Preventative Measures Guide

How to prepare for manufacturing post-lockdown

8 easy social distancing measures

Industry 4.0 technologies that can help

How to perform a risk assessment

Implement digital tools with Made Smarter

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No one can know what the future holds. But it does appear that, whatever happens next during the coronavirus pandemic, manufacturing businesses will be required to follow very specific health and safety guidance from the government.

Where necessary, remote working and social distancing will need to be enforced. PPE will need to be provided to those working in factories. And makers must plan for a return to a full lockdown if required.

Preparation is key to the success of this. Here's what you can do to get ready.

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Meet social distancing challenges

Staff safety comes first, and this means following social distancing guidance effectively.

The movement of people and flow of materials on the factory floor will need to be reconfigured. This naturally comes with its challenges – and requires you to be agile.

Thankfully, there are some simple measures that you can implement now:

- Tape on floors – To mark the 2m distance
- A one-way system – So staff can't pass each other
- Creation of a screen – To allow a team member to safely get closer to another person
- Shift pattern changes – Creating extra working periods so that there are less staff on the factory floor at any one time
- Closure of unnecessary parts of a factory for the time being – For instance, canteens
- Extra cleaning and sanitizing
- Introduction of PPE
- Removing the need to touch surfaces – The contactless door claw can help with entering and exiting your premises, for example

With any measure that you introduce, it's vital to gather data on its effectiveness and analyse it. You can then take steps to enforce and strengthen them where necessary.

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Use new technologies

You may need to either upgrade or swap to Industry 4.0 technologies. These can help with a number of different aspects when it comes to the post-lockdown world.

Visualising social distancing

To see how social distancing can work within your factory without actually stepping foot in it, you can produce a virtual replica of its spatial dimensions. An existing CAD model could be used instantly.

If you don't have one of these, then 3D laser scanning can digitally capture every detail – there are both lower and higher cost options available.

Implementing social distancing

You can increase the number of those that can return to work without them needing to be on-site. How? Through simulation software and artificial intelligence. Simulation can also help rapidly plan staff shifts to meet production schedule needs, and determine the materials required.

There are a few different tools that can be used to share information and impose social distancing. For example, infrared range-finding equipment can measure distances, and voice control can enable hands-free technology use.

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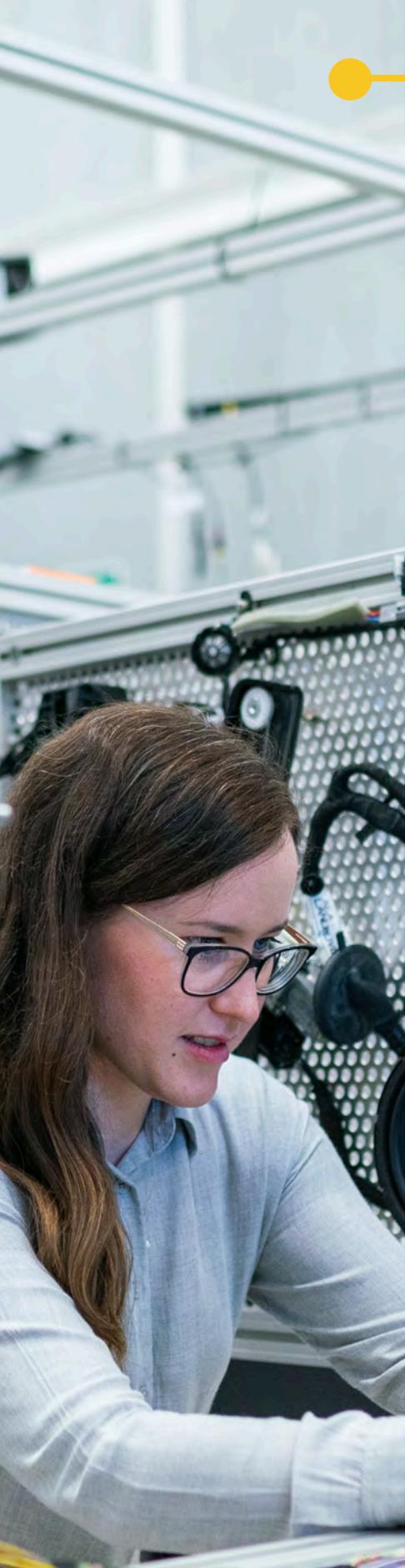
Sharing knowledge safely

If you opt to use augmented reality (AR), workers can see the physical world through video whilst working remotely. They can even annotate tangible objects through a smartphone, tablet or wearable device, to capture process steps or create a step-by-step guide.

Team members can then both swap and retain knowledge; AR can store the experience and expertise so others can learn from it. The result is not just enhanced safety, but boosted productivity and reduced costs too.

Controlling the movement of people and stream of materials

Remote process control is beneficial to any industry. Yet it has been found to be a particular advantage for the food and drink, chemical, pharma, and facilities and infrastructure sectors.

There are a variety of ways to do this. Process control and visualisation – which has the option of contactless access – can be used to manage facilities such as doors, windows, lifts and water, for instance. The actual analysis and supervision can easily be carried out remotely too.

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Tracking the movement of people and materials

Technologies can be used to track the movement of people and materials, as well as collate data. Wearable devices are great for monitoring staff and can be programmed to send an alert when someone is within two metres of another person. Radio-frequency identification tags can also be used to monitor cleaning.

Another idea is thermal imaging, which detects heat radiation and may be able to sense if team members have a fever. It even has a benefit for the post-pandemic world. As it can evaluate heat loss too, you can pinpoint areas that could be more energy-efficient. Whichever system you decide to implement, remember to evaluate the required tolerance and accuracy.

Ensuring thought before action

On a similar note, you'll need a specific workflow solution that enforces the cleaning regime. One that helps enforce new operating standards and procedures can additionally make it easier to share information and ensure social distancing.

Before you put any new digital tools into place, you should also guarantee that your operational technology (OT) and information technology (IT) systems are fit for purpose. This will require you to discuss your IT and cybersecurity with an expert.

Perform a risk assessment

It's also crucial to undertake a risk assessment to make sure you're putting preventative measures in place effectively.

Safety management should be considered in terms of the hierarchy of controls. These are made up of the following:

- Eliminate – Can you eliminate the need for the employee to be in the workplace altogether (e.g. home-working)?
- Substitute – Can the work be completed in a different way (e.g. home-working or shift changes)?
- Engineering controls – Can you create socially distancing workspaces (e.g. implement barriers between desks)?
- Admin controls – Can you do anything to strengthen social distancing reminders (e.g. signs)?
- PPE – Can you get the right stock, and guarantee that people use them?

The Centre for Assessment has produced detailed guidance on this hierarchy, along with a back-to-work risk assessment template that you can fill in.

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Made Smarter

Technology is evidently essential for manufacturing's future. But not everyone has the expertise and funding to use it successfully. That's why Made Smarter is here.

Our advisers will provide tailored guidance to ensure you implement the right applications and are supported throughout your digital journey. We can even help you in producing a digital roadmap. Plus, we can offer up to 50% match-funding if you need investment support.

On top of this, there is the option to enrol a digital native in your business through our digital technology internships. And, if you want to develop your leadership skills so that you can lead your business through industrial digitalisation effectively, there's a subsidised leadership programme available.

In times like these, you don't want to delay your move to digital. So speak to a Made Smarter adviser today. We'll take the time to really understand your business, so you can truly harness the power of new technologies. Get in touch by registering at **madesmarter.uk.** We'll #ComeBackSmarter.

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