

CULLET (BROKEN GLASS)

Collection, Recycling & other related issues.

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USE OF CULLET IN GLASS MAKING

Advantages:-

- Fuel Saving: 10% increase in cullet in batch can save fuel to the extend of 2%
- Increase s furnace life
- Quality of Glass improves, Quality problem like seeds, bubbles can be controlled by using more cullet.
- Glass draw can be increased. By using more cullet upto 20% more glass can be drawn.
- Economical
- Unlike plastics glass made form cullet in batch is as good as virgin material glass.
- Environment friendly : Reduced emission of undesirable gases

COLLECTION OF CULLET

- Directly from Breweries, Distilleries, Soft Drink Factories and other bulk users of glass bottles.
- Individual collectors → Small Collection Centers → Large Collection Centers & processors
- Around 40% of the Glass Containers/ Sheet glass sold come back as cullet in India
- In some of the Countries the return percentage is 60 – 70%

RECYCLING

- Around 50% cullet is used by glass Industry.
- 10-15% cullet generated within the Glass units
- Balance is purchased from outside and processed in the factory:
- Washing → resorting → Mixed with other batch material



CULLET PRICE

- Cost of cullet : Collection + Sorting + Supply + Margins at various stages.
- Price of Cullet mostly decided by the buyer – Glass Industry.
- Industry normally buy cullet at a price lower than the virgin batch cost.
- Now a days Industry normally enter into yearly contract for supply of cullet.
- If the Industry jointly decides – it can keep the cullet price under control.

Cullet in short supply : How to increase availability

- Awareness campaign.
- To work closely with Waste – Management Department of Municipal Corporations.
- Dry & Wet waste to be separately kept (in different color plastic bags).
Dry waste to be segregated for different waste items:
 - (i) Paper
 - (ii) Plastics
 - (iii) Glass
 - (iv) Tin, Al. & other metals etc.
- In Mumbai this is done in individual society building and also at Corporation Dumping Yards.

To improve cullet quality :

- Breweries, Distilleries, Soft drink factories to be requested to store broken bottles properly on pucca ground.
- Cullet suppliers to be persuaded to mechanise the process of cullet sorting and washing. This will increase their cullet processing capacity.



THANK YOU!