



# IRON REMOVAL



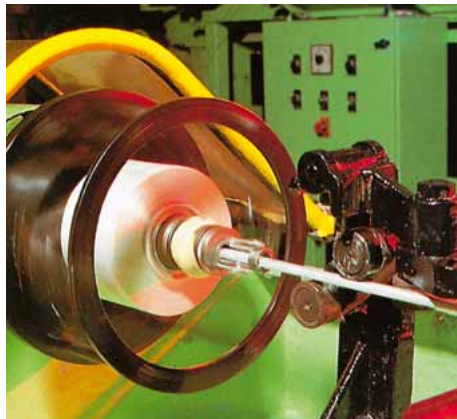


## RECOGNIZED KNOW-HOW

For over 50 years, the quality of our production has been guaranteed by the long service life of our products which assures of minimal maintenance. In terms of productivity and safety our proven methodology will more than meet your expectations. Our know-how in the fields of industrial magnetism, linked to our values of service and quality leads to the recognized performance of all Andrin products.

## QUALITY REFERENCES

Our personal commitment is based on our know-how, our idea of service, our technology, and our compliance with deadlines and budgets. Our production favours your productivity, safety and reliability requirements. We analyze and implement all our activities in compliance with your constraints.



The following companies place their confidence in us :

Arbed	Lux.
Cockerill-Sambre	Bel.
Companie Française des Ferrailles	Fra.
Correns	Jap.
G.D.E.	Fra.
Générale des Eaux	Fra.
Krupp	Germ.
Lyonnaise des Eaux	Fra.
Pechiney	Fra.
Polysius	Germ. Fra.
Sider	Alg.
Sollac	Fra.
Thyssen	Germ.
Usinor-Sacilor	Fra.



## AN IDEA OF SERVICE

Our specialist multidisciplinary teams are equipped with technological resources suited to best meet your requirements. The results we have obtained guarantee our reputation. Our everyday ambition : to know you, listen to you, understand you, anticipate your needs, be at your service, and satisfy you, our valued customers.



## APPLIED ENGINEERING

Having a firm grip on your company's specific problems, we are in a position to help you gain from our capabilities in technical appraisal and advice. Our design office has skills in metal, mechanical and electrical construction and automation, and is able to make recommendations, to design, assemble, build and provide operating follow-up.

Experience gained in the industrial world of high-quality assurance constraints guarantees Andrin product output and reliability. We bring you an optimal service, capable of meeting all your needs and all your expectations for a processing plant with magnetic separation. We are with you at each stage building a plant, drawing up design, implementing the procedures for the manufacturer, assembly and commissioning of an industrial operation.

Our engineers and technicians also visit to improve your existing plants, specify the investment required, and recommend cost-effective solutions.

## IRON REMOVAL

Experience gained in industrial magnetism over more than 50 years enables us today to be the Iron Removal Specialist in continuous flow bulk products. We offer an extensive range of products suited to all your iron removal needs.

Our ferrous metal magnetic and electromagnetic separators are used on all five continents.

### ■ Why remove iron ?

The removal of iron from transported products within the context of continuous handling is required when it is necessary to :

#### ■ Protect

Magnetic equipment protects production tools like crushers, calendering machines, presses, grinding machines, etc, against magnetic parts able to damage these machines. This protection improves productivity by reducing production stoppages and repairs.

#### ■ Refine

Certain products have to be guaranteed free from any ferromagnetic particles or parts, so the iron particles have to be extracted with magnetic equipment. A number of raw materials require a high degree of quality : glass, wood, paper, plastics, chemical products, fertilizer, food - processing products, minerals, coal, etc.

#### ■ Select and sort

Our separators are designed for sorting and extracting ferrous parts mixed with other non-magnetic materials. The applications are numerous, and apply to many products : coal, cement, sand, clinker, household waste, etc.

Ferromagnetic parts recovered in this way can be upgraded by the recycling industry, to which the products of Andrin Iron Removal are fully appropriate.



### ■ An appropriate range

Our range of products has been designed to blend totally with the materials to be processed, the desired sorting quality and your handling line. A table summarizing uses enables you to see the different possible layouts. We offer you four families of equipment :

- Closed revolving separators (drums)
- Suspended magnetic units
- Overbands
- Magnetic pulleys.

The magnetic unit is permanent or electromagnetic depending on the desired power.



### ■ Industrial design

Our equipment is suitable for each specific plant requirement. Their industrial design, nevertheless, enables you to benefit from standardization of their component parts. Maintenance is made easier. Our experience in the iron removal field makes the Andrin trademark a reference in terms of quality, output and reliability. Moreover, some of our equipment is offered to you with patents, the fruit of our design and innovation, a result of listening to your customers.

