



FLAMINGO

FLAMINGO INDUSTRIES

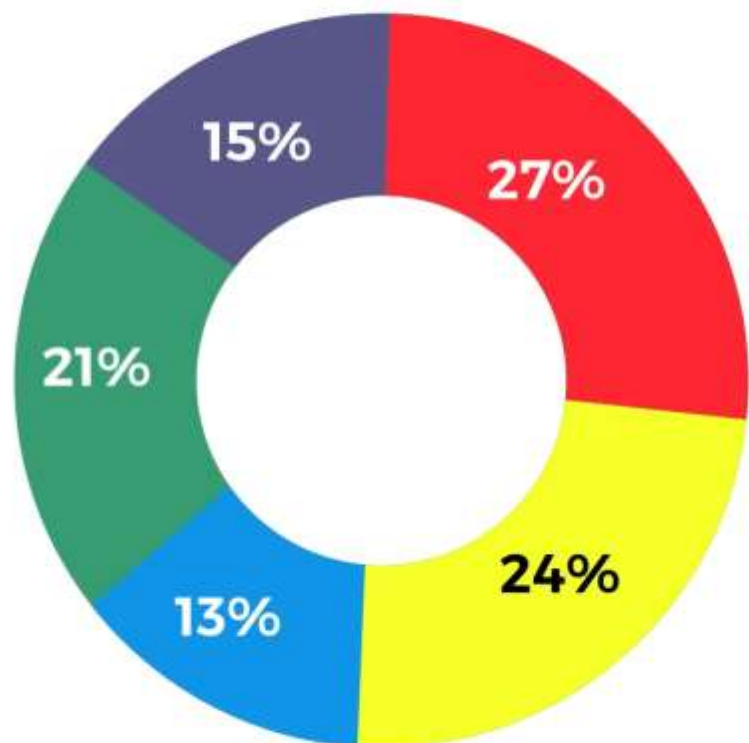
"BIOMASS BRIQUETTE FIRED MELTING FURNACES AND OTHER DEVICES"

-THE FUTURE IS GREEN

USERS OF ALUMINIUM-INDIA



FLAMINGO



- **Transport**
- **Building & Construction**
- **Packaging**
- **Engineering & Cables**
- **Others**

SECONDARY MELTING OF AL- 2017



FLAMINGO

- ◇ Secondary production is carried by the unorganised sector and a few big players (Hindalco ,Century metal recycling)
- ◇ All of the existing melters use either FO (furnace oil, Diesel, LPG, coke or electricity to melt)
 - 8 kg- 10 kg AL melting requires around 1 litre of Oil .
 - Therefore 8 kg Aluminium melting releases around 3 kg of Co₂ emissions.
- ◇ Pune auto industry utilises around min. 10,000 tons of aluminium in the form of various grades of Ingots per month.



