THINGTRAX

MGS Technical Plastics Case Study

Who is MGS Technical Plastics?

Established in 1974, MGS Technical Plastics is a family-owned, technically-led plastic injection moulding company. The company's Blackburn headquarters houses 18 modern, fully automated injection moulding machines, ranging from 35 tonnes to 900 tonnes, and boasts an impressive assembly department and toolroom.

The MGS team's primary focus is on technical capability, quality, and service delivery; this approach has positioned the company as a preferred partner to some of the world's leading brands. MGS has been trading for over 45 years, growing to 54 employees.

MGS
TECHNICAL PLASTICS

The manufacturer credits its success to its continued investment. To become a "smart factory", MGS has taken steps to modernise its facility with investments that will save energy, time, and cost.

As a forward-thinking manufacturer, the company is always striving to improve its processes, the quality of the components it produces, and worker engagement.

To help achieve its goals, MGS decided to adopt an all-in-one "smart factory" solution that could streamline its injection moulding process and future-proof its operations.
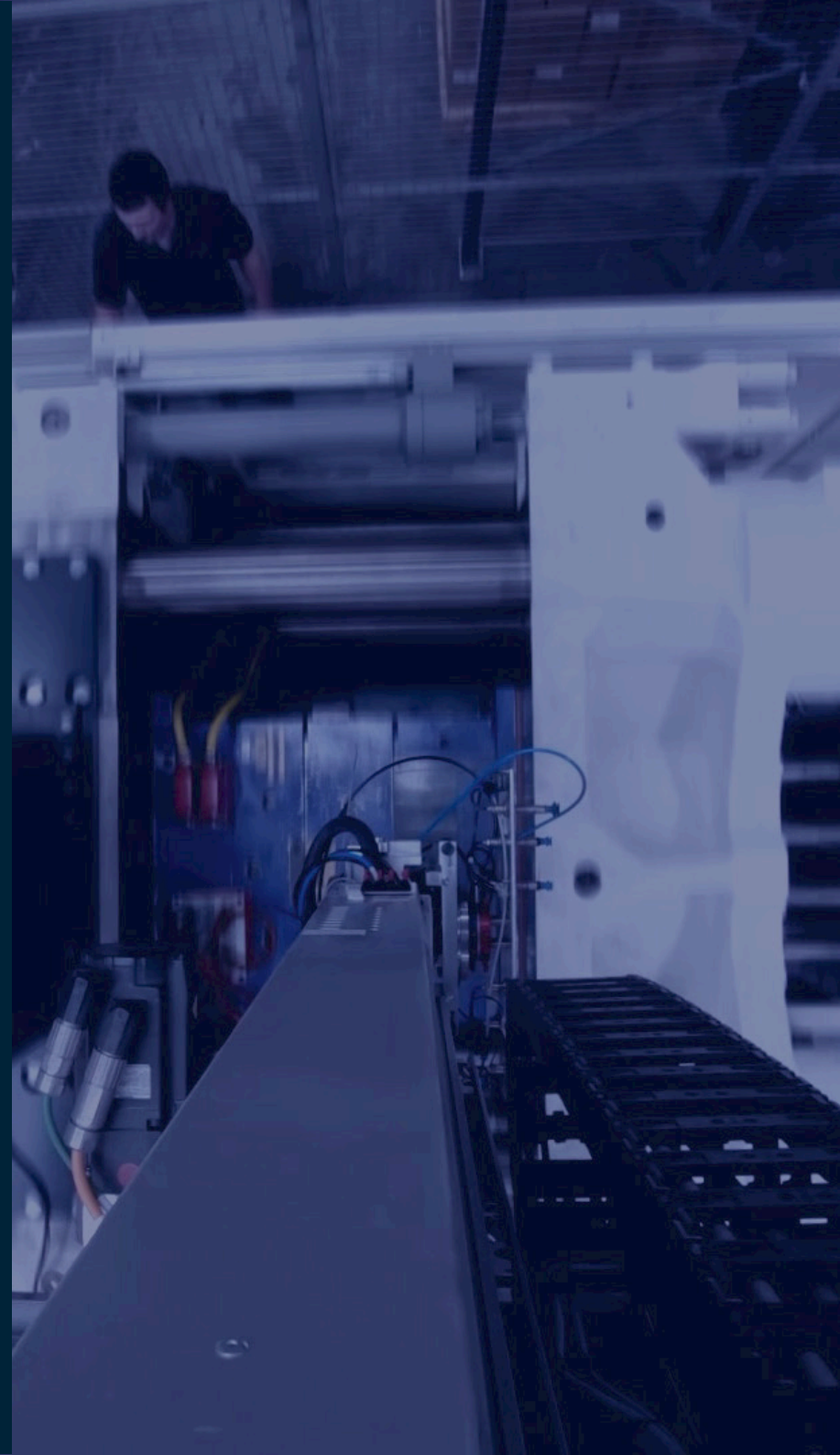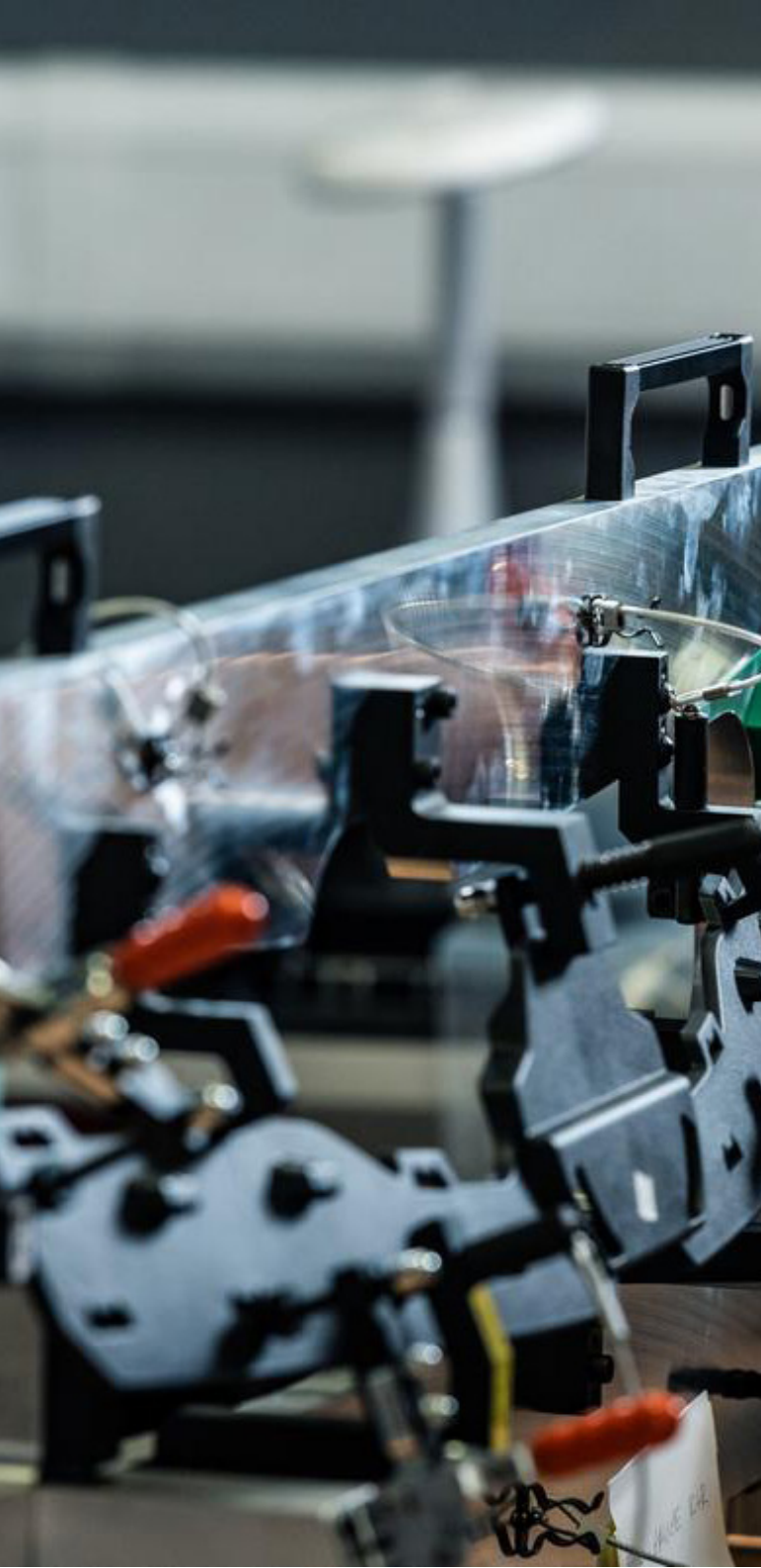
The ThingTrax Solution

MGS approached award-winning technology provider ThingTrax, whose aim is to help manufacturers transform the way their labour, processes and machinery connect. After evaluating ThingTrax's capabilities, MGS implemented the technology on all of its machines in 2020.

