PELLENC ST
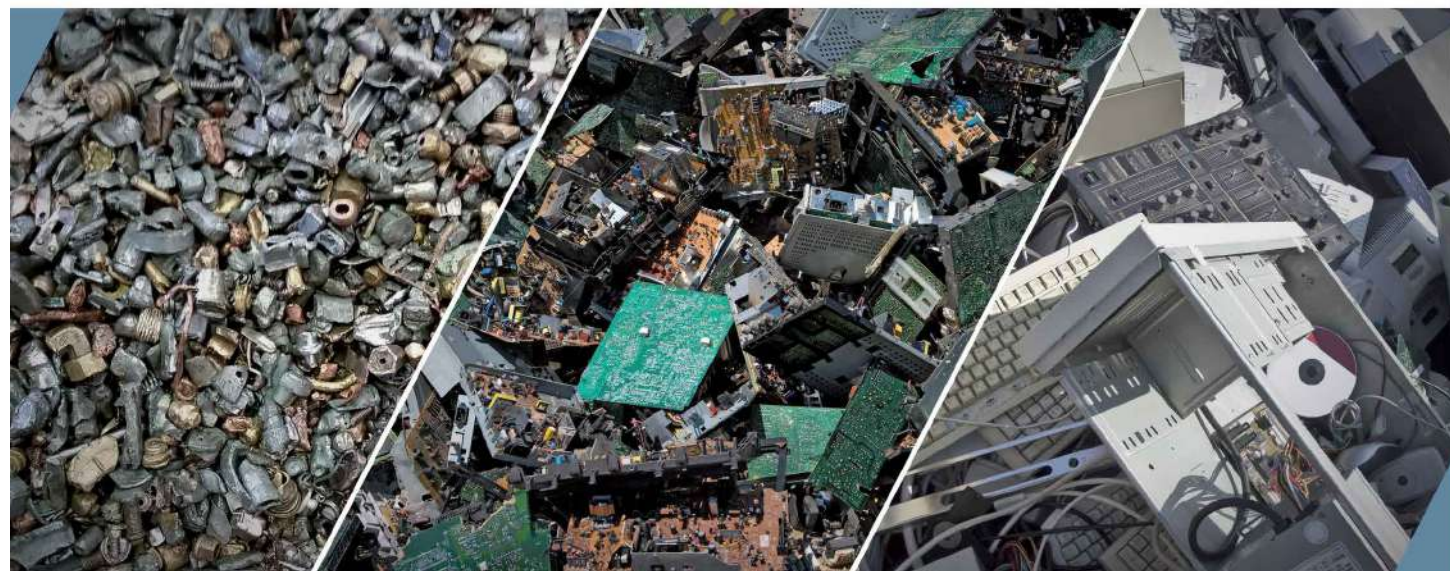
SELECTIVE TECHNOLOGIES

METAL AND **E-WASTE** SORTING

PELLENCST.COM

MISTRAL TRIUM

The **Mistral Trium** combines **three technologies**: NIR Spectrometry, Visible Spectrometry, Inductive Sensing. This powerful combination machine has a high detection sensitivity of metal backed with the quality of resolution and detectability of materials and colors of the renowned Pellenc ST Mistral Machine.

THE
TECHNOLOGY

With the **Mistral Trium**, Metal detection is achieved using a state-of-the-art inductive sensor with **adjustable sensitivity**. The benefits of Inductive Sensing over other metal detection technologies include the ability to detect all kinds of metals: ferrous, non-ferrous (including, for example, stainless steel).

NIR spectrometry and Visible spectrometry by Pellenc ST count among the most advanced optical sorting technologies available on the market for detection and separation of materials and colors. It has been satisfying the needs of even the most demanding customers for over a decade, and has been installed on more than 1,000 machines worldwide.

ADJUSTABLE SENSITIVITY

THE
BENEFITS

HIGH SENSITIVITY
all-metal, detection

ABLE TO DETECT metal particles down to 1.5 mm in size, at 3 m/s

UNIQUE COMBINATION
of three leading technologies: inductive, NIR Spectrometry, Visible Spectrometry

ENHANCED SOFTWARE
and combination capabilities

PERFORMANCE MONITORING
and display wth Pellenc ST's unique software feature Stat Pack

Able to detect metal particles down **to 1.5 mm in size, at 3 m/s**

1,5mm

TRIUM
APPLICATIONS

Metal or E-Waste streams (large or small domestic appliances, End-of-Life Vehicles, Electric and Electronic Waste, scrap metals…)

SCRAP METALS
Sorting by color (copper from grey metals for example)

STAINLESS STEEL
As well as any kinds of ferrous and non-ferrous metals

PCBs
Through powerful signal combination

WIRES
Insulated copper wires through advanced software features

PMMA
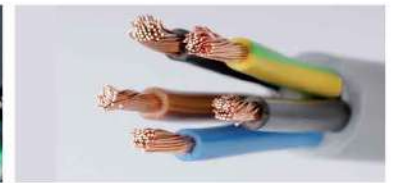Acrylic screen glass

LAMINATES
Or hybrid materials

CASE
STUDIES

PCB: MTB, France
Positive one-step sorting of PCBs

ICW: Confidential, Europe
Positive one-step recovery of insulated wires (metal/NIR combination)

XPERT

Xpert is **the x-ray machine** designed by Pellenc ST to identify and separate products containing heavy atoms from lighter atoms.