OUR TECHNOLOGY

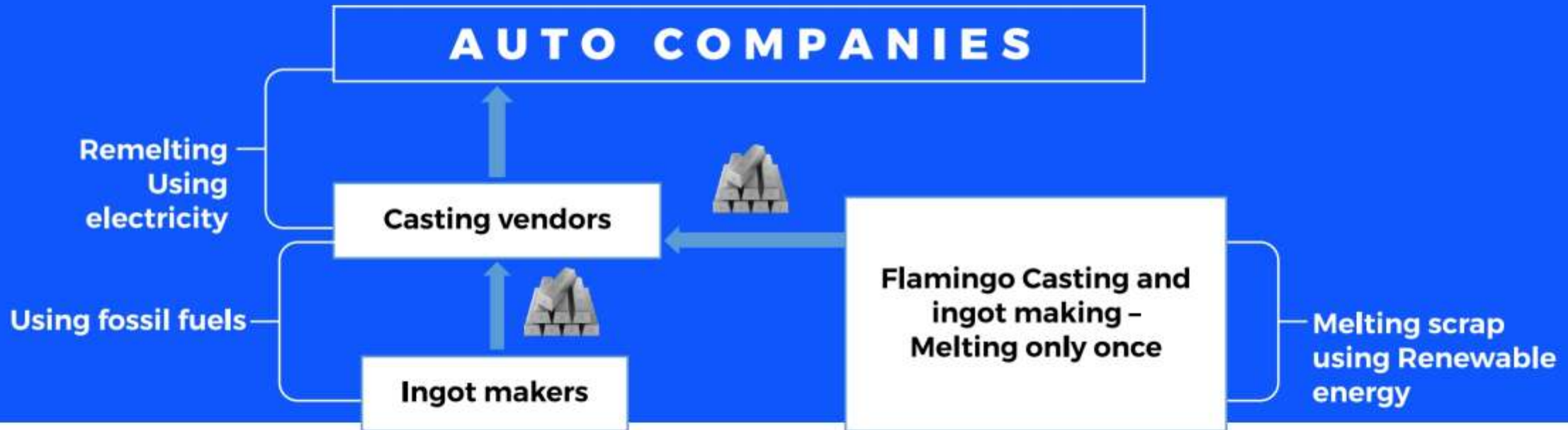


FLAMINGO

- ◇ Aluminium Melting furnace – 500 kg /day and 10 tons per day.
- ◇ Successfully melted Aluminium scrap .
-Furnace oil saved per day would be in the range of 1500 litres
-i.e. $1500 \times 3 = 4500$ kg of CO₂ emissions
- ◇ Cost savings of atleast 20% in fuel .
- ◇ Also works on dual fuel
(mix of renewable and fossil fuels for high
Temperatures)- Above 800 deg celsius



WHERE SHALL WE BE?





FLAMINGO



Bhalchandra Wakchaure

▲ Ex- Director of Steam Boilers, Mah Govt

▲ More than 35 years of experience
in Combustion technologies,
Steam and thermal Engg

▲ Development of New products,



Aniriddha Wakchaure

▲ Sales Of Briquettes from 2009-2011

▲ Marketing and related activities.

ADJACENT MARKETS-



FLAMINGO

- ◇ Aluminium - 659
- ◇ Bronze- 913
- ◇ Lead- 163
- ◇ Zinc- 419
- ◇ Magnesium- 651
- ◇ Brass- 927
- ◇ Silver - 951
- ◇ Gold- 1063
- ◇ Copper- 1083
- ◇ Cast iron- 1204
- ◇ Steel- 1371

We can completely melt metals up to 700 deg celsius .

Above that , we can pre-heat the metals upto 750 deg celsius and then melt them further using other fuels.

COMPETITIVE LANDSCAPE



FLAMINGO

- ◇ All casting vendors of Auto industries (initially)
- ◇ Around 250 such vendors in Pune alone
- ◇ Vendors of Aluminium sections, ingots and other end products in Infrastructure, railways, consumer , aerospace , etc.

OTHER DEVELOPED PRODUCTS



FLAMINGO

- ◇ Biomass cookstove
- ◇ Water Heater
- ◇ Steam Generator
- ◇ Air dryer
- ◇ Incinerator



OUR PROGRESS TO DATE



FLAMINGO

- ◇ **Provisional patent filed**
- ◇ **8-10 more complete patents will be filed**
- ◇ **MNRE certified furnace /stove with highest efficiency(42%)**
- ◇ **AL ingots tested with positive results.**

USER AND ENVIRONMENTAL BENEFITS



FLAMINGO

- ◇ **Aluminium products with very low carbon emissions.**
- ◇ **Employment in the renewable sector increases**
- ◇ **Promotion of high yield agriculture.**
- ◇ **Overall reduction in Green house gases**

TARGET MARKETS



FLAMINGO



And more.....



FLAMINGO

FUTURE UPGRADATIONS

- ◇ Fully automatic Briquetting plants
- ◇ Development of various types of Biomass fired furnaces and burners.
- ◇ Optimizing and upgrading the briquetting plant to Hydraulic machinery and a different shape.
- ◇ Further developing dual fuel technologies for higher melting point metals.
- ◇ Assorting and procurement of metal scrap effectively.
- ◇ Procurement of Biomass and improving methods of collection.

THE FUTURE IS GREEN...



FLAMINGO

Flamingo Team

Aniriddha Wakchaure:

+91 9922755577

aniriddha@flamingoindustries.com

Bhalchandra Wakchaure:

+91 9822551517

bhalchandra.wakchaure@gmail.com



TIMELINE



FLAMINGO



SOURCING OF BRIQUETTES



FLAMINGO

- ▶ There are around 200 briquetting plants in Maharashtra alone.
- ▶ We shall need to organize our own vendors for the same equipped with our machinery.
- ▶ Sourcing of raw material and if required making arrangements for the same

