



## WET SOLID MIXING BLADE

### TECHNOLOGY DESCRIPTION

The technology is a product to mix or agitate wet or semi-solid foam materials during heating or cooling process in a cylindrical tank.

### TECHNOLOGY FEATURES

This design is to replace the original blade in Ezy cooker (MY142132-A) which was invented for cooking viscous liquid or paste. The normal wet solid blade contains high moisture, high density and forms agglomerates in nature. These characteristics will indirectly affect the quality of final product or turn the waste products into worst consequences due to overheat. The new technology is able to scrap the inner wall of the cylindrical tank continuously to produce dried solids with minimum waste. It also has a secondary mixing effect during the operation by forcing materials to mix upwardly and downwardly. Overall, this technology is suitable for mixing, cooling or heating process.

### ADVANTAGES

- Reduces accumulation of the materials on the inner wall
- Minimizes wastage.
- Minimum materials of construction in the invention mixing blade
- Saves labor costs, time and energy.

### INDUSTRY OVERVIEW

#### Main Prospect: Food and Beverage Industry

This simple wet solid mixing blade, with 40o semi-hemispherical shape blade is more suitable for the SME food industries due to its simple functions and lower costs resulting in the reduction in time, energy, and labor costs. Other industrial mixers in the market range from laboratory to production line scale, and consists of a number of variety such as ribbon blender, cone screw blender, high viscosity mixer, double and triple shaft, vacuum mixer, banbury mixer, and intermix mixer.

The SME census in 2011 SME comprised of around 645,136 SMEs reporting 97.3 per cent of total business establishments. Out of that, the 580,985 SMEs came from the Services sector while 37,861 SMEs came from the Manufacturing sector. The prospect of the market is narrowed down to 142,721 SMEs in the Food and Beverages service sub-sector. Out of that, 117,020 was within the Micro size; 24,459 Small; and 1,242 Medium. Moreover, there was also 6,016 SMEs registered in the Food and Beverages manufacturing sub-sector.



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