



SGM INCENERATED BOTTOM ASH (IBA) SOLUTION

Specifically designed for dry and wet
IBA extraction systems



THE APPLICATION

Incineration is a process involving combustion of organic substances present in waste. Incineration of waste converts the waste into ash, flue gas and heat. Incinerators reduce the solid mass of the original waste by 80% and the volume by 90%, depending on its composition.

There are two ways of discharging the IBA:

- 1) Conventional approach: wet discharge
- 2) Innovative approach: dry discharge

Wet extraction

- The IBA has to be piled on the ground for several days so that it can dry
- It is usually possible to process the IBA for metal recovery when the humidity is less than 15

Distribution of IBA with wet extraction

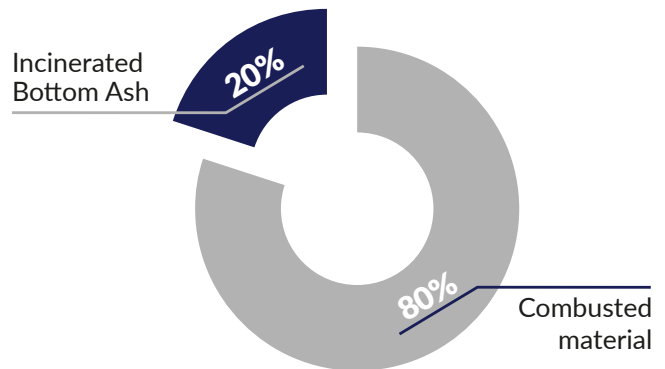
Typical European size distribution of IBA with wet discharge is:

- 15% >16 mm / 5/8";
- 20% 6-16 mm / 1/4"-5/8";
- 65% 0-6 mm / 0-1/4".

This fraction has the highest moisture level.

0-6 mm size has to be screened out before the eddies: it contains a lot of ferromagnetic material, it is very muddy and sticks to belts and vibrating feeders. This is the reason why our competitors do not process this fraction.

Over the past years, thanks to the SGM Extra High Frequency Eddy Current Separator (BVIS), we have proven the massive presence of valuable metals in the fraction sized 0-6mm, especially PRECIOUS METALS (such as gold, silver, palladium, ...).

