The ultimate guide to automated product inspection

Matthews
INTELLIGENT IDENTIFICATION

The Rise of Inspection

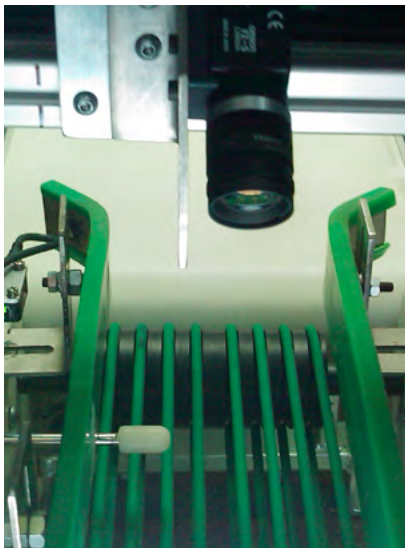
Australian manufacturers today are under more pressure than ever to produce the highest quality goods. With increasingly tough competition at home and from overseas, there's no room for error. However, retailers and consumers are both demanding these high quality products at lower prices, meaning producers need to find a way to ensure exceptional quality while protecting their profit margin.

Many manufacturers are realising that, to achieve these standards, it's no longer enough to rely on human inspection. That's where automated product inspection systems come in.

Product inspection systems, such as metal detectors, checkweighers, x-ray and vision inspection systems, can help ensure that every product leaving your factory doors is of the best quality, ticking all the boxes for consumers and retailers. At the same time, they can substantially decrease operational expenses and optimise plant efficiency.

Whether you're thinking of investing in inspection equipment for the first time, or need to upgrade, this ebook will help you learn:

- Why you need inspection technology
- What can be inspected
- Inspection standards you need to know
- Different types of inspection technology
- How to get the best return on investment
- And much more



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Why do you Need Product Inspection?

Product integrity is a big issue for manufacturers. The high speeds at which products are processed, packaged and labelled today, as well as the reality of short and varied production runs, results in a wide variety of possible defects. And the second those defects leave the factory doors, they can be potentially damaging for the brand owners.

Companies can spend a great deal of time, energy and money checking products manually. However with complex processes and faster production lines, humans are unable to inspect for packaging errors, contamination and quality standards without impacting efficiency. And as the Japanese master of lean manufacturing, Dr Shigeo Shingo, once said: “Humans are animals that make mistakes.”

In a worst-case scenario, relying on human inspection means problems may only be found days after they first appear. However, hundreds or even thousands of contaminated products could have been produced before the issue was even detected. In many cases where human inspection is utilised as the main method of quality control, the first time you find out you have a problem is when a customer alerts you to it. And that’s where brands run the risk of recalls, a damaged reputation and high costs.

For many, automating inspection is the best solution. Inspection systems not only have a higher average detection rate than humans, but they are also able to streamline processes and improve the line’s efficiency. They can also operate at higher speeds where humans struggle.

As a general rule of thumb, automation of inspection drives quality improvement through repeatable and reliable inspection, with automatic data capture to measure reject rates and alert operators. Using an inspection system means technological devices can undertake most of the work when it comes to Quality Assurance (QA), allowing you to reallocate staff to other more productive areas, as well as decreasing the likelihood of an unfit or faulty product leaving your doors.

7 Reasons you need inspection solutions

1. **Higher rate of accuracy:** Using an inspection system produces a higher rate of accuracy compared with human inspection, resulting in fewer errors.
2. **Lower costs:** With fewer reworks and product recalls, production costs are lower. Inspection systems also provide cost savings by reducing waste and manual efforts.
3. **Stronger brand integrity:** High quality products and fewer errors strengthen brand integrity in the long run by keeping flawed products off the shelves.
4. **Free up resources:** Without the need for a manual inspection team, employees can be utilised in other areas of the production line, ultimately improving your bottom line.
5. **Drive continuous improvement in quality control:** By automating quality control, you can establish a reliable system that delivers time and again. This also provides the ability to ensure quality based on specific parameters.
6. **Build trusting customer relationships:** Inspection systems make it possible to demonstrate that reliable QA processes are in place to satisfy your customers. This is often necessary for retail customers, such as the major supermarkets.
7. **Create one lean solution:** Some inspection systems can now be incorporated with other line technologies, so your automated solutions work as one. Any faulty products can be redirected to be correctly labelled, for example, or rejected if the error cannot be rectified. The whole process is streamlined. For businesses, this level of quality control is invaluable, as it prevents costly recalls for products that are not shelf-ready and yet still shipped.

