



*More Than Business*

# **BDR** **Shredders**

Versatile equipment | Robust and reliable | Clean and uniform cut

# ABOUT MTB

Leader in complex industrial waste recycling, MTB designs, manufactures, and sets up single machines, as well as complete recycling line, worldwide.

Both operator and manufacturer, MTB's strength relies on the fact that we know and understand our customers' issues, as we have faced them over the past decades, thus mastering our technologies and recycling processes. This gives us the distinctive ability to offer innovative solutions tailored to our clients' requirements.

With more than 40 years of experience, MTB has acquired a tremendous amount of expertise in the waste recycling industry, so we anticipate the requirements of a constant evolving industry. Our unique model provide us with cuttingedge tools that are unrivaled in the industry.

Our efficient engineering office enables consistent improvements on the conception of our tailor-made machines and helps us maintaining our technological advantage. Our goal : an operating efficiency in continuous progress and an optimal quality for the final products. Indeed, as an end-user, we thrive over the product quality, which stands out on the market !

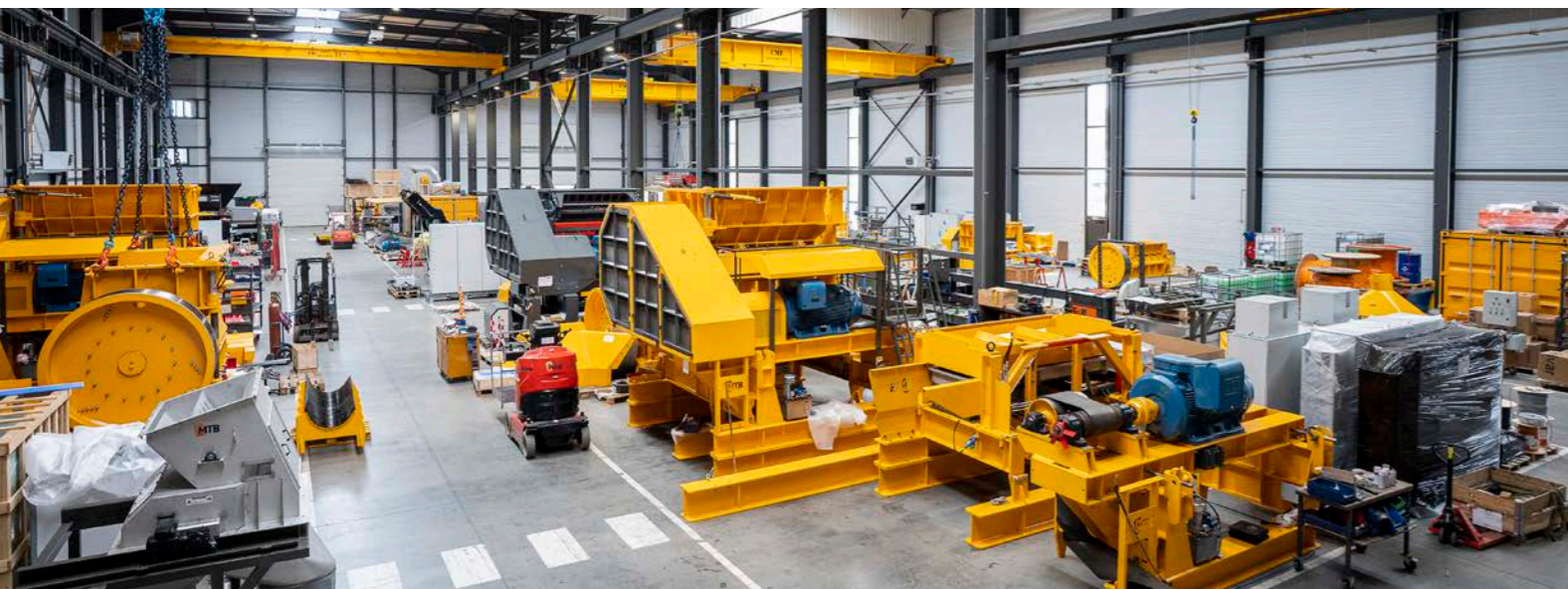
All the manufacturing and assembly operations are handled in France, within our facility in Saint-Chef (Isère).

