



Orchestrating Smarter,
More Efficient
Data Management
Practices in Industrial
Manufacturing with
ATTO XstreamCORE®

Learn how organizations producing heavy machinery and specialized industrial equipment can boost long-term data security with improved availability while cutting down costs and eliminating unwanted complexity.

ATTO XstreamCORE® Ethernet Intelligent Bridges

The Challenge

Data is just as critical as machinery. In today's industrial and manufacturing facilities, from PLCs, robotics, QA inspection systems, and IoT sensors to ERP and MES platforms—each production line generates a torrent of information that must be stored, protected, and retained over time. As these factories modernize, leaning more into Industry 4.0 and IIoT (Industrial Internet of Things), the volume, variety, and velocity of machinegenerated data grows exponentially, presenting some concerns:

- Preserving data for long-term compliance (ISO 9001, NIST, FDA, etc).
- Ensuring operational continuity and rapid recovery in case of system outages or ransomware events.
- Enabling analytics and traceability for everything from defect forensics to supply chain optimization.

Yet, reliance on traditional backup methods that do not scale easily across multiple facilities or modern hybrid workflows, overly subscribed cloud services that are proving to be cost-prohibitive, and localized, all-time-on storage continue to be the norm. This creates siloed infrastructure and fragmented backups, underused hardware, and the increased costs associated with provisioning and maintaining IT sprawl.

KEY CHALLENGES

- Rising compliance demands necessitate longer data retention for traceability, safety, and audits while struggling to keep up with data growth.
- Daily backup jobs conflicted with development processes, production workloads, and core operations.
- Legacy systems are tethered to local servers, creating inflexible workflows and poor resource utilization.
- Infrastructure bloat from duplicated storage hardware across facilities drives up costs and complicating IT manageability.
- Need for a scalable, cyber-resilient backup strategy that avoids the need to rearchitect the entire enterprise IT stack.

The Solution

By introducing ATTO XstreamCORE 8100T, IT teams are able to transform a SAS-based tape library infrastructure into a network-enabled, shareable resource. This allows them to meet their growing appetite for storage while keeping compliance requirements in check. The solution requires no complex middleware or changes to backup software, offering a smarter approach to integrating robust data management practices.

XstreamCORE enables them to:

- Convert a locally-attached tape library into networked storage, allowing multiple remote servers and production systems to access the tape library as a shared resource over Ethernet.
- Eliminate server-to-tape lock-in, which avoided the need for server proximity, interdependence on various server-build components, and reduced scheduling delays—helping them meet backup windows and SLAs.
- Boost performance with hardwareaccelerated, low-latency bridging, which delivered near-direct-attached speeds over standard Ethernet networks.
- Simplify operations through smart allocation of resources, intuitive management, and robust monitoring of drive/media operations.
- Centralize backups without sacrificing sitelevel access, enabling secure, air-gapped storage and fast recovery options across manufacturing plants.





Benefits

- 40% Reduction in Hardware Footprint:
 Companies are able to consolidate high-density tape libraries across plant facilities, which eliminates the need for hardware redundancy while lowering power and maintenance costs fivefold.
- Improved Backup Efficiency and Resilience:
 Backups run faster and independently of local systems, which ensured uptime and continuity even during system maintenance or outages—meeting SLAs 3X faster!
- Better Visibility, Compliance, and Control of Data:
 With granular tape and media diagnostics built
 into the bridge, teams can proactively identify
 failures and meet retention requirements with
 confidence—even remotely.
- Stronger Cybersecurity Posture: This solution enables immutable backups and faster recovery of data on tape media while allowing for air-gapped, secure offline storage and verified access control of the tape infrastructure.

Future-Proof Your Manufactuing Data



In industrial manufacturing, uptime is revenue, and traceability is non-negotiable. Yet, backup and long-term data management strategies still rely on inflexible, siloed

storage workflows. ATTO XstreamCORE bridges that gap by effortlessly integrating storage devices such as tape libraries and disk arrays into the accelerated network age. It unlocks performance, flexibility, and cost-efficiency at scale, helping manufacturers avoid over-provisioning of resources, improve data resilience and ownership, and simplify IT management without re-architecting their existing ecosystem.