"We really liked what the guys at ThingTrax were doing in this space. They understand all the relevant technologies and are innovating using the latest Industry 4.0 concepts."
Judson Smythe
Technical Director at MGS
Technical Plastics

ThingTrax Productivity Module

Recommended for MGS, ThingTrax's **Productivity** module is an all-inclusive hardware and software solution that enables manufacturers to increase productivity by increasing output and minimising downtime whilst simultaneously reducing costs.

The solution:

▶ Provides real-time performance monitoring

▶ Triggers just-in-time operational improvement interventions

▶ Enables deep-dive root cause analysis

How?

The ThingTrax platform gives the MGS team complete control over its machines, allowing them to:

▶ Monitor their machinery from anywhere

▶ Predict machine breakdowns

▶ Plan maintenance

▶ Pinpoint when production schedules can be optimised to allow more jobs to be run (and more revenue can be generated!)

▶ Observe employee workflow patterns

With ThingTrax, MGS employees can quickly and easily log in via any computer, browser, or tablet to view up-to-the-minute information.

The investment in ThingTrax has revolutionised the way MGS's factory operates, which is crucial as the company enters new partnerships and continues to grow.

The company has seen many benefits since the implementation of ThingTrax, as Judson highlights:

"For me, the visibility it provides has had the biggest initial impact; our management team have a finger on the pulse and know each machine status at any given point in time. This allows us to react quicker, plan better, and have greater control of our operation overall.

"From there, things like accurate scrap recording, downtime, and energy monitoring become very useful tools for supervisors and technicians to utilise.

"The costed vs. actual information is excellent too, really highlighting that production is running accurately and in line with the ERP system.

"ThingTrax has given us the perfect platform. With it, we can focus our attention and improve our manufacturing performance, making us a healthier business."

Daily Management Module

With the **daily management** module, set out your organisationally aligned performance goals, run meetings, proactively manage tasks, hold people accountable, instigate counter measures and reward team members who execute to achieve organisational objectives.

Leverage this ThingTrax module to foster a progressive, positive, performance-oriented team culture.

Productivity Module

With the **productivity** module, you can automatically ingest jobs from your ERP, drag-and-drop jobs to the right machines, then sequence the jobs for each machine into an optimised schedule.

Meanwhile, sensors on each machine and cameras at each manual assembly cell or packing station give you real-time data and insights on jobs status triggering just-in-time interventions to increase output or reduce cost.

Algorithms automatically predict if jobs will finish and be delivered on time. They will also automatically predict the knock-on effect of job delays on other jobs in the queue so that planners can adjust scheduling and customer expectations can be managed proactively.

Quality Module

The **quality** module enables customers to manage customer complaints from receipt to resolution in a trackable compliant manner.

The module guides teams through an 8-step process:

- ▶ Forming a team

- ▶ Describing the problem

- ▶ Containing the problem

- ▶ Understanding the root cause

- ▶ Identifying a corrective action

- ▶ Implementing the corrective action

- ▶ Preventing the issue from occurring again

- ▶ Recognising the team for resolving the customer problem

Maintenance

If you have opted for the **productivity** module then ThingTrax has all the operational data about your machines. We can tell you how many hours each machine has run, how much of that has been downtime, how much has been productive time, how many cycles have run, and how many parts have been produced with which tools.

As a result, the **maintenance** module add-on can reference each machine and tool's maintenance schedule then automatically instigate preventative maintenance tickets and capture the status of those tickets. Increased visibility of maintenance across the business and proactive maintenance discipline enabled by

ThingTrax maximises the lifespan of your assets and minimises unplanned downtime which can cause expensive delays and missed customer deliveries.

Sustainability & Safety

Most manufacturing businesses have corporate sustainability objectives. You will have goals to reduce your carbon footprint as well as continue to improve your health and safety record.

With energy prices rising, you have the desire to monitor and minimise energy consumption as much as possible whilst maintaining output.

With the ThingTrax **sustainability & safety** module, the platform can give you real-time insights about how each of your factories and your business as a group is performing against these corporate goals.

Connected Applications

The ThingTrax Manufacturing Performance Platform is built on the latest technologies. As a result, through pre-build connectors, it can be rapidly integrated with hundreds of other applications without the need for costly or lengthy custom integration projects.

Whether it be your ERP system (like SAP or Dynamics) or a Business Intelligence solution (like DataBox, PowerBI or Tableau) or countless other complementary factory applications, with a few clicks ThingTrax will interoperate with the other tools that you use to run your business.

For more information on how ThingTrax can benefit your business, **speak to our team for a free demo!**

Find out more ▶