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What processes can be automated for inspection?

Increasing automation means production lines are getting faster, and while this is good news for production volumes, it can be challenging news for your packaging and labelling.

Traditionally, manufacturers have relied on the human eye to pick up errors. That was sufficient when line speeds were slower; however, today's speeds mean human inspectors just can't check every product on the line — and that's simply not good enough to meet the increasingly stringent regulations of retailers and trade customers.

The good news is there are many processes that can now be automated for inspection, making sure the product leaving your facility is shelf ready:

Vision Inspection

- **Check the label is present:** Inspect for the absence or presence of a label on a package or container.
- **Label pair validation:** Ensure the front and back labels are paired correctly.
- **Skewed label detection:** Ensure that labels are applied straight and in the correct position. Many retailers mandate this to enable easy scanning, for example.
- **Dog-ear label detection:** Verify that labels have been securely applied to the container or package, so they won't tear or come off completely at some point in the supply chain.
- **Double label inspection:** Make sure that only one label has been applied to the same location on the package.
- **Overwrap alignment inspection:** Perform a 360-degree inspection to ensure wrap-around labels are straight and properly positioned.
- **Graphical label verification:** Verify if the right label has been applied by inspecting for a unique graphical item on the label.
- **Barcode verification:** Ensure the barcode has been printed correctly, as well as make sure the proper label has been applied by verifying that the correct barcode is present. This is essential to meet the stringent criteria of major retailers.
- **2D Data Matrix Code verification:** Confirm the proper label has been applied by verifying the 2D code is present and checking that the code has been printed correctly.
- **Content and fill levels:** Ensure the packaging contains the contents it should contain, and at the correct levels.
- **Colour:** Match products, labels, bottles, caps etc. by colour to ensure they are correct.
- **Tamper seals:** Check seals are in place and not broken.
- **Date codes:** Check the use-by dates are in place and legible.
- **Sorting products:** Sort products based on specific markings or characteristics.
- **Counting products:** Ensure all products are present, for example, that there are no gaps in a chocolate box.
- **Dimensions / measurement:** Checking various aspects such as open flaps on a carton, height, width, diameter, distance etc.
- **Item present / missing:** Does the pack contain the correct number of items; e.g. is there a knife, fork and spoon in each meal?

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Checkweighing

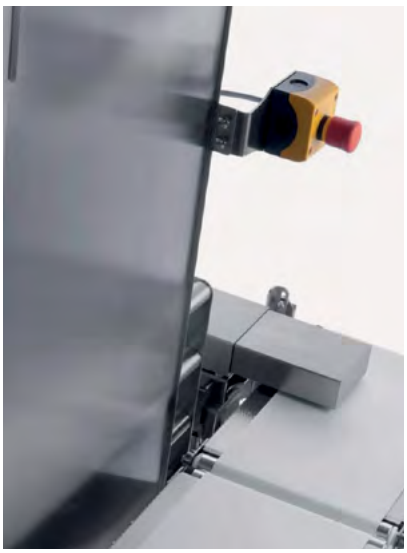
- **Compliance with regulations:** Ensuring products are legal.
- **Check product weights:** Check food and non-food products to ensure weights are within specified limits and automatically remove any packs that aren't. Can check packaged goods (from 10g to 60kg) as well as unpackaged food such as fish, poultry, minced meat, sausages, bakery products, milk and dairy products.
- **Classify products:** Sort goods according to weight classes.
- **Missing item:** Find boxes / multipacks with items missing e.f. find / identify surgical kits which have items removed.

Metal detection

- **Inspect for contaminants:** Make sure that products leaving your factory door don't have metal contaminants in them such as: nuts, bolts, washers, bars, swarf etc These could harm your customers, your reputation and your bottom line.
- **Inspect for inclusions:** Make sure every pack contains a specific item e.g. at least one foil sachet of salad dressing in a bag of salad mix.

