ELIMINATE METALLIC FOREIGN MATTER.

PROTECTING YOUR PRODUCT, EQUIPMENT AND BRAND.
REMOVE STAINLESS STEEL AND FERROUS CONTAMINATION WITH MAGNETIC SEPARATION

AURORA PROCESS SOLUTIONS IS A NZ OWNED AND OPERATED BUSINESS AND HAS BEEN SUPPLYING THE LOCAL AND OFF-SHORE MARKETS WITH HIGH QUALITY MAGNETIC SEPARATORS, METAL DETECTORS AND X-RAY INSPECTION SYSTEMS FOR MANY YEARS, ACCUMULATING A WEALTH OF INDUSTRY KNOWLEDGE AND TECHNICAL EXPERTISE.

1. We're open for discussion: Meet to discuss how we can improve your process, prevent recalls and protect your product, equipment and brand.
2. We're mobile: Our team specializes in on-site consultation, scoping, process surveys and risk assessments.
3. We're solution focused: Our team will work with you to provide the optimum solution, be it customised, adapted or standard.
4. We're mobile: Our team specializes in on-site consultation, scoping, process surveys and risk assessments.
5. We train and educate: We'll help ensure you get the best out of your investment by training operators and key personnel in areas such as health and safety, cleaning, maintenance and operation.
6. We support for a lifetime: We're committed to providing highly competent, accurate and market-leading advice, guidance and solutions for a lifetime. This includes on-going equipment validation, calibration and certification.
7. We install and commission: We have established a network of qualified engineers to ensure your project runs on budget and on-time.

MAGNETIC SEPARATION: OBJECTIVES

AURORA PROVIDES MAGNETIC SEPARATION SYSTEMS TO ACHIEVE NUMEROUS DUTIES/FUNCTIONS IN THE PROCESS INDUSTRY INCLUDING:

- Metallic contamination-free products
- Reduction of contamination, risks and associated consequences such as product recall
- Removal of work hardened stainless steel fines that evade metal detectors
- Reduction of product rejection and associated downtime/product wastage after metal detectors
- Equipment protection and reduction of equipment maintenance requirements
- Satisfying CP Control and HACCP Audits
- Customer satisfaction
MAGNETIC SEPARATION: DUTIES

MAGNETIC SEPARATORS INSTALLED AT STRATEGIC LOCATIONS USING A COMBINATION OF THE BELOW DUTIES WILL PROVIDE EXCELLENT COVERAGE OF YOUR PROCESS LINES.

PRODUCT PROTECTION
This is the Magnetic Separator’s integral duty which minimises the risk of metal fragments and weakly magnetic contaminants such as work hardened stainless steel, rust particles and wear fines (which can evade metal detectors) becoming embedded or incorporated in outgoing products. This duty is aimed at reducing product rejection, and in all events, preventing product recall and its associated brand and customer relation impairment.

INTAKE/TRACEABILITY
The purpose of this duty is to remove contaminants from bulk and/or ingredient intakes at the commencement of the process line. In addition to protecting your plant equipment and having positive impact on product quality, this will also indicate raw materials requiring improved supplier quality controls.

PLANT PROTECTION
These Magnetic Separators are installed prior to equipment susceptible to damage from metallic contaminants. This duty greatly reduces equipment wear and failure which minimises repair costs and production downtime and also contributes positively to final product quality.

INDICATION
The duty of an indication Magnetic Separator is to monitor possible plant failure and provide early warning for urgent maintenance needs. These magnets, positioned after key equipment, greatly reduce the time and cost of identifying sources of contamination from equipment breakdown.

TARGETING:
- Ferrous items and fines
- Work hardened 300 Series Stainless Steel fines
- 400 Series Stainless Steel Items and fines
- Rust
- Magnetic Stone
- Swarf
FORCE® PNEUMATIC LINE

THE FORCE10 PNEUMATIC LINE MAGNET IS THE ULTIMATE SOLUTION FOR EFFICIENT, RAPID AND SAFE SEPARATION OF MAGNETIC FOREIGN MATTER FROM YOUR PROCESS LINES. This unit is comprised of high intensity +10,000 Gauss staggered magnetic bar configuration for maximum product coverage, allowing high-performance separation of ferrous and sub-micron paramagnetic contamination. The magnetic elements are mounted on the revolutionary ‘express-clean’ drawer system for exceptional cleaning efficiency.