## Engineering know-how gained from experience

Each MTB machine can be integrated into complete recycling line by our Engineering Office. The conception of such lines is focused on giving the most value to our customer, by obtaining final products with the highest quality.

Our vision and method have been influenced by the daily use of our production lines. This is how we have been able to create one of the most efficient tool on the market.

As an end-user of our own machine, we display the perfect showcase to our customers, thus proving our technological lead.



BDR 2400 R

## BDR SHREDDERS

### Designed for durability and versatility

The BDR range of versatile shredders is characterized by its robustness and its operating torque obtained with the clutchmounted flywheel (up to 5 tons). Fed by grapple or conveyor, they allow the reduction of a large number of products down to sizes between 10 and 100 mm depending on the grid used. The special treated alloy steel cutting blades which could be turned around 4 times and the wear parts of simple shape guarantee very low operating costs. The easy blade adjustment and grid mount systems minimize downtime for maintenance.

The high performance BDR shredders are designed for the precise handling of various types of complex industrial wastes.

### Application specialities

- Cables
- Aluminum profiles
- Ferrous scrap
- Tires
- Electronic wastes
- Radiators Al/Cu
- ACSR



# BDR SHREDDER **ADVANTAGES**

## **A robust hopper**

The feed hopper has been designed to withstand the shocks associated with grapple feeding. The hopper can be adapted for conveyor feeding.



## **Homogeneous output particle size**

Thanks to its quick-change screen system, the BDR is able to provide a precise, calibrated particle size.

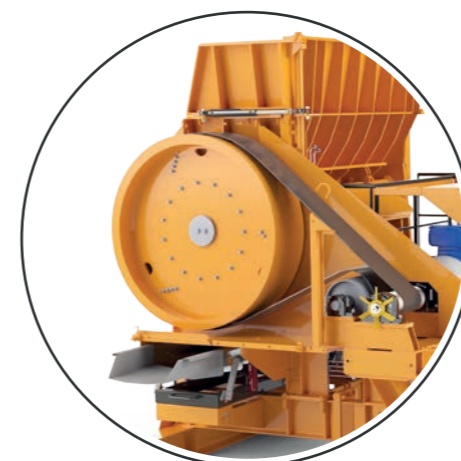
Output sizes range from 10 mm to 100 mm. Various screen models are available, with sizes and shapes to suit different types of waste.

## **Easy maintenance**

Thanks to hydraulic assistance, accessing and changing screens is quick and easy.



*BDR 2400 U*



## **A heavy duty flywheel**

The flywheel mounted at the end of the rotor will provide high-torque to cut through thicker particles without stalling.

## **Clever adjusting screws system**

Thanks to pushing screws and bolts design accessible from the outside of the cutting chamber, it is possible to adjust the gap between fixed and mobile blades without opening the machine.

## **Optimal blade design**



The BDR has fixed and mobile identical blades. For operators, there is therefore only one reference of knife to manage. Moreover, these blades are parallelepiped and can be used 4 times by being turned over successively.

The blades are made of a proprietary steel alloy. Their shape guarantees optimum robustness which drastically extends their lifespan and allows keeping operating cost down a minimum.

## **Torque limiter protection**

When a solid object enters the cutting chamber by accident, it can generate serious risks if the machine isn't designed to handle it.

In BDR systems, a clutch between the flywheel and rotor halts the rotor instantly if solid objects enter the cutting chamber, preventing damage. MTB's unique shredder design maximizes rotating mass inertia while ensuring safety in case of malfunctions.

