

Ecodry-TF<sup>™</sup>, drying technoplogy is suitable for greenfield and brownfield distilleries using sugary feedstock who employ biomethanation as primary treatment of raw spent wash.

It converts Biomethanated spent wash into NPK rich dry soil conditioner- an additional revenue generator.



In many countries, ZSD has been made mandatory. Until now, ZSD was being achieved either through composting, incinerating or spray drying of biomethanated spent wash. However, there were multiple challenges including land and press mud availability, capex, foul odour due to ineffective composting or incessant rains.

Then there is also the need to meet regulations in countries where ZSD has been specified.

This necessitated a dryer which will deliver non-hygroscopic dried product which was easy to store and dispatch.

To overcome these challenges, Praj has developed and introduced the innovative  $Ecodry-TF^{TM}$  technology for drying of biomethanated spent wash.

Praj's Ecodry-TF<sup>TM</sup> involves pre-treatment of partially concentrated biomethanated spent wash which is then dried in the agitated thin film dryer.

Ecodry-TF<sup>™</sup> is suitable for greenfield or brownfield distilleries using sugary feedstock who employ biomethanation as primary treatment of raw spent wash. Ecodry-TF<sup>™</sup> can be thermally integrated with other unit operations within a distillery to recover maximum energy.

Composition of BMSW Dry power			
	Parameter	Unit	Value
1	Total Solids	%w/w	97.55
2	Ash	%w/w	47.58
3	Kjeldahl Nitrogen	%w/w	3.76
4	Phosphorus	%w/w	1.7
5	Phosphorus as P <sub>2</sub> 0 <sub>5</sub>	%w/w	3.89
6	Potassium	%w/w	10.9
7	Potassium as K <sub>2</sub> 0	%w/w	13.13
8	Magnesium	%w/w	2.58
9	Calcium	%w/w	2.17
10	Sulfur	%w/w	3.39
11	Sodium	%w/w	0.37
12	Zinc	ppm	54
13	Iron	ppm	692
14	Manganese	ppm	46
15	Copper	ppm	100

## **Benefits** :

- Specially designed agitator leading to very low cleaning frequency and maximum uptime.
- Pretreatment of partially concentrated spent wash delivers easy-to-handle, non-hygroscopic product.
- Heat integration leads to recovery of 70% energy from the dryer.
- High turndown capability.
- Effective heat transfer and feed distribution leads to very low moisture content of 2- 5% in the product.
- The resultant product is rich in NPK suitable to be used as soil conditioner.
- Praj can help with tie up arrangements for offtake of the product.

**Certification** ASME, TUV, CE, CCODE, ISO 9001 or any other global standards are required.



PIL/ALC/ECODRY-ATFD /V1/NEW//MAR 16/0.5K

## Praj Worldwide

Argentina I India I South Africa Thailand I UAE I USA



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