All American Poly slashes inventory shrink using IFS Cloud and Cloud Services

Since replacing a legacy, highly customized system with IFS Cloud, in under three years polyethylene extruder All American Poly has slashed finished goods inventory shrink by 200%, and raw material inventory shrink by 100%. Total net business savings are estimated at more than $5m per annum. It has also replaced 14-day delivery windows with a confirmed date for any delivery.

Specializing in custom blown film extrusion, for 45 years All American Poly has produced best-in-class products such as shrink bundling film, stretch and shrink Hooder films, pallet covers, top sheeting, tubing and bags and liners. Serving the food, beverage, bedding, furniture, ag/chem, building supplies, paper, textiles, foam and glass industries, the company supplies major brands including in the US.

Extruding over 75,000 tons of polyethylene each year, All American Poly operates three plants continuously 24/7. With large gravimetric blending and mixing machinery processing tons of raw materials, the company must manage and optimize raw material inputs and outputs, waste streams, overall batch effectiveness and more.

Explains Joseph Adamski, IT Director for All American Poly, "When I joined the company in 2021, it was striving to run a Six-Sigma lean manufacturing operation. However, the legacy system that was in place was highly customized and calling on many disparate data sources. All American Poly is in business to make products, not create software. It was clear the company needed to find a best-in-breed commercial ERP system that could rapidly consolidate all the business dimensions and operations into a single turnkey platform," he says.

About All American Poly

Established in 1979 and headquartered in Piscataway, New Jersey, All American Poly is the largest privately held polyethylene extruder in the US.

With three manufacturing facilities in New Jersey, Georgia and Arkansas, the company's blown film extrusion products are used in multiple sectors including food and beverage, building supply, agriculture, industrial, bedding, furniture and textiles.

allamericanpoly.com

Pinpointing a future-ready commercial solution

Working alongside the new CFO, and with an IT refresh budget in place, Adamski engaged several business stakeholders in the selection team. Research using Gartner to pinpoint forward-thinking ERP solution vendors quickly highlighted IFS strengths in the Magic Quadrants for manufacturing, mid-size enterprises and Cloud ERP. "I'd previously mostly worked with SAP for 25 years in the consumer product distribution and supply chain space, so I was interested to see the best-practice industrial capabilities offered by IFS," he says.

The stakeholders had a clear strategic intent for the business transformation. "IT projects of this scale take place generationally, for long-term gain. They need to be considered and executed with foresight. We wanted to partner with an organization that would create a leading-edge position and embed best practice. Moving from in-house servers, coders and developers to a managed cloud service would let us delegate software and IT support to experts to focus fully on making and developing products for customers," says Adamski.

Selection and implementation journey

Following a comprehensive six-month selection process reviewing providers including IFS, SAP, Epicor, Oracle, Infor and Microsoft Dynamics 365, Adamski's committee unanimously voted for IFS based on scorecard performance and proof of concept. Out-of-the-box embedded functionality for best practice, plus the ability to configure aspects for the business without customization, were key attractions. "I was also reassured we would be amongst the first to be reaping the benefits of, and technology investment in, the next-generation product, IFS Cloud," says Adamski.

Implementation began just three months after signing contracts in 2022, going live in May 2023 in IFS Cloud with core business processes. The following year saw the implementation of new modules including Demand Planning, Advanced Planning Board, Visual Shop Order Operations Planning Relationship Management and Quality Management. "This year we're introducing Time and Attendance in Human Capital Management, and Maintenance with Mobile Work Order," he adds.

Moving from nine disparate legacy solutions to one fully integrated business system required change management to ensure smooth adoption. "We redeployed three of our most senior experts to become super-user leaders, overseeing implementation and adoption in key functional areas. Interestingly, teams across our three production plants all quickly took to using IFS tools like Shop Floor Workbench with excellent results. They instantly liked it," says Adamski.

Benefits seen with IFS Cloud

- Legacy, siloed multiple products replaced with single fully integrated, AI-enabled Enterprise Resource planning (ERP) solution for Manufacturing
- Future-proof evergreen solution configured with no invasive customization
- Real-time IoT production data from Crosser fed direct to ERP
- Traceability and tracking data enabling Safe Quality Food certification
- PFAS-free material and PCRP data to evidence sustainability compliance and track reprocessing
- Confirmed dates for all customer deliveries
- Inventory shrinkage slashed: finished goods 200% lower, raw materials 100% lower
- Fully managed Cloud server and database platform with IFS Cloud Services
- Screens and fields configurable without a developer toolkit or skills
- Evergreen, agile, fully configurable solution
- Ready to deliver AI-driven Demand Planning & Manufacturing Scheduling Optimization

IoT, Crosser integration, insights and new opportunities

A critical feature of an efficient production process is the ability to pull material usage consumption in near real time. Being able to accurately monitor and value machine time, labor time and materials is also important. One of the factors influencing the choice of IFS Cloud was instant integration via an API to Crosser, a solution bridging operational technology data and IT systems machine data. Explains Adamski, "Historically, we lacked the ability to ingest connected factory IoT into core business processes. A job order might run for three to four days, so we want to accurately understand raw material consumption through our blending components. That capability was absent before implementing Crosser alongside IFS.

"Inferring what you use based upon what you made is only so accurate. With Crosser capturing and interpreting data minute-by-minute to IFS, we can instantly see precise material consumption and waste stream costs," he says. "Through insights for machine labor and materials we can understand our margins and competitiveness for different products to make informed production decisions going forwards". In the first product demonstration, Crosser successfully posted data to IFS Cloud in the first demonstration. Adamski's developer estimated the company had just saved around 400 hours of work. "We were instantly sold," says Adamski.