X-ray

- **Inspect for contaminants:** like glass, stone, bone, metal, teeth, rubber, plastic.
- **Check for voids:** holes in cheese, missing items.
- **Other benefits:** of an x-ray inspection solution can include inspecting packaging for things like open flaps on a box, items present, gross weight and more.
- **Type of products that can be inspected:** Almost anything: packed goods, loose free flowing goods, pumped products (meat, cheese, dough), liquids etc.



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Essential Guide to Inspection Standards

Do you know which standards apply to your manufacturing facility? Here are three standards every manufacturer should know.

Measurement Standards

In Australia, the National Measurement Institute (NMI) is the regulator of all trade transactions involving measurement. From firewood and fuel, to milk, groceries, gold and iron ore, trade measurement covers a wide range of goods and transactions in the Australian economy.

During 2013–14, trade measurement inspectors:

- Audited almost 10,000 business premises
- Tested almost 13,000 measuring instruments
- Inspected almost 30,000 lines of packaged goods for correct measure

According to the NMI, the overwhelming majority (88%) of fines imposed in 2013–14 were related to short measure in prepacked articles, i.e. goods that were underweight.

So it pays to take the time to get it right!

Expert tip: In Australia, NMI certification of weighing equipment only applies to catch weighers, not checkweighers. There is no NMI certification for checkweighers in Australia.

Australian manufacturers can choose from two key standards of measurement for their goods:

1. Uniform Trade Measurement Legislation (UTML)

The UTML is the longstanding international system. It states that one package in 12 can be less than the stated weight, but the average content in a sample of (12) prepacked items of the same measurement cannot be less than the stated quantity. No items can have a shortfall of more than 5%. There are exceptions, such as mushrooms and soap, where a greater maximum deficiency is allowed as a result of moisture loss.

2. Average Quantity System (AQS)

Introduced in Australia in 2010, the AQS *is designed to assist packaging companies to make it easier to meet the average net content requirements. The AQS standard is especially good for large production runs, helps minimise waste and re-work and is globally recognised.* This is the "e" mark on a product. Under this system, the average net content in a pre-packed sample from the production run cannot be less than the quantity marked on packs. An allowance is made for a small number of packs that exceed the tolerable deficiency – however, none can have more than twice the tolerable deficiency. As a result, the AQS provides a 97.5% assurance that goods are within the prescribed tolerances.

Find out more about UTML and AQS on the National Measurement Institute website.

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Woolworth Quality Assurance (WQA)

As grocery retailers continue to improve business processes and meet their customers' demands for trusted information, they are putting a bigger focus on product identification. That's why retailers such as Woolworths are increasingly looking to their suppliers to help them ensure every product can be quickly and accurately identified throughout their supply chain.

Woolworths has managed its own Quality Assurance Standard since 1996. Independently third-party audited, it's known as "Woolworths Quality Assurance" or WQA.

Vendors supplying Woolies with Woolworths-branded foods must maintain certification to the WQA Standard, with two audits each year to keep them in check. The certification is site and product specific (which Woolies will nominate).

The WQA program is by invitation only, but whether you're already supplying Woolworths, or looking to supply them in the future, it's worth taking the time to look at the WQA and identify any gaps you need to fill – especially because many other retailers enforce very similar standards.

The WQA Standards cover many areas, including, fresh produce, manufactured foods, eggs, livestock and seafood (including marine caught).

The WQA has strict protocols to ensure product quality and weight is maintained:

A) Checkweighing

To demonstrate that your product meets the weight or volume declared on the label, every single Woolworths-branded, finished-retail-packed products must go through an electronic check-weighing system.

You should keep any data and reports captured from electronic on-line check weighing systems, and they should be easily retrievable. You should also have procedures in place to calculate and verify packaging weights to ensure the actual product net weight/volume is measured accurately, and also record any references on product labels to drained weight (e.g.: for canned goods), for compliance.

ALL Woolworths branded items must be equal to or above the stated weight on the pack.

B) Inspection

At a minimum, all Woolworths-branded products must be subject to metal detection. This means the vendor's site should include foreign-object-detection equipment, such as metal detectors or x-ray systems, to detect if any products have become contaminated with foreign products.

In most cases the equipment will be situated in-line so it can screen the finished packed product. Vision inspection systems can be used for process control during the production process or for quality control on finished products.

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5 Inspection Technologies You Need To Know

Not all inspection technologies are made equal. So you need to understand which inspection machinery will drive quality and process improvement while delivering the best return on investment (ROI).

