FIRST STEP
Injection Moulding 4.0

Greater China Region
After all, the legacy factory is more like a traditional,
Our vision is to enable people-centric smart manufacturing for the many companies.

iPlast 4.0 helps our clients to implement Innovation Centres and Model Factory Cells (MFC).

Our implementations combine readiness check, consulting, hardware, training and software in the fields of Scientific Moulding, Smart Maintenance, Smart Automation and Smart Manufacturing.
OUR ECOSYSTEM

EDUCATION INSTITUTES

ASSOCIATIONS

SOFTWARE

RETIRE DEE INGNEERS | PRACTITIONERS | YOUNG ENGINEERS |

Injection Moulding | Tooling | Maintenance | Quality
LEAN | Automation | Supply Chain Management
Digitalisation | Business Development

BUSINESS PLATFORM

HARDWARE

www.iPlast40.com
Our FOCUS

- Industry
- Manufacturing
- SMEs
- Plastics Industry
INDUSTRY 4.0

Why it matters?

- Industry 1.0: Mechanization, steam and water power
- Industry 2.0: Mass production and electricity
- Industry 3.0: Electronic and IT systems, automation
- Industry 4.0: Cyber physical systems

THREATS or OPPORTUNITIES?
A choice or A MUST?
Let’s not discuss Industry 4.0
10,000 feet above ground
Challenges for SMEs implementing Smart Manufacturing

Order Received → Quality → Equipment → Delivery

Material → Work Process → Product → Client

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Invest first?
New business first?

Train first?
Pay first?
Challenges
• Cost of investment
• Awareness and success stories
• Digitalised culture and skills
• Messy physical world

Benefits
• Better quality
• Lower operation costs
• Create additional revenue
• Adapt to changing environment

Industry 4.0: Highly disruptive?

Think Big, Start Small
FIRST STEP
Injection Moulding 4.0

Injection Moulding 4.0 Readiness Check (IM40RC)

Digital Transformation Roadmap (DTR)

Set up Model Factory Cell (MFC)

Operational Excellence

Business Growth

Consulting | Hardware | Training | Software

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Industry 4.0

Readiness Check

What is Industry 4.0?

Leadership | Organisation | Technology | Market

Baseline assumption
- Large well run companies
- Certain sectors
- Advanced economies

Actual baseline

1. Baseline must be closer to actual state of industries
2. Applicable for SMEs
3. Reflect domain knowledge differences in sub-sectors
FIRST STEP
Injection Moulding 4.0
Malaysia

YouTube
Youku
Anston Tan
Principal
iPlast 4.0

Organized by MPMA, supported by HRDF
REALISING
INJECTION MOULDING 4.0

Industry 3.0

Industry 4.0

Model Factory Cell

Cloud Platform
Default Apps
Third-party Apps

Smart Cloud Platform
- Big Data
- AI
- Machine Learning
- Deep Learning
- Algorithm Engine
- Sharing Economy
- Apps (Platform APIs and Marketplace)

Existing condition?

Moulding machines
Measuring equipment
Scanners (Barcodes, RFIDs, QRs etc.)
Assembly lines

Edge server for localised services
Interfacing options
- Digital and analog I/Os
- PLC interfaces
- EUROMAP 63
- OPC-UA/EUROMAP 77
- EDI for ERP/MRP

INNOVATION CENTRE
CHINA’s role in the region’s digitalization journey
Make manufacturing sexy again

Machine 1: I am running at target 70% OEE. Supplier A is 58.4% and supplier B is 62.7%

My temperature, water flow rate and cavity pressure is normal

The outside ambient temperature is 22°C, I will now lower my set temperature by 2°C to maintain the part quality.

I have an order for 5,000 pcs for next 2 hours. The next production is order 2245. Activate mould change procedure now.

I will need oil service in 7 days time. Please reschedule order 1123 to another machine.
When manufacturing is sexy again ...
GOVERNMENT SUPPORT

No Motivation
No Determination
Street Fighters

To enable *people-centric smart manufacturing* for the *many companies*
Anston graduated with an Honours degree from Singapore’s Nanyang Technological University in 1999. Over the course of the next two decades, he founded moulding factories in Europe and gained invaluable experience and insight into the plastics industries in Europe and Asia. He is also highly proficient in areas such as industrial process optimisation, production automation and turnkey factory design.

From 2001 to 2011, Anston led his company to become the second largest global plastic goods supplier to Sweden’s foremost furniture and home furnishing company. Alongside the manufacturing business, he concurrently spearheaded the set up of a consulting arm to provide turnkey solutions to plastics companies in East Europe and Russia.

In 2014, with the emerging German Industry 4.0 concept, and building on his experience in Industry 3.0, Anston co-founded the German Training Centre for Injection Moulding (Asia), German Innovation Centre for Industry 4.0 (Asia) and the iPlast 4.0 people-centric smart manufacturing platform. He also created the Injection Moulding 4.0 development roadmap to implement smart manufacturing for numerous companies and is consequently now recognised as a pioneer in the field. Cementing this pioneer status, Anston is frequently invited to influential international conferences to speak on enabling Industry 4.0.

Today, Anston leads a global team of professionals and experts that has successfully enabled many Asian plastic moulders to embark on automated and digitised manufacturing, with the added benefit of raising their technical capabilities. He is also appointed by the Malaysian Plastics Manufacturers Association (MPMA) as their Lead Consultant for the Malaysian government’s initiative to bring Industry 4.0 to the plastics industry.