

clever thinking : clear design

PROCESS EXTRACTION SOLUTIONS

METAL PACKAGING





WELCOME TO IMPACT AIR SYSTEMS

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IMPACT & THE METAL PACKAGING INDUSTRY

Impact Air Systems design, manufacture, and install a vast array of air-based material conveying solutions including waste, trim and scrap conveying systems, dust, fume and odour control systems.

Our solutions can be found hard at work in many different industries all over the world including beverage can and can ends manufacture, paper, carton and cardboard, printing and conversion, foil, film, textiles, automotive and healthcare through to material recycling or recovery facilities.

With over 30 years of trading experience, Impact Air Systems is built around core quality values, vast industry experience and are at the forefront of technological developments to ensure solutions are world class, exceeding the individual needs of every customer.

Impact Air Systems is highly regarded among can manufacturers, consultants, plant designers and OEM suppliers alike, for providing high quality, robust, well executed, cost effective solutions. We have provided solutions to many well-known manufacturers in the beverage can industry, installing systems worldwide which play a vital part in the efficient production and safe working environment they demand.

INNOVATIVE DESIGNS

We recognise and support the responsible production you must maintain by providing you with innovative, energy efficient designs and systems. Our systems are reliable, robust, well considered and compliant with international standards and directives. Our engineers use the latest 3D modelling software and our installation teams are highly trained and fully accredited.

Our experience and expertise enable us to design and install bespoke solutions to compliment the stringent demands of the modern production facility, ensuring a clean and safe working environment, whilst recovering valuable waste material for recycling and ensuring unwanted dust or fumes are handled safely and effectively.

We have been designing bespoke air-based material conveying solutions for over 30 years and our extensive range of systems are specifically engineered to support the beverage can manufacturing process. Our team have extensive knowledge of the can making process and take great pride in ensuring the solutions offered meets with all the individual requirements of the production facility.



SYSTEM BENEFITS

From increased revenue from aluminium recycling to an improved working environment, there are many benefits that an Impact Air Systems solution can provide.

All Impact systems fully comply with NFPA 654, 91, ATEX & COSHH regulations



Over 30 years of british engineering and expertise in the metal packaging sector



Vastly improved working environment by extracting odours, nuisance dust and oil mist and vapours from facility

Innovative and energy efficient solutions. Tailored packages to suit your needs.



Custom designed for your specific facility layout

Significantly improve the value of recyclate aluminium and steel recovery through scrap handling



System modifications for existing systems available

Processes a wide variety of beverage can sizes and shapes at line speeds of up to 2500cpm



Long life, thermally insulated, ductwork used. State of the art, easy-to-use system controls, system training and support provided

Fully automated bale handling for continuous production



A dedicated after sales and field services team



SCRAP HANDLING SOLUTIONS

To support the high-speed removal of steel or aluminium scrap from cupping presses, body maker trimmers and reject can collection points, Impact Air Systems provide robust, efficient and cost effective scrap handling systems, which convey the waste material to centralised collection areas for baling and recycling.

Features include: Whole can/scrap collection hoppers or telescopic extraction nozzles, oil mist separation, chopper fan, specially adapted high durability ductwork, advanced screen separators and baler feed weigh hoppers and even fully automated robot bale handling.



WHOLE CAN & SCRAP TRIM COLLECTION



REJECT CAN PICK-UP POINTS



SWEEP-UP COLLECTION POINTS



BRIGHTS & DECORATED SEPARATION



MATERIAL HANDLING FANS





A key element of our latest robot bale handling and palletising cell allows finished bales to be stacked into separate bright and decorated loads, without using wooden pallets. A 'pallet free' pattern enables stacking of bales into a payload for strapping, leaving fork truck lifting voids, resulting in aluminium scrap that can be transported for recycling without the need for costly wooden pallets, therefore increasing the revenue generated for recovered waste aluminium. The bale stacking pattern also ensures maximum vehicle payloads are achieved once the material is ready to leave the facility for re-melting.

ROBOTIC HANDLING AND BALING

The high production output typically seen in beverage can facilities, means that a significant amount of scrap material must be collected for recycling. Bales need to be stacked into manageable pallets to enable them to be transported offsite for remelt. Historically, this task has been manual or more recently, by using automated robot bale stacking, where bales are stacked onto a wooden pallet for ease of movement.