## QUESTIONNAIRE IRON REMOVAL

### CHARACTERISTICS OF THE PRODUCTS MATERIAL TO HANDLE

- |                         |  |                                 |                                     |
|-------------------------|--|---------------------------------|-------------------------------------|
| <b>1. Type</b><br>_____ | <b>2. Flow (m<sup>3</sup>/h)</b><br>_____      | <b>4. Granularity</b><br>_____  | <b>6. Temperature (C°)</b><br>_____ |
| _____                   | <b>3. Density (kg/dm<sup>3</sup>)</b><br>_____ | <b>5. Humidity (%)</b><br>_____ |                                     |
| _____                   |  |                                 |                                     |

### FERROMAGNETIC TO REMOVE

- |                         |                          |                                |  |
|-------------------------|--------------------------|--------------------------------|--|
| <b>1. Type</b><br>_____ | <b>2. Shape</b><br>_____ | <b>3. Max. weight</b><br>_____ | <b>5. Quantity per hour</b><br>_____                     |
| _____                   | _____                    | <b>4. Mim. weight</b><br>_____ | <b>6. Presence</b><br>Continuous ____ Extraordinary ____ |
| _____                   | _____                    | _____                          |  |

### CONTINUOUS HANDLING EQUIPMENT

#### Conveyor belt

- |                                       |   |
|---------------------------------------|---|
| <b>1. Width</b><br>in mm _____        | <b>4. Burden depht</b><br>in mm _____               |
| <b>2. Speed</b><br>in m/s _____       | <b>6. Widht of product</b><br>in mm _____           |
| <b>3. Shape</b><br>_____              | <b>7. Head drum</b><br>Ø in mm _____                |
| <b>4. Incline</b><br>in degrees _____ | <b>8. Steel structure belt</b><br>yes ____ no _____ |

#### Shoot

- |                                     |                                       |
|-------------------------------------|---------------------------------------|
| <b>1. Inside size</b><br>_____      | <b>2. Incline</b><br>in degrees _____ |
| <b>3. Chute</b><br>by gravity _____ | other _____                           |

#### Vibrator

- |                                  |  |
|----------------------------------|--|
| <b>1. Sizes</b><br>Leng-th _____ | <b>2. Incline</b><br>in degrees _____                          |
| Width _____                      | <b>3. Motorization</b><br>Electromeca. _____ Electromag. _____ |
| Height _____                     |  |

### ELECTRICAL INSTALLATION

- |                                 |                                 |                                    |
|---------------------------------|---------------------------------|------------------------------------|
| <b>1. Voltage</b><br>Volt _____ | <b>2. Frequency</b><br>Hz _____ | <b>3. Number of phase</b><br>_____ |
|---------------------------------|---------------------------------|------------------------------------|

Company \_\_\_\_\_ Dated \_\_\_\_\_

Address \_\_\_\_\_ Contact person \_\_\_\_\_

\_\_\_\_\_ Title \_\_\_\_\_

Telephone \_\_\_\_\_ Fax \_\_\_\_\_

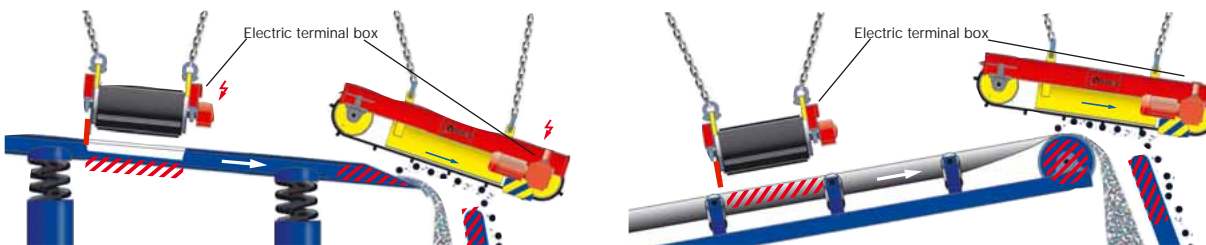
ASP



ASA



OVBP



OVBA



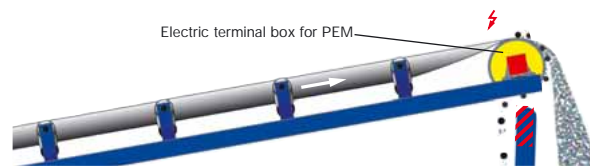
TEME



TMAP



PMAP - PEM



/// Non-magnetic area

Waste

• Ferromagnetic parts

## OUR KNOW-HOW



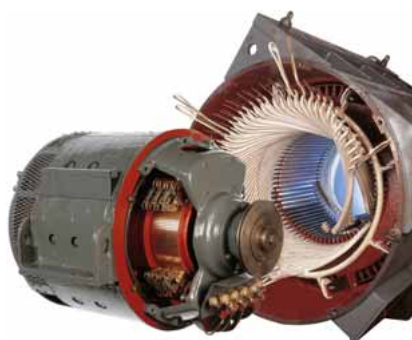
### ■ MAGNETIC LIFTING

Magnetic and electromagnetic lifting equipment combines force, durability, reliability, productivity and safety, enriched by numerous undertakings linked to experience gained in all the big traditional sectors such as metallurgy, the steel industry, ferrous recycling, shipyards, and steelwork.



### ■ METAL EXTRACTION

We guarantee results which link performance, reliability and technological solutions, to continuous innovation. Our control of Eddy currents, metal sensing, magnetized compressed air and electrostatic forces enables us to solve numerous cases of non-ferrous metal separation. Using our products, durable solutions can be reached for bulk product sorting in continuous handling.



### ■ ELECTROMECHANICAL HANDLING

Our company is based on electromechanical maintenance. Our analysis and follow-up methods offer you every technical and cost effective solution. All our visits for assembly, dismantling, renewal, bringing up to standard or updating revolving machines are punctiliously carried out with optimal operation guaranteed.



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