Within just 20 hours of implementation consulting, Crosser was connected to live blending systems, publishing IoT observations into IFS – an achievement that had previously taken six-to-nine months' work with competitor products.

The successful introduction of IFS Cloud and Crosser has already opened new business opportunities. Explains Adamski, "We are now exploring new food contact products which require Safe Quality Food certification. Compliance requirements are stricter demanding process and data record intensive procedures. We couldn't provide the traceability, tracking and evidence required in the old system, but with IFS we were able to become SQF qualified in 2024."

Sustainability monitoring

All American Poly uses resins and polyethylene, a plastic derivative. Operating within customer supply chains, the company must satisfy any third-party sustainability requirements. Explains Adamski, "For example, a customer may want assurance that we are using PFAS-free materials, or that we manufacture using a certain amount of postconsumer recyclable product (PCRP). To remain a certified supplier, they may ask to see lot batch information on our inputs, and annual audit data. Now, with IFS, we have the capability to readily provide evidence of compliance at a granular level if needed." Any waste or damaged material from manufacture is recycled and re-used or re-sold. "We have two reclamation reprocessing lines. IFS helps us track and report our reprocessing production as a separate line of business," says Adamski. "Whenever we stand in front of a customer, we want to show that we're an agent of responsibility, and IFS helps us do that".

Opportunities with industrial AI

In what areas does Adamski see the embedded AI capabilities in IFS Cloud benefiting the business in the future? "The opportunity for AI driven Demand Planning is huge. Adding intelligence beyond algorithmic or statistical analysis to provide enhanced insight for activities like raw material planning or sales planning through automated learning is exciting," he says. "The other area is Manufacturing Schedule Optimization. There's a big need for 'what if?' analysis. For example, we may think a product should be manufactured in a certain plant, on a particular line. But is that the optimal choice? AI in IFS can look at the data objectively, tell me what I should do and rationalize why."

Efficiencies, savings and benefits so far

As a made-to-order product manufacturer, the ability to accurately quote customers with "Capable to Promise" (CTP) delivery timings is critical. Calculating CTP requires the ability to analyze inventory, production/resource capacity, raw material availability, and supply chain constraints to determine when an order can be made ready and shipped. "Prior to implementing IFS Cloud, we would give customers a 14-day window for delivery. Since IFS, we provide a single delivery date," says Adamski. "From confirmation delivery times in weeks, we give a customer a day that an order will arrive, and track our performance on that day," he says.

Since implementing IFS, All American Poly has seen finished goods inventory shrink reduce by 200%, and raw material inventory shrink reduce by 100%. Observes Adamski, "On the legacy system we were regularly seeing $1m write-downs for finished goods every month. Since moving to IFS, we recently saw a finished goods write down of just $8,000 on a year-end physical inventory for one of our production facilities. From year one to year three using IFS, we've also seen a 100% decrease in shrink for our bulk raw material, equating to a $5m saving. These efficiencies come from detailed inventory tracking, handling optimization and inventory management with IFS," he says.

Choosing IFS Cloud Services

One of the decisions All American Poly made at the outset was to contract IFS Cloud Services to manage and maintain the IFS Cloud solution off-premise. Explains Adamsky, "We're a manufacturer – producing goods is our business focus. We're far more efficient serverless, with 24/7/365 network access to a sector-leading commercial ERP solution. On the database side IFS takes care of all availability, disaster recovery, security redundancy and regulatory issues. On the software side we have a fully managed evergreen instance that is always on the latest version," he says.

Above-board access for development

In terms of UX and the ability to fine-tune operation, Adamski is impressed. "Take the HCM ERP module we're now implementing. It really is slick and cohesive. The low code, no code ability to modify screens without a developer toolkit or skills means that we can add a new form field in seconds ourselves. Adding or modifying a new local workflow doesn't impact primary processes. The source code remains protected up in the cloud."

Supporting the Moment of Service

Because most products are engineered to specific customer specifications, it can take All American Poly nine months to onboard a customer, including exacting trials and tests. Observes Adamski, "IFS provides the ability to analyze the long-term profitability of a book of business, streamline the qualification journey, quote a profitable yet attractive price point for a contract, and crucially deliver the ongoing compliance and production data evidence needed to maintain a long-term relationship likely to span a decade or more," he says.

Advice for others considering implementing IFS Cloud

What advice would Adamski offer others considering a move to IFS Cloud? "I would say working with a good IFS Partner is invaluable. Our implementation was managed by Arcwide (then Enterprise Consulting). In 30 years working in IT and ERP, three out of the best five functional consultants I've worked with came out of our implementation project partnership. The value of having solution architects and business focused consultants bringing best practice industry experience was huge. The team clearly wanted the project to succeed, and our relationship with Arcwide developing long term strategic wins using IFS Cloud continues today. The knowledge available within the wider IFS customer community is also invaluable. I'd highly recommend attending conferences like IFS Unleashed and joining user groups, "he says.

All American Poly's journey illustrates how rapidly IFS Cloud for Manufacturing, coupled with IFS and IFS Partner industry expertise, can deliver business value. "Looking ahead, I have weekly meetings with Arcwide and a quarterly steering committee with Arcwide and our IFS account manager. We are all committed to continuing our success to date."

Find out more

For further information, contact your local IFS office or visit ifs.com

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