THE
TECHNOLOGY

The Pellenc ST Xpert is a high-tech optical sorting equipment based on dual-energy X-Ray transmission technology. It detects and sorts objects based on their atomic density. The Xpert has reliable hardware features such as an X-ray sealed tube and HV generator, a technology that has proved its efficiency with 30 years in the industry.

THE
BENEFITS

DUAL-ENERGY DETECTOR
for enhanced sensitivity and results independent from thickness

EXTENDED LIFETIME
with HV generator with sealed tube up to 15000 hours

STANDARD, HIGH-RESOLUTION AND HIGH-POWER NOZZLE bars available

HIGH RADIATION PROTECTION
standards, NF C74-100 and NF C15-160 accredited

XPERT
APPLICATIONS

SEPARATION OF METALS by atomic **density:** Aluminum, Magnesium vs Copper, Zinc

SEPARATION OF ALUMINUM
From wires, rubber and black objects

SEPARATION OF BFR LOADED PLASTICS
Brominated flame retardant loaded plastics

LEADED VS NON-LEADED GLASS
Such as cathodic screen waste

SEPARATION OF STONES, GLASS, METALS
From a wood or organic stream

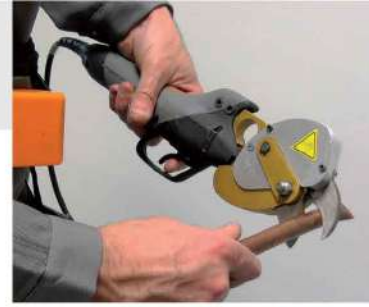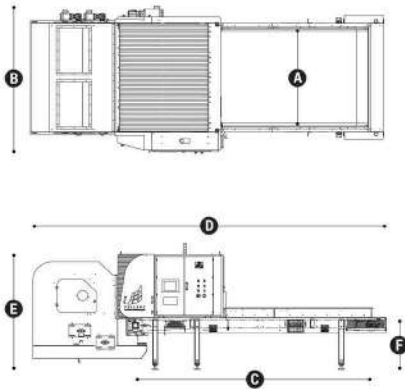**OTHER APPLICATION BASED ON ATOMIC DENSITY:**
Please contact us

PEMAX

CUTTING TOOL FOR INDUSTRIAL USE.

The Pemax tool is widely used in the auto and waste industry for cutting and removing materials. Markets: ELV, WEEE, Aviation, Naval, Construction... Capable to cut various materials: Zinc, Copper, Aluminum cable, Iron pipe, Plastic, Wire netting, Cable, and more... Portable with battery pack for easier use.

DATA SHEET

	MISTRAL TRIUM						XPERT
MACHINE WIDTH (mm) ▶	800	1200	1600	2000	2400	2800	1200
A	800	1200	1600	2000	2400	2800	1200
B	1755	2155	2555	2955	3355	3755	2340
C	4770	4770	4770	4770	5770	6770	4890
D	7152	7152	7152	7152	8152	9152	6550
E	2165	2165	2165	2165	2165	2165	2821
F	990+/-50	990+/-50	990+/-50	990+/-50	990+/-50	990+/-50	990+/-50
WEIGHT (Kg)	710	840	970	1100	1230	1360	6700
POWER (Kw)	4	5	5.5	7	7.5	7.5	7
POWER SUPPLY	230V - 50HZ SINGLE-PHASE						
AIR PRESSURE	8-10 BARS						
CONVEYOR SPEED	STANDARD 3 M/S						
INCOMING STREAM UP TO	10T/H	15T/H	20T/H	25T/H	30T/H	35T/H	10T/H
HIGH SENSITIVITY INDUCTION SENSOR	●	●	●	●	●	●	-
VISIBLE SENSOR	●	●	●	●	●	●	-
NIR SENSOR	○	○	○	○	○	○	-
XRAY SENSOR	-	-	-	-	-	-	●

● Standard Feature ○ Optional Feature

	DISTANCES BETWEEN NOZZLES	FRACTION SIZE
STANDARD BAR	25 mm	30 - 250 mm
HIGH RESOLUTION BAR (HR)	12,5 mm	10 - 250 mm
HIGH POWER BAR (HP)	25 mm	30 - 250 mm

SPECIAL FEATURES AND OPTIONS (EXTRACT) :

- Dual-Eject and Multi-channel ejection
- Output boxes, high speed conveyors and maintenance platforms
- Stat Pack
- Regional and climatic options
- Detect metal down to 1.5 mm

PELLENC ST SNAPSHOT

PELLENC ST
SELECTIVE TECHNOLOGIES

EUROPE & INTERNATIONAL

PELLENC ST
125, rue François Gernelle, BP 124
84120 Pertuis Cedex 4
France

📱 **+33 490 094 790**

✉ **contact@pellencst.com**

🖥 **PELLENCST**.COM

in ▶

NORTH AMERICA

PELLENC ST AMERICA, INC
1299 Schlumberger Dr.
29715 Fort Mill, SC
USA

+ 1 803 396 3990 Extension 210
contact.usa@pellencst.com

JAPAN

PELLENC ST JAPAN, KK
Arte Otemachi 10F, 1-5-16,
Uchikanda, Chiyoda-ku
Tokyo 101-0047
Japon

+81 3 3233 2150
contact.japan@pellencst.com

PELLENCST.COM