# THE PERFECT CUTTING DESIGN

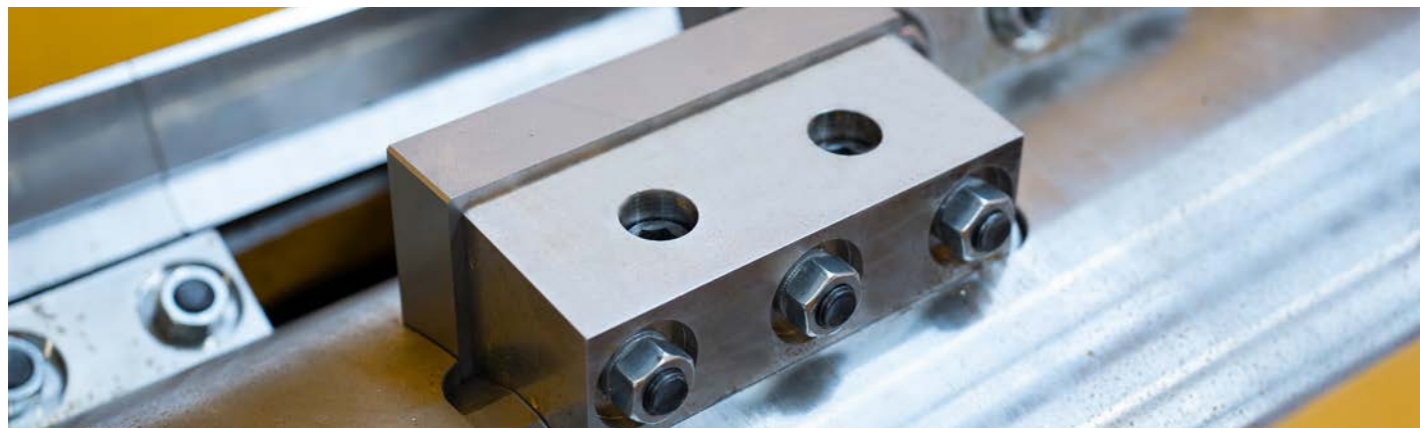
Complex materials require the best cutting system.

Powerful cutting technology, combining a single rotor and flywheel, ensures extreme efficiency on complex industrial materials such as non-ferrous metals, aluminum profiles, electronic scrap, tires, radiators, etc.

The system of interchangeable fixed and mobile blades guarantees consistent cutting precision, for optimum throughput and granulometry.



*Sample of crushed aluminum cable*



*Blade and blade holder*

# THE FLYWHEEL



*BDR 1645 Flywheel*

When the shredding capacity increases or when slightly more difficult parts reach into the cutting chamber, the shredder must be able to get over these “sticking points”.

The BDR Shredders are equipped with a flywheel (up to 5 tons and of 2 meters of diameter). Hence with a lower loaded mass, the inertia generated is finally up to three times more important. The weight/power ratio is then optimized.

The rotor rotates at a rather slow speed but with high torque, providing unmatched cutting precision.



BDR 1645

# EASY MAINTENANCE

To simplify maintenance operations and reduce intervention times to avoid production loss for the operator, MTB has chosen to equip its shredders with simple, robust opening and clamping systems that are above all easy to handle and reliable.

Thanks to the push-button operator's console located close to the machine, all commands required for maintenance operations can be carried out simply and safely.

The upper frame, clamped in the closed position by a working operating system, is unlocked and opens automatically and opens automatically to allow access to the rotor and moving blades.

Likewise, screen holder raising and clamping are managed directly from the operator console.



*Image of a BDR 1645 during maintenance*

The BDR 1645 is a concentrate of innovation in terms of maintenance. Everything has been designed to make operators' work easier and save time.