FORCE® GRAVITY GRATE

REVOLUTIONARY EXPRESS-CLEAN MAGNETIC SEPARATOR DESIGNED TO OPERATE IN GRAVITY TRANSFER APPLICATIONS

The FORCE10 Magnetic Gravity Grate provides outstanding levels of contamination removal. This unit is comprised of a high intensity +10,000 Gauss staggered magnetic bar configuration for maximum product coverage, allowing for high-performance separation of ferrous and sub-micron paramagnetic contamination. The magnetic elements are mounted on the revolutionary ‘express-clean’ drawer system for exceptional cleaning efficiency.

FORCE® AUTOCLEAN

THE AUTOCLEAN MAGNET IS AN EXCEPTIONALLY EFFECTIVE MAGNETIC SEPARATOR, REMOVING MICRO SIZED WEAKLY MAGNETIC FINES THROUGH TO LARGE FERROUS CONTAMINATION.

By cleaning automatically the Autoclean saves a lot of operator time, H&S issues, breaking the line/hygiene risks, and contamination take inaccuracies. This unit can be operated via a stand-alone control system or linked to your company PLC system for ultimate control.

FORCE® LIQUID LINE

THE PRESSURE & LIQUID PIPELINE MAGNETIC SEPARATORS ARE USED TO EXTRACT AND RETAIN FERROUS CONTAMINANTS AND WORK-HARDENED STAINLESS STEEL FINES FROM WET OR VISCOUS/SLURRY PRODUCTS CONVEYED BY PIPELINE.

The unit incorporates a series of high-strength rare earth magnetic probes, which attract and secure unwanted contamination present in the product stream. Customisable to suit product viscosity, particle size, flow rate etc.
METAL DETECTABLE PRODUCTS

AURORA OFFERS A FULL RANGE OF METAL AND X-RAY DETECTABLE PRODUCTS, WHICH MEET HACCP AND BRC COMPLIANCE REQUIREMENTS.

All products can be detected and rejected by standard metal detection systems and are also x-ray visible.

Our product range includes pens, markets, personal protective equipment, food handling tools, test pieces, metal detectable seals and much more.

FORCE10 BARS & PROBES

HIGH STRENGTH RARE EARTH MAGNETIC BARS AND PROBES ARE EXTREMELY VERSATILE SEPARATORS SUITABLE FOR MANY APPLICATIONS.

Bar Magnetic Separators are available with handles and connection fittings for simple insertion into pipes/chutes/ducts/equipment, housing etc, for easy removal to inspect and clean.

These units can be installed in strategic locations for indication purposes, providing early warning of plant/equipment breakdown and traceability of contamination from ingredient suppliers.

X-RAY INSPECTION

MAGNETIC SEPARATION AND X-RAY ARE BOTH BECOMING INCREASINGLY ESSENTIAL WITH THE MODERN DAY MARKETS INCREASED FOCUS ON PRODUCT PURITY AND PRODUCER RESPONSIBILITY.

X-Ray systems are not only designed for contamination, but are designed to detect and reject a vast range of defects from foreign matter, under-filled or over-filled products, product defects, densities and more. They have advanced variable detection frequencies that can inspect through packaging, including foil, and at high speeds.

METAL DETECTION

METAL DETECTION AND MAGNETIC SEPARATION COMPLEMENT EACH OTHER IN PROTECTING YOUR PRODUCT FROM FOREIGN METALLIC CONTAMINATION.

Highly intelligent metal detection systems for inspecting a vast range of products for metallic contamination. Our metal detectors feature market-leading intelligence and ease of use along with a high standard of construction to provide many years of reliable service.
MAGNET VALIDATION

PROVIDING YOU WITH PEACE OF MIND! IP, BRAND AND QUALITY STANDARDS NEED TO BE PROTECTED AND GUARDED. VALIDATE YOUR MAGNETIC SEPARATORS AND DOCUMENT YOUR SECURITY.