PROCESS EXTRACTION SOLUTIONS

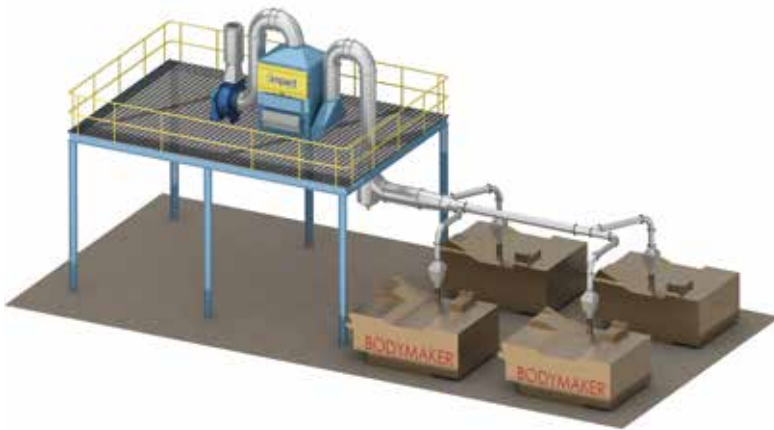
SCRAP EXTRACTION AND ROBOTIC BALE HANDLING



System features

- Requirements to support modern high-speed lines
- Backup/standby system redundancy
- Heavy duty ductwork and system components
- Energy efficient system design and ductwork layout
- Segregation of waste into bright and printed scrap
- Bale size and weight variations between bright and printed scrap
- Palletless bale stacking configuration
- Vehicle payload and after site transportation reduction
- 4 or 6 axis robot configurations
- Automatic bale stack strapping

OIL MIST EXTRACTION SYSTEMS



System features

- Specially selected conveying ductwork with leak free joints and seals
- Local impingement filter usually mounted above the bodymaker to remove excess fluids
- Energy efficient ductwork design and conveying velocity to minimise operational running costs
- Latest hyper oil multi-stage self-cleaning filtration technology achieving a separation efficiency of 99.95MPPS according to EN1822 standards
- High efficiency clean air fans
- Easy maintenance and replacement of filtration media

PRINTER INK MIST AND OV MIST EXTRACTION



System features

- Specially developed ink duct capture hoods
- Suitable for up to 8 colour printers
- Separate large droplet collector for OV mist
- Simple but effective filtration solution
- Can be ducted into cold concentrator circuit if required

PRINTER COOLING MODULE



System features

- Data logging for performance analysis
- Individual ink head and gearbox temperature control
- Can be supplied to support multiple decorators
- Automatically diverts water through a heater to avoid overcooling of the inker heads when selected low temperature is reached

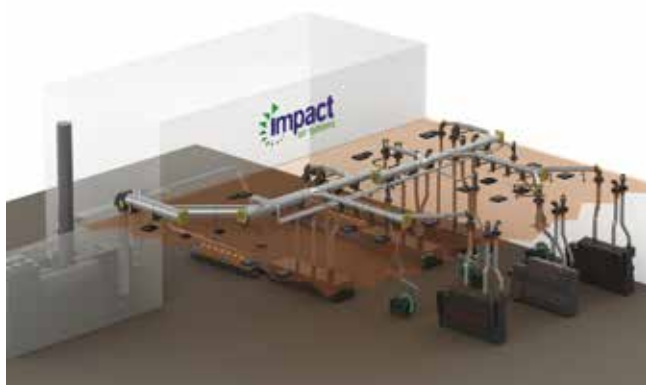
SPRAYS LACQUER AND CAN CONVEYING FUME EXTRACTION



System features

- Very high explosive lacquer (ATEX ST3 dust) considerations
- Specially selected ductwork earthing and electrically conductive seals or earthing bridges
- Latest technology self-cleaning dust filters
- Incorporating absolute/ HEPA filter media

PROCESS EXHAUST STACKS



System features

- Centralised hot and cold roof ductwork systems designed to collect solvents, fume and odours from multiple ovens or discharges systems
- Explosion protection systems
- Bypass and standby functions
- Thermal lagging and condensation protection systems

WORLDWIDE SUCCESS

Impact Air Systems extraction solutions play an integral part in the aluminium and steel packaging manufacturing process. As an industry leader in this field, our experience allows us to design, manufacture and install a bespoke system to meet individual requirements, ensuring a clean and safe working environment and valuable recovery of waste material.



CLIENT FEEDBACK

"We are very impressed with high level of professionalism we experienced from Impact. Their knowledge of the systems they install and also of the beverage can manufacturing process is extremely reassuring.

From start to finish they worked to a very high standard and all members of the team were polite and courteous at all times.

We would highly recommend Impact and will continue to work with them on future projects."

"Punctual, reliable and a pleasure to have on site."

"Impact are a company that move with the times ensuring the systems they design and install fit and work around the latest technology in our can manufacturing facilities. This is why they are always our first port of call."

"A thoroughly professional company who understands the needs of the customer and delivers an outstanding service."

"Impact went the extra mile to ensure customer satisfaction. We would definitely use them again and recommend them to other can manufacturers."

PROUD TO WORK WITH...



CROWN



Nampak
packaging excellence





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