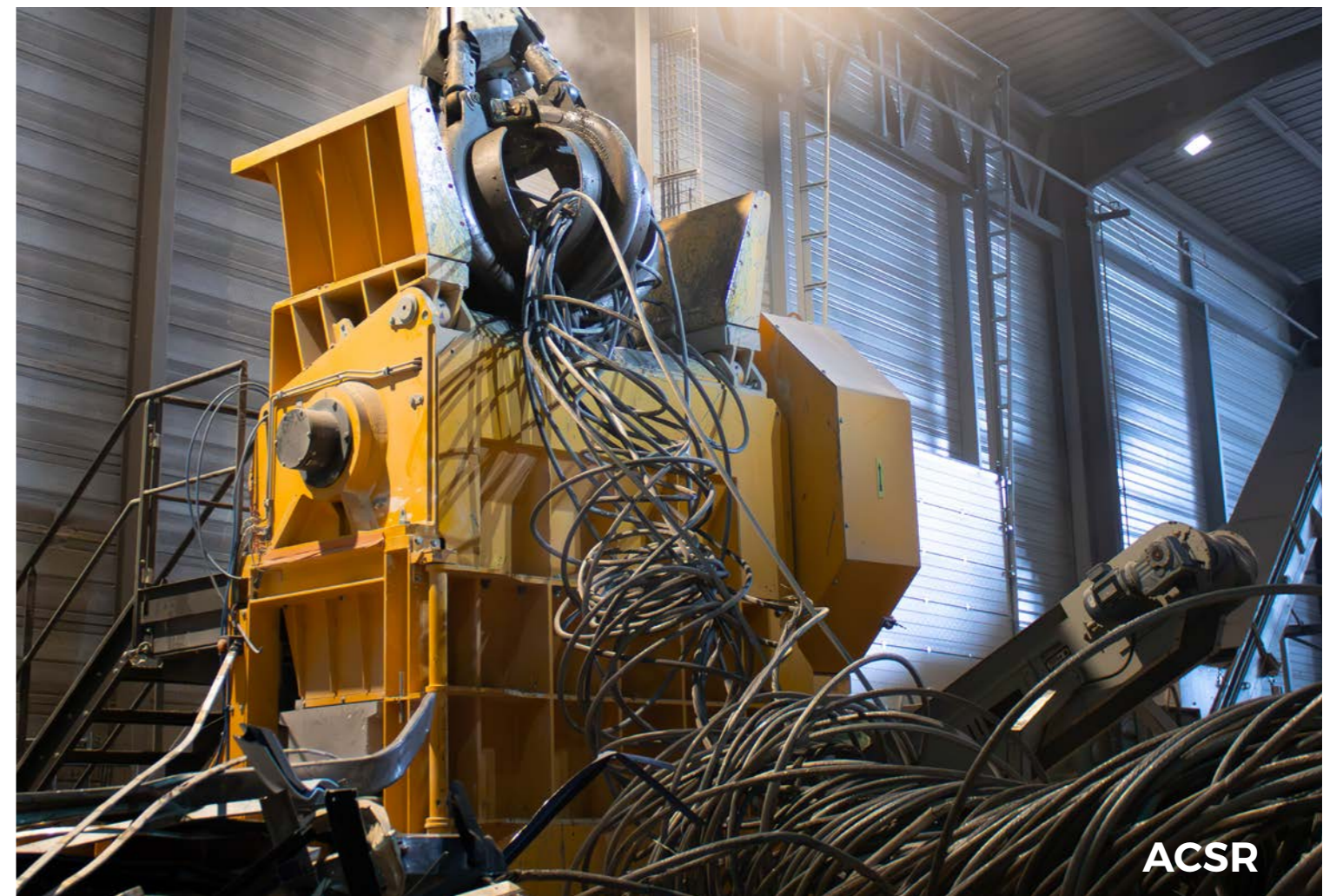
The hopper tilts forward with the help of a hydraulic pump to provide easy access to the cutting chamber and therefore to the blades.

Access to the screen feeder is also very comfortable, since after opening the front door, you can slide a platform to be at the perfect working height. Once again, hydraulic assistance is provided for raising and lowering the screen holder and for tilting the screen to change it.

