Schematic diagram of the production process in BioWanze

1. Wheat is processed through the mill, producing flour and bran.
2. The bran is sent to the biomass boiler, while the flour is used as a feedstock for fermentation.
3. In the fermentation process, yeast, enzymes, and other ingredients are added to the flour, resulting in the production of ethanol, sugar by-products, and gluten.
4. The gluten is dried and pelletized to form gluten pellets.
5. Textured wheat protein, such as BeneoPro W-Tex, is produced from the gluten.
6. The starch liquid from the fermentation process is subjected to liquefaction/saccharification, producing a mash.
7. The mash is fermented to produce more ethanol and sugar by-products.
8. The ethanol is distilled and rectified to produce high-purity ethanol.
9. The sugar by-products can be used as a feedstock for additional processes.
10. Electricity is generated from the turbine, and steam is produced from the biomass boiler.
11. ProtiWanze® and CDS are produced from the various by-products and ingredients of the process.

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