1. Vision inspection

What does it inspect?

- Vision inspection is mostly used to inspect packaging integrity and product conformance, including:
- Inspecting presence, position and formation of a code (date code, barcode)
- Validating the presence and position of labels
- Checking closures of tamper seals, correct caps by colour,
- Detecting packaging content and fill levels in bottles or jars
- Sorting food and beverage products based on marking
- Counting products

Why invest?

Vision systems are instrumental in identifying a wide range of quality issues – things that humans are unable to do reliably and consistently, especially at high speeds.

Vision systems might have been around a while, but improvements in technology mean they are getting faster, more robust and can handle a greater range of inspection tasks per camera. Cameras are also taking better and clearer images, which are necessary to identify defects. The better the image, the less likely the vision system is to reject something falsely.

Another benefit is that manufacturers can tie a vision inspection system into automated processes to reduce production-line errors that could ruin an entire batch of goods. That alone could deliver the return on investment you're looking for.

Expert tip: Be sure that the supplier you are considering offers support that matches your business requirements i.e. if you operate 24hours 6 days a week in two states can your supplier provide support that matches those hours and locations? If you are considering a one-man-band then who will help you when the supplier is on holidays in Africa for a month?

Be careful of the temptation to do it yourself. Many people start out thinking that it will be cheap and easy (so I'll do it myself) but vision is much more difficult than most people realise, so use a company with a proven record in delivering solutions.

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2. Checkweigh

What does it inspect?

Checkweigh systems are used to reduce waste and overfill. They can support weight compliance for two standards: AQS and non-AQS (UTML). Checkweighing is also essential if you supply to leading retailers. They often have their own compliance requirements, such as the Woolworths' WQA, which mandates checkweighing for Home Brand products, and highly recommends it for all products. Checkweighers can be used to sort products during the manufacturing or packing process but more typically sit at the end of the line, where they can precision weigh at required line speeds. If a product is overweight or underweight, the checkweigher will instantly remove it from the line (reject the product) and alert you to the issue immediately, so you can address the problem before you produce thousands of out-of-spec products.

Why invest?

Checkweighers are most often associated with compliance to regulations, but they can also boost your bottom line by reducing waste, tightening tolerances and ensuring more consistent products. By improving weighing precision, checkweighers are proven to provide an immediate contribution to productivity and profits. The more accurate your checkweigher, the more money you can save. So even with a packet of nuts, saving the tiniest amount of overfill could add up to massive savings over time.

Because checkweigh technology can help manufacturers detect issues with product overfill (or underfill), you are able to correct the problem fast and save costs.

3. Metal detection

What does it inspect?

Metal detection systems only inspect products for metal. They are ideal for inspecting dry products (think flour, coffee powder, sugar) and frozen products, plus also give very good results on a wide range of other products. Metal detection systems sit towards the end of the line in most cases and check the "final product".

Why invest?

One of the biggest culprits for food contamination today is metal and (in-particular) non-magnetic stainless steel. This is where metal detection technology is extremely effective. Unlike their predecessors, the advanced metal detection systems today can be configured to detect contaminants even in products with high moisture content.

Expert tip: Metal detection systems do have pitfalls for the unwary; They can be affected by electrical interference, vibration, salt, moisture and high or changing product temperature. They can have a greatly reduced sensitivity when inspection products in aluminum packaging such as foil pouches or metalised film – an increasingly common packaging type in the food industry.

Don't waste money on buying a metal detector that the supplier tells you will work well for products in foil film. In fact, avoid this supplier in the future! If aluminum or foil packaging is being used (e.g. lasagna tray) then look to use X-ray metal detection technology for a solution.

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4. X-ray inspection

What does it inspect?

Metal isn't the only culprit of food recalls. Glass, stone, rubber and other contaminants can make their way into the product. By evaluating density through the product and packaging, X-ray inspection equipment can identify these foreign bodies.

Advanced X-ray inspection systems can perform in-line quality checks to:

- Detect physical defects
- Measure product mass
- Identify missing or broken products
- Inspect packaging seal integrity

Why invest?

Unlike metal detection, X-ray inspection is ideal for a wide range of packaging, especially in bottles, cans, jars, pouches, boxes, trays and foils as well as many products that metal detectors typically struggle with, such as high moisture, high salt or high temperature products. Better yet, it can detect contaminants embedded right in the product and tell the operator where in the product the contaminant sits.