PERFECT FOR **COMPLEX INDUSTRIAL WASTE**

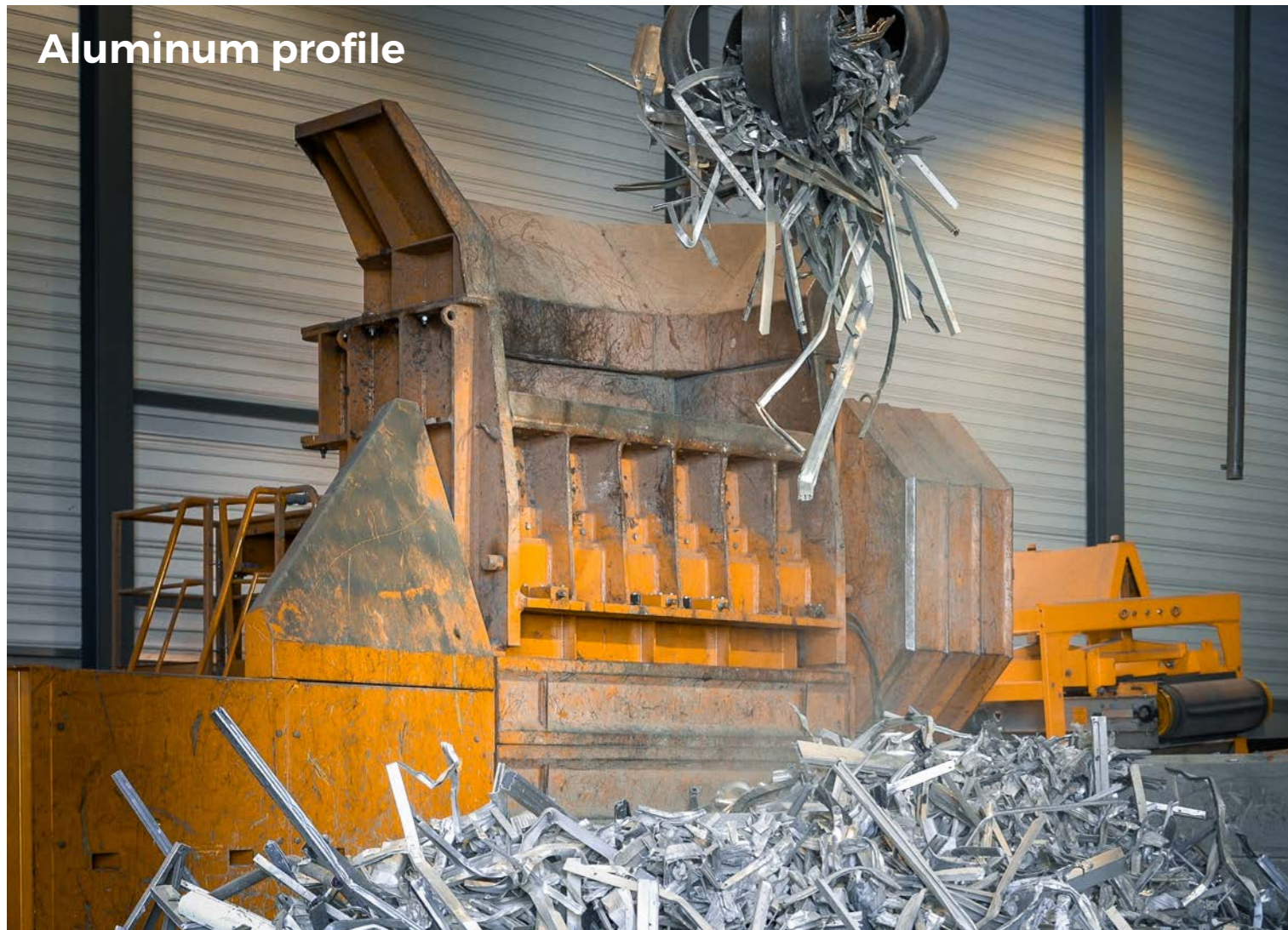


Greasy cable



ACSR

Aluminum profile



E-scrap



# BDR SHREDDER RANGE

## **BDR** 2400 U / R



TECHNICAL DATA	<b>BDR</b> 2400 U	<b>BDR</b> 2400 R
Power	220 kW - 300 hp	280 kW - 375 hp
Weight	27 T	30 T
Quantity of fixed blades	12 blades	12 blades
Quantity of mobile blades	36 blades	36 blades
Rotor length	2400 mm - 94,5 inch	2400 mm - 94,5 inch
Cutting speed	110 - 145 RPM	110 - 125 RPM
Blades dimensions	28 x 56 x 195 mm 1,1 x 2,2 x 7,7 inch	38 x 78 x 195 mm 1,5 x 3 x 7,7 inch

