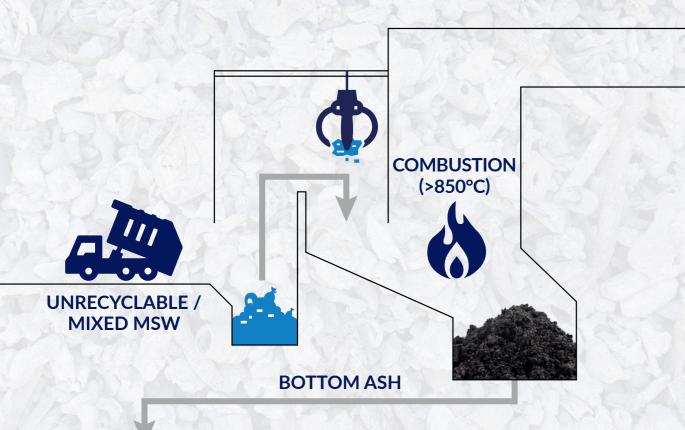
# SGM DOMESTIC WASTE IBA PROCESSING **SOLUTION ADVANTAGES**

- 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).



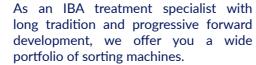


# **SGM TECHNOLOGIES** APPLIED TO IBA PROCESSING

- Magnetic separation
- Sensor based separation
- Gravity separation
- Ballistic separation







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.





8 Fully owned subsidiaries



Manufacturing and repair facilities

#### 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 and India, as well as a few long standing agents with extensive experience in the SGM products

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





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# **SGM INCENERATED BOTTOM ASH (IBA) SOLUTION**

Specifically designed for dry and wet **IBA** extraction systems







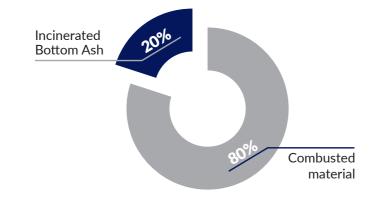
#### THE APPLICATION

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)Innovatative 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

#### 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

### Distribution of IBA with wet extraction

Typical European size distribution of IBA with wet discharge is:

- 15% >16 mm;
- 20% 6-16 mm;
- 65% 0-6 mm.

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, ...).



#### WET EXTRACTION PROCESS EXAMPLE - IBA 30 TON / H







NF metals 0-6mm



NF metals 6-16mm



Meath



Ferrous fraction 6-16mm