A magnet validation survey is a standard food safety and auditing recommendation required to be carried out on all magnetic separators in processing plants annually. Aurora conducts annual magnet validation surveys using procedures and documentation endorsed by HACCP International.

The magnet validation service provides confirmation of magnet quality by measuring the gauss and matching the results to specifications.

The validation is done by a calibrated gauss meter defining whether the magnet is as effective as it should be and is in the right location. Multiple readings are taken to define average surface strength at the point of product contact with the magnetic separator, on an annual cycle performed by a magnetics technician. This service is completed on site, minimising disruptions to your business.

Once the survey is completed, the results are recorded and validation report documents, providing a reference for auditors and health and safety officials are forward to the client. These outline the current magnetic strength and condition, relevant industry standards, strength trends and recommendations where necessary.

VALIDATION REPORTS INCLUDE:

- Evaluation of whether the magnet is effective as it should be in its particular location
- Evaluation of whether the magnet complies with the relevant industry and company standards
- Evaluation of whether the magnet is the correct type for the application
- The physical condition of the magnet
- The risk of contamination or equipment damage
- If the magnet operation and access is safe
- Whether the magnetic coverage is adequate for the duty required
- Whether the magnetic strength is adequate for the duty required
- The strength history/trend
- Recommendations if required

RISK ASSESSMENTS

THE AURORA MAGNETICS TEAM OFFER A COMPREHENSIVE ON-SITE RISK ASSESSMENT SURVEY TO IDENTIFY YOUR PLANT’S CURRENT LEVEL OF PROTECTION FROM METALLIC CONTAMINATION AND ITS ASSOCIATED RISKS.

Aurora draws on over 40 years of combined experience and market leadership in Magnetic Separation and a long-standing relationship with leading Magnetic Separation consultants to provide quality advice, recommendations and good practice guidelines that are at the forefront of global development and industry regulations.

A team of technicians will visit your site to observe the process in action and consult with staff to gain a thorough understanding of the plant’s operation.

Once sufficient information is gathered we will present a comprehensive report detailing methods to mitigate identified risks, and provide on-going support throughout any implementation requirements.

Many market leading brands have taken advantage of this service and have proven the extensive benefits of an efficient and effective magnetic separation system.

Call us now – make us part of your process.
DAIRY FACTORY – HAMILTON

“This design job involved a very difficult application, with highly customised components. We installed a FORCE 10 gravity grate. This rare earth magnet was researched and installed by Aurora and has the highest strength gauss rating of any such magnet in the country.

When working with food products even the most minute dust-like particles must be removed and this system does the job completely.

I was impressed by the depth of engineering knowledge shown by Aurora, not to mention showing a constant interest in researching further at every new challenge.

The project involved a very difficult application and was experimental but throughout the process we found Aurora to be very professional and excellent to work with.”

DAIRY FACTORY – SOUTH ISLAND

“In my opinion they are one of the best service providers. They are very knowledgeable. They know their products and are very professional.”

“The machine’s magnet is much stronger [than previous machines] so the function is very good from a physics viewpoint, It is very good looking with a very elegant design.”

“Aurora has raised the bar. The previous magnet was labour intensive to clean as it was heavy and cumbersome. We no longer have these problems. The operators and plant manager are very happy with the user-friendly design. We don’t have to worry about the previous issues.”

PROCESSING FACILITY - NORTH ISLAND

“Aurora listened to what we wanted and sourced the machine we needed. They then programmed it to what we wanted and installed it,”

“It was a complicated thing they were having to do but they were good, and they were always very pleasant to deal with... communication was great.

Aurora was recommended... and delivered on high expectations. “We were happy with their product, price and service, and with their performance,”

FOOD MANUFACTURER – HASTINGS

“They bring their equipment and there’s very little disturbance to the plant. Aurora tests our magnets for effectiveness and we get a good service from them. From there we get a report, with recommendations and it means we’ve got traceability, which is important in our industry.”

“Aurora fits in with us and they’re aware of the environment. They are willing to wait and don’t interfere with what’s happening at the plant,”

“I can’t fault them, they are very personable, very quick and easy to communicate with. Every dealing with Aurora is positive.”