## **BDR** 1645 / 1245

TECHNICAL DATA	<b>BDR</b> 1645	<b>BDR</b> 1245
Power	132 kW - 180 hp	90 kW - 120 hp
Weight	13 T	7,5 T
Quantity of fixed blades	8 blades	6 blades
Quantity of mobile blades	24 blades	18 blades
Rotor length	1600 mm - 63 inch	1200 mm - 47,2 inch
Cutting speed	120 - 170 RPM	140 - 180 RPM
Blades dimensions	28 x 56 x 195 mm 1,1 x 2,2 x 7,7 inch	28 x 56 x 195 mm 1,1 x 2,2 x 7,7 inch



**BDR** 1645



**BDR** 1245

# YOUR BENEFITS

## A long-term investment in robust equipment

- The most powerful machines on the market
- Lifetime up to 35 years
- Robust design with plate thicknesses of up to 100 mm

## Reduced operating costs

- No need for pre-sorting upstream of the shredding stage
- Increased blade durability
- Easy maintenance for short production downtime

## Enhanced operator safety

- Easier maintenance thanks to improved equipment design and accessibility
- Improved safety for teams, with less handling of heavy and dangerous parts

## Premium services

- Customized engineering
- Experience from being operator
- On-site installation and commissioning
- Training on both operation and crane feeding
- Ultra-responsive customer service

BDR 1245 inside a CableBox



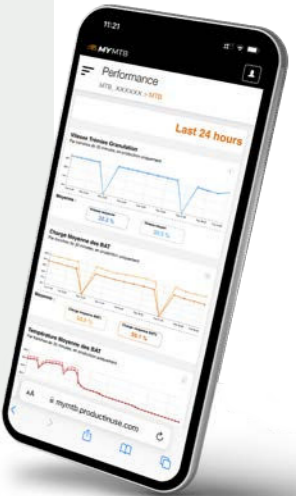
An all-in-one tool for more productivity

MyMTB is an intelligent platform on which all your MTB equipment is connected. All machines from your entire system are constantly monitored and analyzed thanks to a powerful sensor system.

The MyMTB application processes all the data received in real time, and allows you to improve your use of MTB machines in order to obtain a better efficiency.

Through performance indicators, you will be able to analyze your production trends to optimize your installation but also anticipate maintenance needs.

All data is protected and stored in a secure area. You will be able to access it by authenticating yourself on the application, no matter where you are.



### Production overview

- Operations analysis
- Energy consumption tracking
- Downtime tracking and reduction



### Support center

- On-line trouble shooting
- Technical support request
- Request follow up & history

### Equipment Inventory

- Processing lines or equipment overview
- Warranty period



### Documentation library

- Operators Manual
- Electrical Drawings
- Customer documentation

### Telematics Data

- Machine Status
- Machine fault
- Associated reports & alerts



### Notifications Center

- Mail alert
- Production reporting





# CUSTOMER SUPPORT

## TRAINING AND COACHING

Our experts will train you before commissioning the machines, to give you the keys to success.

## CUSTOMER SERVICE

We're here to advise, troubleshoot and supply spare parts at short notice.



## INSTALLATION - MTB SERVICE

Technicians specialized in the installation and repair of our equipment, able to operate rapidly anywhere in the world.

## CHARACTERIZATION AND ECO-DESIGN SUPPORT

Our eco-innovation team, the group's R&D unit, supports manufacturers in their circular economy initiatives.

We offer 4 levels of support :

- 1.AWARENESS
- 2.INVESTIGATION
- 3.IMPLEMENTATION
- 4.DEVELOPMENT



Visit our website

[www.mtb.fr](http://www.mtb.fr)