Over recent years, X-ray equipment has become a lot faster and easier to use, making it ideal for high-speed production lines. This makes it a worthy investment for those processors who want to reduce contamination and protect against recalls.

5. Barcode scanner

What does it inspect?

Barcode scanners ensure barcodes are present and correct for use through the supply chain and with point-of-sale. They can inspect barcodes on cartons, pallets and individual items. Barcode scanners can be linked to databases using software to even check if the right barcode is on the right product.

Why invest?

By scanning a barcode on the line, barcode scanners help manufacturers drive greater profitability and productivity. Doing this on line, rather than at the end of the batch or shift, identifies errors in packaging or labelling immediately. The same system can be linked to a stock control system to increment products counts as the products are being made – so warehouse tallies are always up to date.

Expert advice: To find out what the best inspection technology is for your production line, speak to Matthews' experts.

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Metal detection vs. X-ray inspection

Metal detection and X-ray inspection have long been the first line of defence for food and beverage processors, but vast improvements in engineering and software mean it's not immediately obvious which will provide the best performance.

There are a number of boxes any inspection system must tick. For food and beverage applications, both metal detectors and X-ray systems must be extremely sensitive, easy-to-use, fast, fully automatic, robust, reliable and cost effective. After all, the system often needs to be able to pick up the smallest contaminants from thousands of products in challenging processing environments.

So which inspection technology should food and beverage processors invest in to ensure the safety and quality of their products — metal detection or X-ray?

To help you make your decision, consider the following questions:

How is performance measured?

The performance of a foreign-object detection system is determined in three ways:

Detectable contaminant types: There are lots of contaminant types, including glass, rocks, bones, plastic, pieces of metal and so on. Often, the real challenge isn't finding the contaminant, but ignoring the packaging, product and environment. False detections can quickly add up both in terms of time and costs.

Minimum contaminant size: This depends on the system design and technology as well as the "product effect". This is the degree to which the food looks like a contaminant to the detection system.

Probability of detection: What is the chance of the system missing a contaminant in real production, with real products running at real speeds? As a general rule, the larger the contaminant, the higher the probability of detection. However, you also need to build in a margin for error, with periodic audits and preventative maintenance.

What contaminants do you want to detect?

Traditionally, metal detection systems were used to detect metal (including aluminium and wires), while X-ray inspection detects all metals, as well as many other solid contaminants (think glass, stones, bones and some plastic). However, today's technology means metal detection systems, such as Matthews' systems by Bizerba, can also detect non-ferrous metals.

Typically, X-ray inspection systems can find smaller contaminants than metal detectors and can check a wider range of materials, including large packaged products, cases, cans and bottles.

However, there are challenges for both systems. Typically, metal detection systems find it difficult to ignore wet and salty products, as they are conductive. While X-ray inspection systems have limited success when it comes to dense products with lots of texture. That said, there are examples of advanced systems that can overcome both these issues.

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What is the packaging type?

In the food and beverage industry, many brand owners are switching to metallised film or foil-based packaging to enhance products' appearance or shelf life. This effectively rules out metal detectors, because they have to reduce their sensitivity in order to cope with the packaging, meaning that the size of the metal piece that is able to be detected is vastly increased and therefore the risk of having a metal contaminant pass through in a product without being detected is vastly increased. X-ray inspection systems however, can see right through into foil-based packaging to detect extremely small foreign objects. Make sure you take into account how you might change your packaging down the track, as this will determine the best investment for your inspection processes.

What's the optimum detection point?

The optimum detection point is the stage in your processing line that has the most chance of finding contaminants. This influences which technology should be employed for the best performance.

Metal detectors can be installed almost anywhere along the line, but their success largely depends on the size of the opening in the metal detector that the product passes through. So that means they tend to work best for products in small packages and bulk conveyed products. By contrast, X-ray systems have greater sensitivity with large products. In both cases, processors and packers can often derive the best value by placing the unit at the end of the line, examining finished (i.e. packaged) products.

What's the speed of application?

One of the biggest challenges for manufacturers and processors is finding a system that will perform at rapid speeds. This is where many X-ray systems come up short. Because of the scanning rate, their speed range may be limited. Also, X-ray systems need a constant, known speed to construct images. So they cannot be used in gravity-flow, blown or vacuum applications, unlike metal detection systems, which can be used almost anywhere in the process.