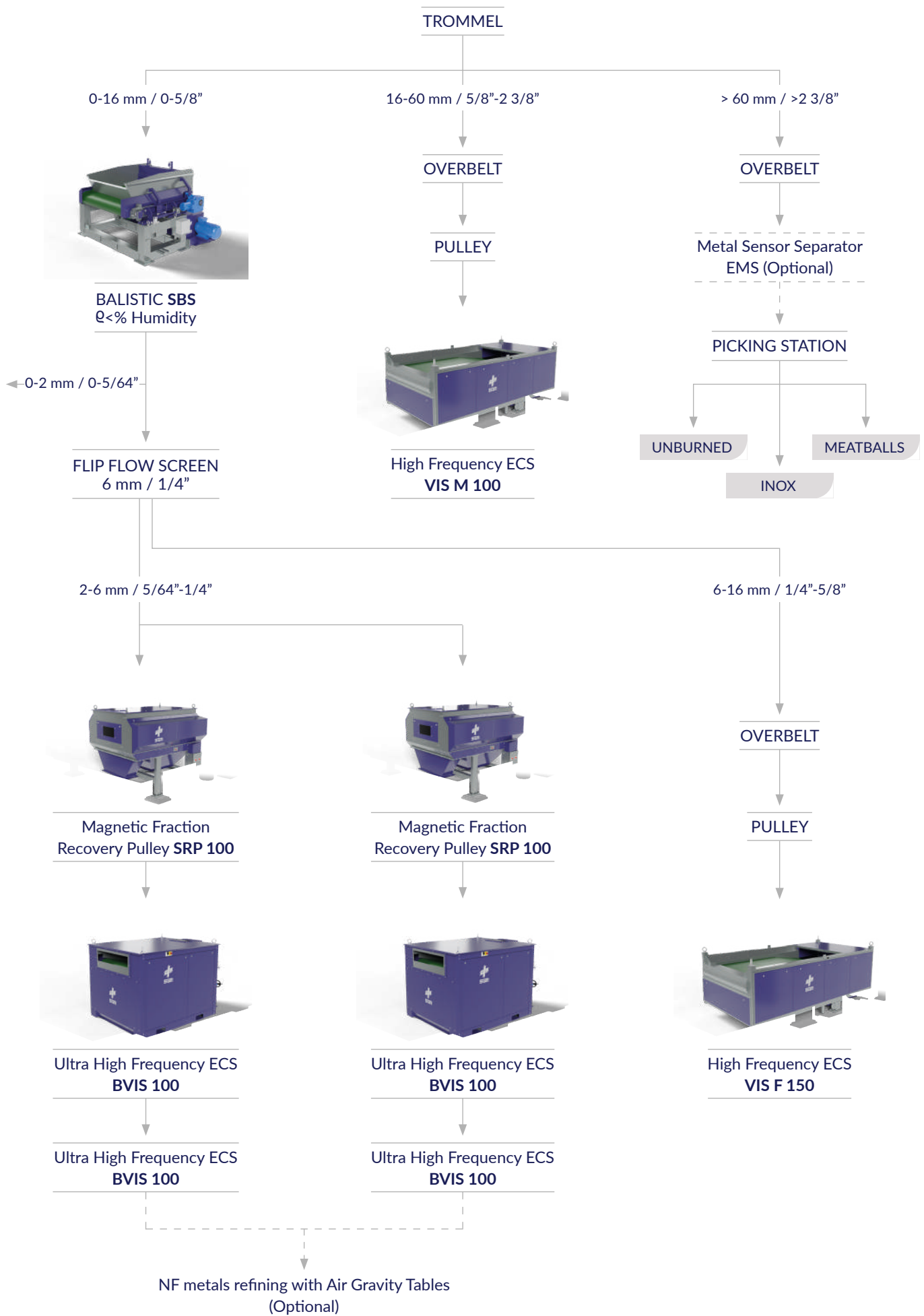


Dry extraction

- Since the IBA is completely dry and at about 60 °C, it can be processed directly after the discharge
- It's much easier to recover the metals (no hardening) and the quality of the metals is excellent (no oxidation, very shiny)
- Easy process for the fine bottom ash



WET EXTRACTION PROCESS EXAMPLE - IBA 30 TON / H





NF metals 0-6mm / 0-1/4"



NF metals 6-16mm / 1/4"-5/8"

