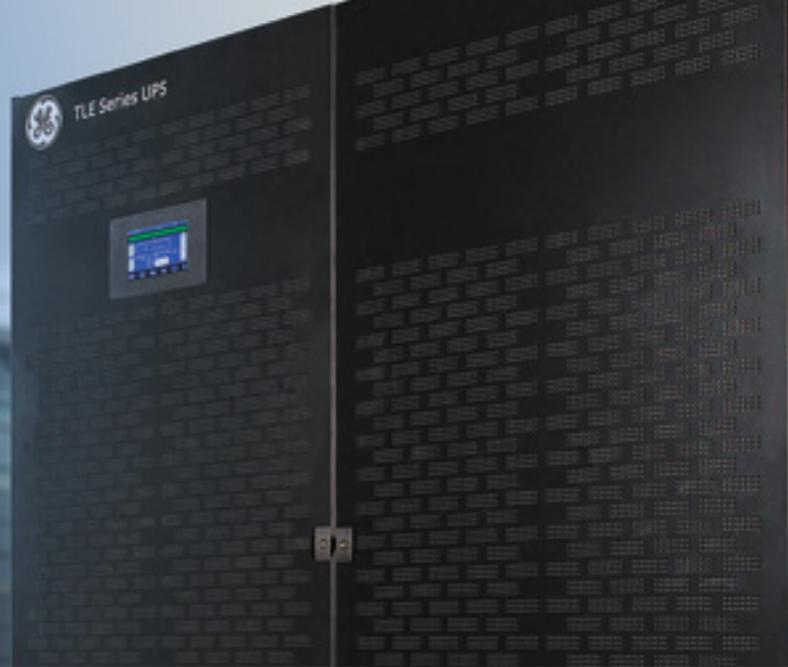




Powering Uninterrupted 3D Printing Operations with UPS Systems



When it comes to the high-tech 3D printing processes in today's digital industrial era, even a short power disruption can have a significant impact. Whether caused by inconsistent utility operation, weather-related incidents or the normal operation of non-linear load equipment, a power disruption can create a micro-fracture that ruins a 3D printed component even if the process has been completed. This loss extends well beyond the component, leading to an array of operational impacts.

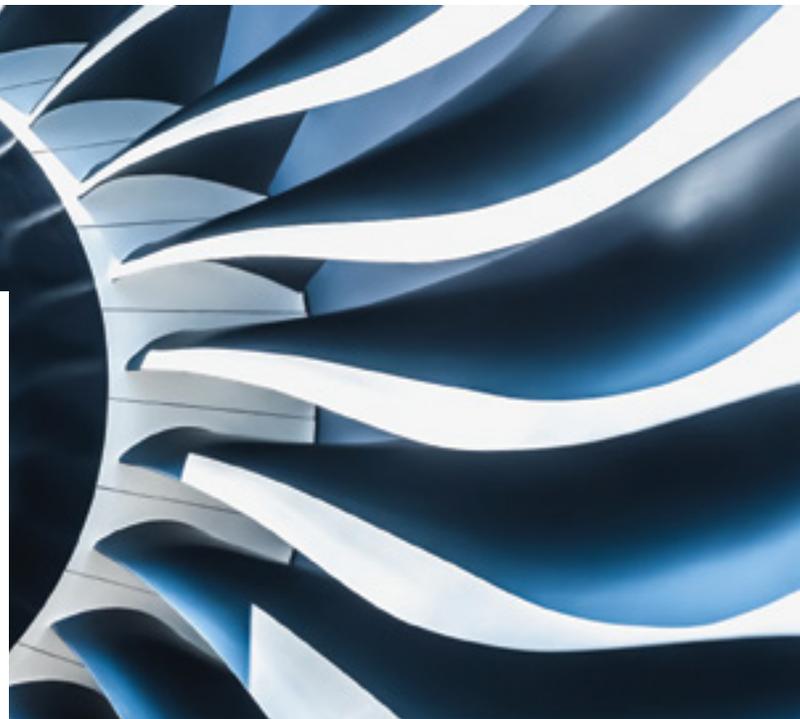
What Challenges Can Power Loss During 3D Printing Create?

- Loss of operations
- Loss of raw materials
- Increased lead time to customers
- Reduced human resource utilization
- Loss of revenue
- Increased operating costs

Case Study: The Impact of Power Issues on Aircraft Turbine Blade 3D Printing

THE PROCESS:

An aerospace application is using 3D printing for the design and prototyping of turbine blades. This process is using 20 3D printers over a three-day period to produce six turbine blades.



THE DISRUPTION:

A downtime event lasting approximately 3 hours interrupts the 3D printing process, resulting in more than \$130,000 of impact.



Facility Impact:

Fire due to excess heat from power surges and spikes, causing partial or total loss of the production facility



Operational Losses and Unscheduled Downtime:

\$200-\$400 per hour, per machine*



Human Resource Productivity Losses:

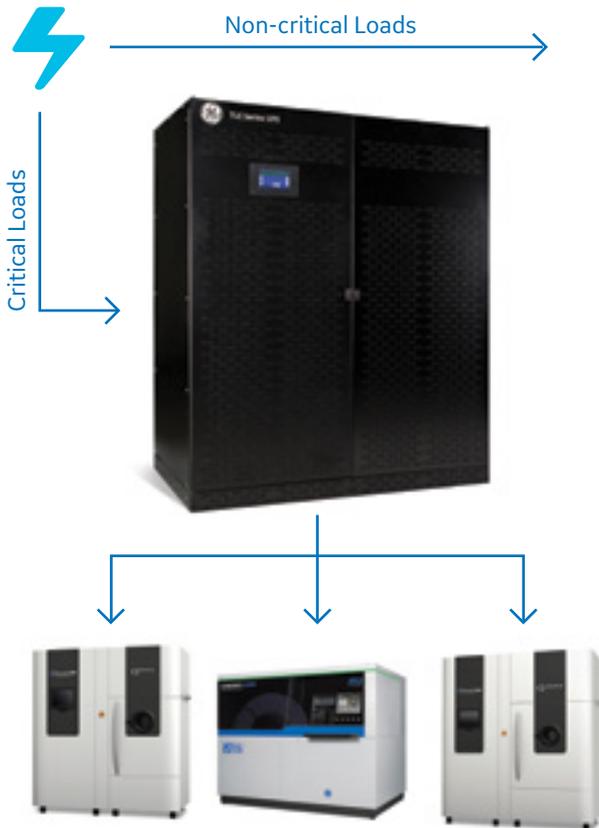
12-18 hours per person, or \$100-\$300 per resource*



Loss of Product:

\$125,000 per event, multiplied by each machine

* numbers calculated for this specific site.



THE SOLUTION:

High-reliability **UPS systems** optimize operational uptime, helping to run a 24x7 production facility uninterrupted by power anomalies.

- A GE-quality power back-up solution prevents out-of-tolerance voltage conditions on the factory floor
- Experienced GE Power professionals can configure and construct a turnkey solution from design to installation and commissioning
- Solutions for backing up one 3D-printing unit or a complete facility
- Realize ROI by reducing impacts and losses from downtime due to a power interruption without a back-up UPS

UPS power back-up systems can help keep your 3D printing processes running smoothly, without costly interruptions.

- **Improve the printing cycle**
- **Avoid production downtime**
- **Increase electricity quality**
- **Enhance system reliability**

Get Uptime Protection with GE UPS Systems

Contact GE Industrial Solutions today

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