Louisiana Raw Sugar Factory Operation



Milling – Delivered cane is weighed for cane yield, sampled for cane quality and washed in the mill yard. Shredders then prepare the cane by producing a uniform mat of chopped cane on the carrier. A series of three-roller mills crush the cane and extract the raw juice. Water is sprayed on the cane to help wash the juice from the cane. The woody residue left after extraction of the juice is called bagasse and is used as a fuel in most factories but can also be used for paper, building boards, plastics, mulch and animal bedding or litter.







Clarification – The raw juice is strained and heated. Lime is added to cause impurities such as mud to settle. Clarifiers separate the juice into clarified juice and muddy juice. The muddy juice is sent to filters where any juice is removed leaving mud (filter cake) which is returned to the fields.





Evaporation – The clarified juice is then boiled in evaporators which remove most of the water leaving a thick syrup.



Crystallization and Centrifuging – The syrup is boiled under partial vacuum which causes the development and growth of sugar crystals. Massecuite (raw sugar crystals mixed with molasses) moves to centrifugals which separate the two. After all the commercially recoverable sugar is removed, the resulting molasses is sold as blackstrap molasses and is generally used as cattle food or can be used in production of alcohol, yeast, citric acid or vinegar. The raw sugar is then stored in warehouses until sold to refineries for further processing





Photos provided by Cora-Texas Mfg. Co.