HARNESSING THE POWER OF INDUSTRY 4.0 IN PLASTICS FOR A SMARTER FUTURE

In an industry dictated by precision and speed, the digitisation and automation of **plastic injection moulding** operations is creating exciting opportunities for progress. But are businesses ready to optimise?

Today's Manufacturers' **Uptake Of Technologies:**[1]

CONNECTED EQUIPMENT
35%

SENSORS
41%

CLOUD-BASED TECHNOLOGIES
41%

ROBOTICS
26%

The manufacturing industry is fast adapting to new technologies, introducing automised, data-based processes to optimise operations.

However, there are **challenges to widespread uptake** in plastic injection moulding

61%
see upskilling workers to operate new technologies as a challenge

75%
are reluctant to invest in new technologies while current equipment is operational

WHAT DOES THE FUTURE HOLD?

THE INTERNET OF THINGS (IOT)

Connecting plant equipment can create an end-to-end process that requires minimal human-machine intervention.

IoT uses cloud-based devices, sensors and big data to interchange information between systems. This data informs operational improvements for efficiency, productivity and cost control purposes.

SENSORS

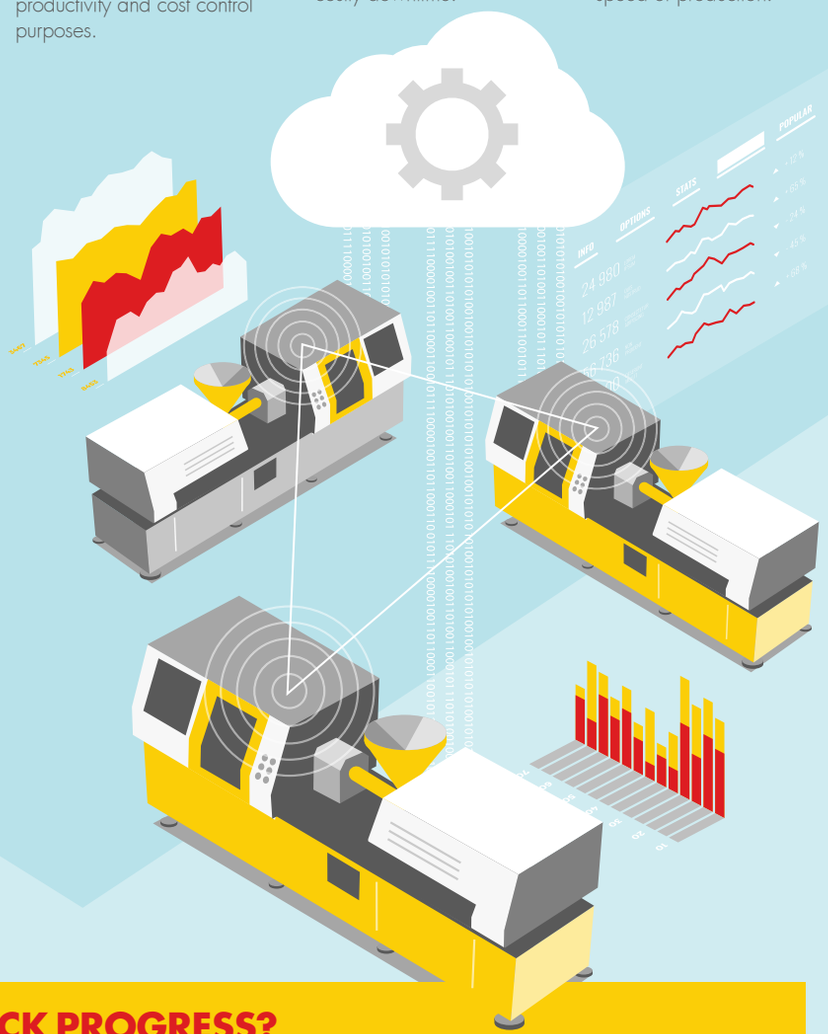
In-mould sensors use cavity pressure and temperature sensors to detect issues that are not visible to the naked eye.

Oil sensors monitor the quality of hydraulic fluid in real time. Monitoring fluid characteristics, they can spot potential equipment problems that could lead to costly downtime.

ROBOTICS

Advances in robotics are meaning they no longer just unload parts from a moulding machine. Today, they can unload, inspect, assemble, and pack parts.

From sprue pickers to complex end-of-arm tooling, integration of robotics can boost part quality, consistency and speed of production.



HOW CAN WE UNLOCK PROGRESS?

To successfully integrate Industry 4.0, it's important that lubricant solutions not only effectively protect new, high value equipment, but also help to boost productivity. By the same token, also protecting currently operational machinery allows businesses to protect the bottom line, meaning they can invest in Industry 4.0 options going forward.

Expert suppliers can help customers get the most from equipment, from providing high quality lubricants, to supporting with training and upskilling staff, this will be key to driving the industry forward.

1: This survey, commissioned by Shell Lubricants and conducted by research firm Edelman Intelligence, is based on 350 interviews with Manufacturing sector staff who purchase, influence the purchase or use lubricants / greases as part of their job across 7 countries (USA, China, India, Germany, Russia, Indonesia and the UK) from March to April 2018. For more information, please visit www.edelmanintelligence.com