

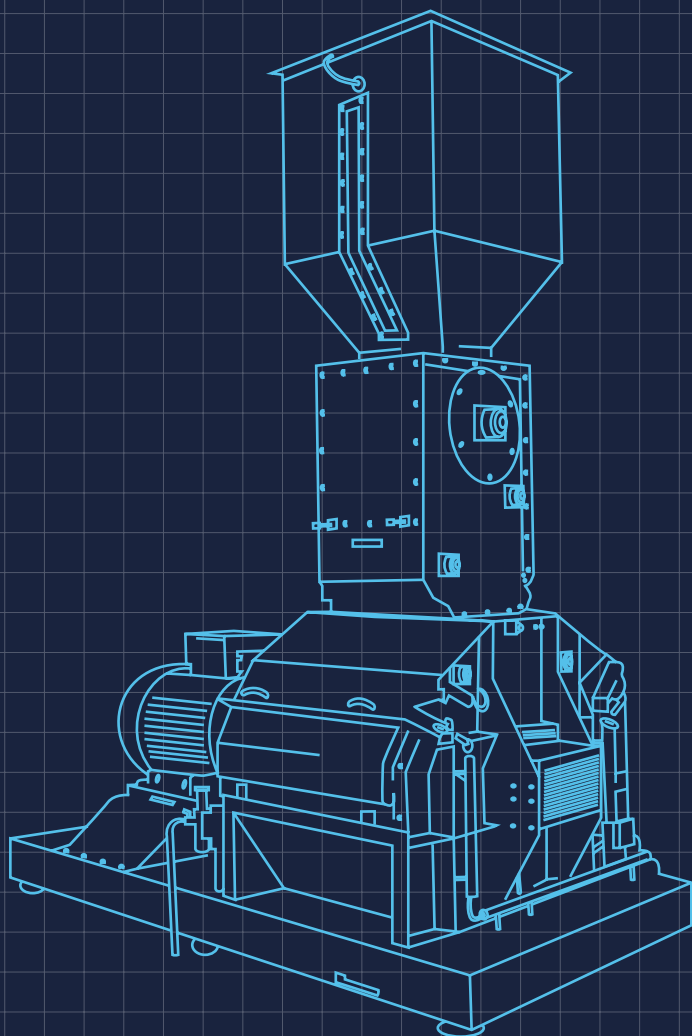
CARBOMILL

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HAMMER MILLING AND GRIST STORAGE UNDER CO₂ ATMOSPHERE

Fine grinding, carried out with a hammer mill and combined with the thin bed filter **Meura 2001** leads to the production of a clear wort with a low fatty acid content and a higher yield, at least 100% of the laboratory yield.

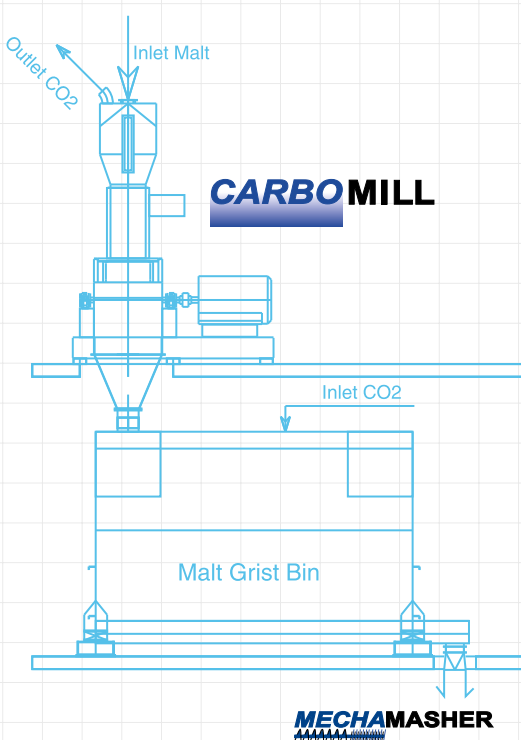
In order to improve the filterability and quality of the wort produced as well as the shelf life of the final beer, Meura has developed the **CARBOMILL**, a hammer mill working under a CO₂ atmosphere. In association with the **Mechamasher**, the Meura mechanical pre-masher, **this system provides a complete oxygen-free mash preparation solution.**



#UNSTOPPABLEMEURA

MAIN ASSETS

- ▶ Oxidation of the grist is avoided during milling and storage (no lipoxygenase activity) by the injection of CO₂ in the grist case. This improves the mash filterability and the flavour stability of the beer.
- ▶ The **CARBOMILL** is a hammer mill with a horizontal shaft. Breaking plates in the upper part of the mill protect the sieves against early wearing out.
- ▶ The mill is explosion-proof due to the working conditions under CO₂ atmosphere.
- ▶ The CO₂ consumption is about 3 to 4 kg per ton of malt.
- ▶ The **CARBOMILL** has a low initial cost as well as a low maintenance cost.
- ▶ Possibility of using other gases, such as N₂.



TECHNICAL DESCRIPTION

Grinding is a result of impact between the hammers and the particles that are propelled onto the breaking plates.

Prior to start-up, the CO₂ (or N₂) is injected in the grist bin to provide a gas blanket.

During the milling, the malt grist falls into the grist bin and pushes the CO₂ back through the hammer mill and the malt feeding system. In this way, the air surrounding the malt grains is replaced by the gas, protecting the malt grains from oxidation before entering the mill. The milling itself also occurs under a CO₂ atmosphere.

The malt grist then falls directly into the grist bin where it can be stored under CO₂ between brews. During the emptying of the grist bin CO₂ is injected into it to replace the grist

Type	Motor power (kW)	Capacity (tons malt/hour)
CRM 90/6	90	6
CRM 110/9	110	9
CRM 132/12	132	12
CRM 160/15	160	15
CRM 200/20	200	20