

# Dry sludge with single pass dryer... simple unique design.

Replace sludge disposal costs with profit!



Duske Sludge Dryer System

Duske rotary dryers have been converting process/waste problems into profits for food processors and other process industries for many years. Some by-products have market values of \$400 to \$500/ton.

Now the same moisture-reduction system has been engineered to process a variety of sludges. For example:

- Industrial wastewater treatment sludge
- Municipal sewage treatment sludge
- Paper & pulp process sludge

Sludges that formerly were difficult to handle and transport and required costly disposal can now be converted to useful, valuable products. By reducing moisture content to 10% or less, a Duske Single Pass Rotary Dryer makes granular or pelletized products that cut costs/produce profits.

Application case studies give detailed proof of results, including equipment and operating costs, moist sludge

input and dried sludge output of typical systems. Also, examples of how dried sludges produce value as fuel supplements, fertilizer and animal food ingredients.

A range of single pass and triple pass rotary dryer capacities provides cost-effective systems (see table). The smallest size fits on a flat bed truck and has an evaporation capacity of 1100 lbs/hour. This pre-wired and pre-piped unit is suitable for mobile applications or for small volume permanent installation. Larger systems are custom engineered for up to 35,000 lbs/hour evaporative capacity or higher. Layout of system components can be custom-configured to fit available space.

Duske engineers supervise installation and startup of Rotary Dryer Systems worldwide. Services include maintenance, rebuilding and converting triple pass dryers into single pass dryer systems for easier maintenance.

Duske application engineers can determine the type and capacity of systems that will serve your needs most efficiently. Operating results can be predicted and guaranteed. Fax or phone today for an evaluation of your requirements and a prompt quotation.

Leasing arrangements available.

  
**duske**  
design & equipment co., inc.

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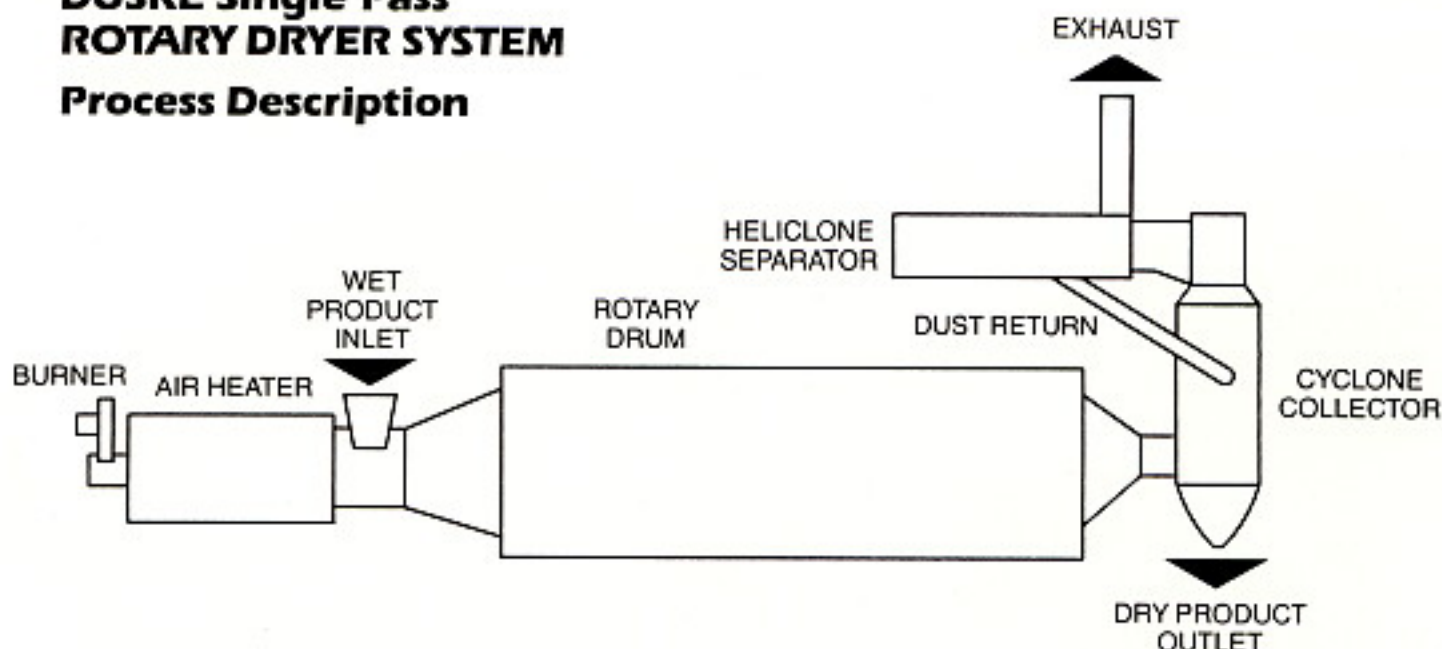
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# DUSKE Single Pass ROTARY DRYER SYSTEM

## Process Description



A novel single pass rotary drum brings the product into direct contact with a high velocity hot air stream which flash-dries and conveys the product at the drum inlet. The product exits the drum at an outlet moisture of 7% to 10%. Product temperature is kept low due to special drum design.

In the cyclone, the product is separated and dis-

charged through a rotary airlock. The air with the remaining fine dust is drawn into the HELICLONE™ Separator which returns the dust into the cyclone. Cleaned gases from the HELICLONE Separator are exhausted.

The dryer is wired for fail-safe operation. Temperature control protects against product overheating.

Model No.	Maximum Evaporative Capacity*		Burner Capacity MM BTU/hr	Approximate Dimensions (Basic System Layout)		
	Kg/hr	Lbs/hr		L	W	H
SPD-500	500	1,100	1.5	31'6"	6'4"	9'8"
SPD-1250	1,250	2,750	3.5	38'0"	11'0"	13'0"
SPD-2500	2,500	5,500	7.5	48'0"	19'0"	18'0"
SPD-4000	4,000	9,000	15.0	55'0"	20'0"	19'0"
SPD-8000	8,000	18,000	30.0	76'0"	22'0"	21'0"
SPD-12000	12,000	27,000	40.0	90'0"	24'0"	23'0"
SPD-16000	16,000	36,000	60.0	110'0"	26'0"	25'0"

\*Operating capacity depends on product

### APPLICATIONS:

Duske Triple Pass or Single Pass Rotary Dryer Systems are useful in a variety of applications, including:

Blood meal	Hatchery waste	Canning by-products	Bark
Bone/meat meal	Composts	Cassava root	Wood flakes
Feather meal	Manure (including paunch manure)	Potatos and potato waste	Sugar cane bagasse
Fish meal	Brewer's spent grain	Citrus pulp	Beet pulp
Shellfish waste	Distiller's spent grain	Corn cobs	Alfalfa
Egg shells		Sawdust	Bakery waste

Some users of Duske Single Pass Dryers are Con-Agra, Perdue Farms, Hatfield Quality Meats, Waldbaum, Ampro Fisheries, Shapiro Packing.

  
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Bulletin No. 400