

# **A Review on Cryogenic Grinding**

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**Abstract:** *The paper aims in improvisation of the grinding process for elastic materials like rubber, plastic, composites, metals, waxes etc. Nowadays, we find a lot of wastage of these materials. Some of them like plastic, artificial rubber composites are very much harmful for our environment. This research will basically help in cautious use of the above mentioned pollutants. For example, Thermoplastics are difficult to grind small sized particle at ambient temperature because they are soften adhere in lumpy masses and clog screens. In cryogenic grinding when thermoplastic is chilled by dry ice, liquid carbon dioxide or liquid nitrogen they can be finally grounded to powder suitable for electrostatic spraying and other powder processes. Advantages of these processes are to increase productivity through optimized particle size, elimination of caking product within the mill, increases protection from the fire and product oxidation due to inert milling atmosphere*

**Keywords:** Cryogenes, Cell disruption, Cryogenic grinding, Polyamide, Cry milling, Freezer milling