SGM PROVIDES FROM SINGLE SEPARATORS TO COMPLETE SOLUTIONS



Meatballs



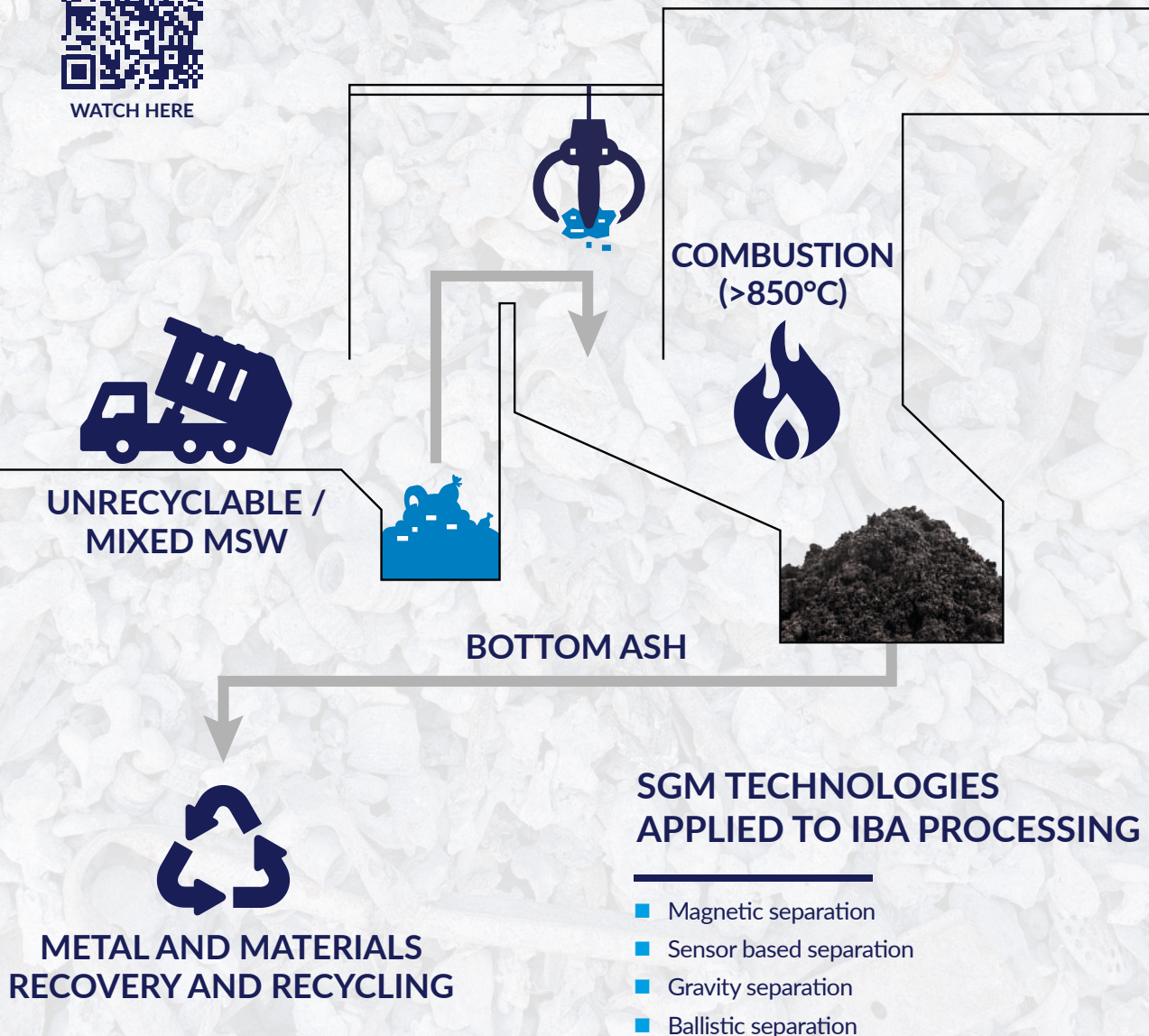
Ferrous fraction 6-16mm / 1/4"-5/8"

SGM DOMESTIC WASTE IBA PROCESSING SOLUTION ADVANTAGES

- Profitability: <6mm IBA contains the majority of the heavy metals.
- The SGM High Frequency ECS model BVIS with a concentric induction drum spinning at 4800RPM allows the recovery of metals down to 2mm.
- The SGM DSRP consists in the most effective deferrization system based on a floating pulley able to sort out all the ferromagnetic material.
- SGM dynamic sensors EMS which allows to achieve huge throughputs and permits to recover metal pieces that cannot be recovered by traditional technologies (ex. stainless and meatballs).



WATCH HERE





Release: September 2024

- 70** Years in business
- 9** Fully owned subsidiaries
- 2** Manufacturing and repair facilities

As an IBA treatment specialist with long tradition and progressive forward development, we offer you a wide portfolio of sorting machines.

Our expertise is acquired not only through our repetitive partnerships, but also through our group companies BSB Ambiente and Iris Ambiente with a production of 60,000 tons/year each.

SOME SGM REFERENCES FOR IBA PROCESSORS



SGM WORLDWIDE

Always available, near you, in your language.

The SGM business model is based on providing technological expertise, staying close to its customers through a network of SGM Magnetics corporations located in Italy, Germany, UK, Belgium, USA, China, Mexico, India and Japan, as well as a few long standing agents with extensive experience in the SGM products and technologies.



Because the **BEST SOLUTION** is often a combination of different **BEST TECHNOLOGIES!**

Our choice of printing on 100% recycled paper is just a step in our journey towards a greater environmental responsibility. A better future is possible, and we can all help make it happen.

Printed on myRecyco
myRecyco is 100% recycled fibre with varying proportions of pre-consumer and post-consumer waste. myRecyco is biodegradable and compostable.

Ecological characteristics:



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