

If you work in manufacturing, your teams will be feeling the pressure right now.

Industry changes like mass customisation and trends such as 'just in time' have inflated your customers' expectations and driven up competition, and as a result, your people are working harder than ever to keep up.

The solution should be simple: invest in smarter machines, hire more people. But it's easier said than done: machines are expensive, skilled workers are scarce, and expanding your operations is a huge, risky undertaking.

So how do you meet growing demands without increasing your costs (and your payroll)?







THE RISE OF 'SMART' MANUFACTURING

Smart Manufacturing is about leveraging information throughout the product lifecycle, with the goal of creating flexible manufacturing processes that respond rapidly to changes in demand. According to Gartner while it's encouraging that 91% of the participants in a 2018 survey on digitising manufacturing operations are pursuing a smart manufacturing strategy, it is not a pursuit without hurdles. From people and processes, to materials, machines, and information: everything needs to be synchronised to drive flow.

KEY DRIVERS OF MANUFACTURING COMPETITIVENESS:

- Talent
- 2 Cost Containment
- 3 Productivity
- 4 Supplier Network







BETTER-CONNECTED PEOPLE

YOUR PEOPLE ARE
THE HEART OF YOUR
MANUFACTURING
OPERATIONS.
EVERY DAY YOU RELY
ON THEM TO:

- Measure, grade and feed raw materials into your production machinery with precision.
- Operate and monitor your sensitive production-line equipment.
- Assemble products on your production line with the care they deserve.

- Ensure finished goods get fed into the distribution network effectively
- Keep your facilities secure and your people safe
- Ensure maximum uptime, all the time

PUT TOGETHER, IT'S PEOPLE WHO KEEP YOUR OPERATIONS UP AND RUNNING.



TWO-WAY RADIOS: STILL THE FIRST CHOICE FOR MANUFACTURERS

45% of manufacturers use two-way radios. That's more than any other plant-communication technology



INTRODUCING TRBOCALL

TRBOCALL enables you to connect teams at any site. That way, your production and engineering teams can connect directly with their counterparts at other locations.

Two-way communications have come a long way since the radios you may have bought a decade ago.

Today's digital systems combine hardware, software, radio and broadband technology to deliver seamless, instant communication and data access across the entire manufacturing plant.

So you can connect your teams seamlessly, and reach everyone and everything in your facility, within seconds.



THE POWER OF INDUSTRIAL UNIFIED COMMUNICATIONS bn3 sint nequ

We'll go through each of them in this guide, so you'll be fully informed and prepared to advance your team It's cost-effective, quick-to-implement solution for meeting growing demands, while getting more out of your existing communications. workforce and plant. There are 15 ways to empower your teams with industrial unified communications, and they fall under three core areas of manufacturing: **PRODUCTIVITY** \rightarrow UPTIME → SAFETY AND SECURITY



RISING CUSTOMER DEMANDS AND EXECUTIVE PRESSURES MEAN YOU'RE NOW EXPECTED TO MANUFACTURE AND DELIVER PRODUCTS FASTER THAN EVER.

But simply 'working faster' can be dangerous without also 'working smarter.' Here's how to work both faster and smarter with industrial unified communications:



01. VOICE APPS

Apps like push-to-talk, voice dispatch, IP telephony with data, and comprehensive voice and data give you the freedom to select a specialised device for each employee without the need for central control.

WORK ORDER TICKET MANAGEMENT

Work-order-ticket management apps let you manage your teams' workflows via their radios. It means your mobile workers can notify dispatch when jobs are done, so you can monitor, analyse and improve cycle times.

03. INDOOR-LOCATION TRACKING

Indoor-location tracking means your people can locate everyone and everything across your site within seconds, thanks to Bluetoothpowered iBeacons placed around your facility.

04. GPS INTEGRATION

This helps you locate your mobile and portable assets, like the lorries going in and out of your factory. For added visibility, you can combine it with Google Earth and satellite, hybrid and street-level maps.

WAVE BROADBAND PUSH-TO-TALK (BBPTT)

WAVE eliminates the barriers between communication systems so your teams can collaborate seamlessly, whether they're on smartphones, tablets, PC's or radios. It also gives you worldwide access to factories, offices and even customer, thanks to internetenabled mobile solutions.



UPTIME IN MANUFACTURING IS ABOUT PREVENTING COSTLY STOPPAGES AT THE EARLIEST OPPORTUNITY, AND PREVENTING DELAYS AT THE CONSUMER END TO ENSURE THE BEST EXPERIENCES

Here's how industrial unified communications helps you tick both of those boxes:



06 NOISE CANCELLATION

Today's digital radios can reduce background noise and automatically adjust volume to match plant noise levels. That way, your team members don't have to wait for quiet times to communicate with one another.

07. FLEET MANAGEMENT

Fleet management apps let you track your teams' vehicle data, including current location and speed. They also let you monitor route and schedule adherence, fuel consumption, ignition status and more for maximum insight.

108 TEXT MESSAGING AND EMAIL

You can even send texts and emails to radios. And not just from phones - from tablets and even desktop computers. It means your teams can receive equipment and status alerts from a range of sources, and notify technicians from a single interface.

O9 DATA GATHERING AND ANALYSIS

Monitor and control your manufacturing equipment from a distance with SCADA Remote Terminal Units. Integrated seamlessly across your entire radio network your teams can leverage your current infrastructure for powerful process automation and more expansive communication capabilities.

10. SYSTEM MONITORING

System Monitoring apps let your people check radio network failures, get real-time workflow status alerts by SMS or email, record calls, and analyse any radio congestions. They also offer live diagnostics.



KEEPING YOUR PLANT AND PEOPLE SAFE AND SECURE IS HARD - THERE ARE MORE DEVICES ON THE FACTORY FLOOR, MORE CHANNELS TO COMMUNICATE THROUGH, AND MORE PRESSURES TO DLIVER THAN EVER.

To keep up, your workforce communications will need to integrate with up-to-date, smart safety features.

Here's how to make that happen with industrial unified communications:



PERSONNEL • SAFETY

Today's radios are built with integrated safety features like "man down" and "lone worker." It means radios can call for help when people can't, and initiate emergency alerts if radios are inactive for longer than usual.

14. DURABILITY

The latest digital radios have batteries designed to last a full shift. So your team members can rely on their radios to work whenever they need them.

12. ALARM MANAGEMENT

Alarm management apps enable your team members to respond quickly, letting you monitor and remotely operate doors, gates, lights, sprinklers and more.

15. HEAVY-DUTY HEADSETS

Heavy-duty headsets offer protection against noisy environments whilst allowing your people to make and receive radio calls. They also give your people the freedom to use their radios without touching them, so their hands are free to manage other tasks more safely.

13. COVERAGE

Today's digital radios provide better coverage than ever before, including underground areas where mobile phone networks don't normally reach. People, not machines, are the real heart of your manufacturing operations. It's *people* who adapt to evolving demands and prevailing trends.

And the better-connected they are, the more effective they'll be. That's why it pays to empower your people with industrial unified communications, so they're always doing their best work, even in moments when plant productivity, uptime safety and security are on the line.







To see how Eemits Communications can help to transform your operation, visit www.eemits.co.uk/why-trbocall