What else can the technology do?

When investing in any technology, it's worth thinking about how you can get the most value for your business. In this case, you want to look at what the systems can perform in addition to detecting contaminants. For example, X-ray inspection systems can see inside a container to detect missing products in a pack — something that's not possible with a metal detector. X-ray systems can also inspect a product by measuring the shape, counting objects or using the density of the image to estimate weight. Each of these processes helps to ensure that only the highest quality products are leaving your factory doors.

What's the total cost of ownership (TCO)?

As with all processing equipment, it's worth weighing up the upfront cost against the total cost of ownership (or TCO) over its lifetime. This includes training, maintenance, repair, parts and so on. In general, X-ray systems are more expensive up front than metal detection systems. Metal detectors also last up to four times longer. So if you only need to examine small, dry products the extra functions of an X-ray system won't add any value to your business, so opt for a metal detector. But if you need to go beyond the basics, the X-ray system could prove a worthy investment over the long term.

The Result

So what's the answer for metal detection vs X-ray inspection? Well, the bottom line is, one solution doesn't fit all. There are many factors that affect performance so the best way to choose your ideal inspection system is to look at your exact application, product and industry needs. If you are still unsure, contact Matthews Australasia and ask for a specialist to come to your site to assess your application and provide you with options and guidance on the best solutions for your application(s).

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Fast tips for implementing inspection systems

There's no golden rule for implementing an inspection system. Every manufacturer's needs, products and production lines are different. However, there are some essential things to remember if you want to get the best results:

1. **Fit for the task:** First and foremost, consider whether the inspection system fits your requirements. Does it include features that will pay back and give you the best possible return on investment (ROI)? For example, it's always good to choose a checkweigher with a bit more up the sleeve in terms of belt speed and product memory. This will ensure it meets not only your business needs now, but in the future too. Work with your supplier to get the best solution for your unique needs.

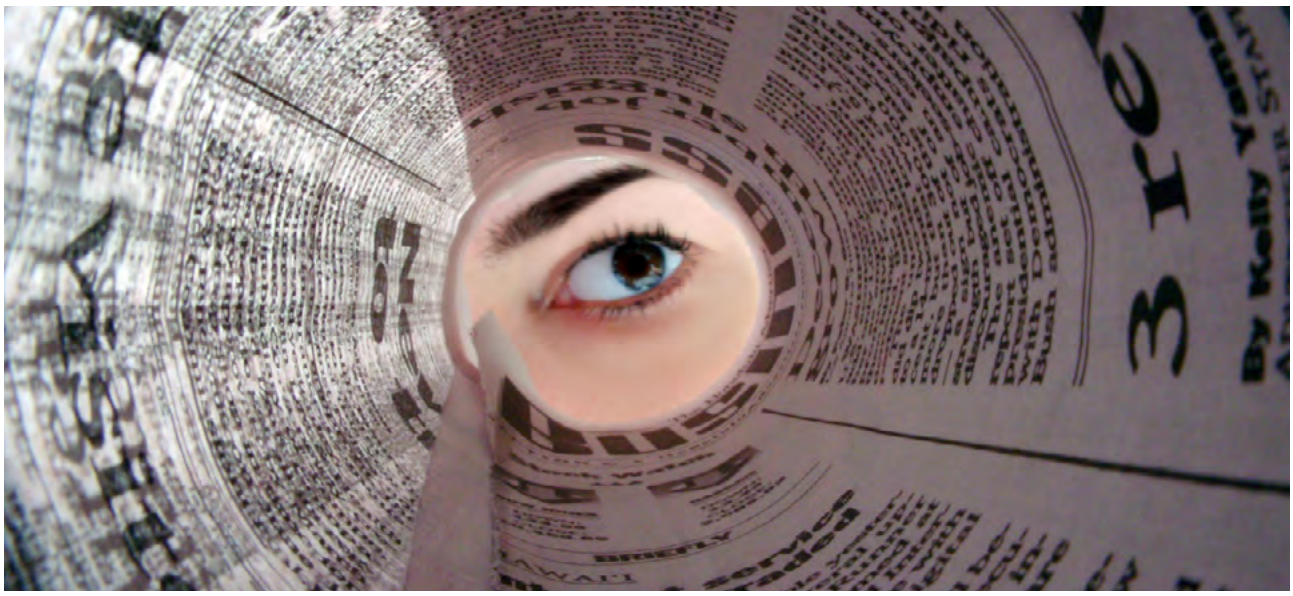
2. **Install the inspection machinery close to the end of the line:** It goes without saying that inspection should be conducted as the very last process before the product leaves your premises. So wherever possible, install your inspection system at the end of the line (unless it is being used for a specific purpose such as sorting or equipment protection during the production process).

3. **Know the rules for metal detection systems:** Metal detectors are sensitive to metal, vibration, electrical noise, salt and moisture. So consider all these factors when implementing your system. The equipment supplier will be able to provide the best advice on whether this is the right solution for you, and how to install it effectively.

4. **Take your time getting it right:** The more time you spend getting the installation right upfront, the better the inspection system will work for your facility. Work with the supplier to ensure that you and your staff are trained properly and will get the most out of your system. (Find out how Matthews can help!)

5. **Go for local service:** As with every part of your automated production line, you need to ensure you can get support when you need it; does the supplier offer support that matches your requirements? Have they done similar systems before? A system that does not require special service tools or equipment is more cost-effective to run in the long term. And by choosing a supplier like Matthews that will be able to provide expertise and support on-site or remotely as required, you can ensure your systems are always running smoothly.

6. **Live feedback:** The ideal system will give operators live feedback when there is a problem – so that the problem can be corrected before it gets out of hand. This is often overlooked for vision in particular – but live feedback is critical if you are to get on top of problems before they get on top of you.



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How to get the highest return on investment

The more efficient the manufacturer, the higher the potential for profit. Manufacturers can spend a significant amount of time, energy and money in checking products manually, but inspection systems allow for checks to be done automatically and accurately. Investing in or upgrading your product ID and inspection equipment is a proven way to streamline your existing processes and improve efficiency, while maintaining high quality and ensuring compliance.

The latest developments in inspection equipment include a number of important features to help manufacturers increase uptime and maximise their return on investment, including:

Easy installation and set-up: Get up and running quickly and easily

Automated product changeovers: Significantly reduce unnecessary downtime, so your production lines run uninterrupted for longer.

Modular, hygienic design: Modular construction and hygienically designed stainless steel equipment supports quick and effective washdown.

Easy to use: Simplified operation and easy-to-use interfaces reduce operator errors and time taken for staff training.

Higher reliability and lower maintenance: Less time spent on servicing and repairs, thereby reducing operational costs and maximising uptime.

One compact system: Save on valuable floor space to maximise ROI.

Automatic reporting: To save you even more time and effort the system should be capable of producing automatic (preferably electronic) reports. Even if you don't use this feature today, you may want to use it in the very near future.

Communication: Operator error is the cause of most problems, so the ideal system should be capable of communicating easily to other equipment on the line – with the trend toward changing products at one control point (HMI) and all linked machines change accordingly.

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Is inspection the magic bullet?

There's no doubt that automating quality processes is the key to delivering the highest quality products. And in today's environment, that is a huge competitive advantage. But there's also a push from the major Australian food and grocery retailers to embrace this technology to enhance product quality and reduce the risk of errors.

We're not saying that inspection systems are the magic bullet – there are other processes and checks that can help. But they are proven to vastly improve processes and reduce the risk of recalls due to packaging and labelling faults. And that can only be a good thing for any manufacturer.

About Matthews

Matthews Australasia, a family business, is the Australian leader in intelligent product identification and inspection solutions for the manufacturing industry. We provide and support coding, labelling, inspection and software solutions that integrate seamlessly into your manufacturing environment to drive efficiency, accuracy and cost-effective processes in your supply chain.

Every day thousands of manufacturers use Matthews' hardware and software solutions to code products; check product and packaging to eliminate coding and labelling errors; inspect products; and capture more data on the factory floor in real-time.

Matthews can help you implement the right hardware and software for your business goals, whether you need a compliant pallet label or an end-to-end product traceability solution.

Matthews Australasia offers a FREE AUDIT for inspection solutions. This is an exclusive offer which includes a site visit and our expertise on how inspection solutions can help improve your production processes or if you already have inspection systems, what you can do to get more out of them.

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