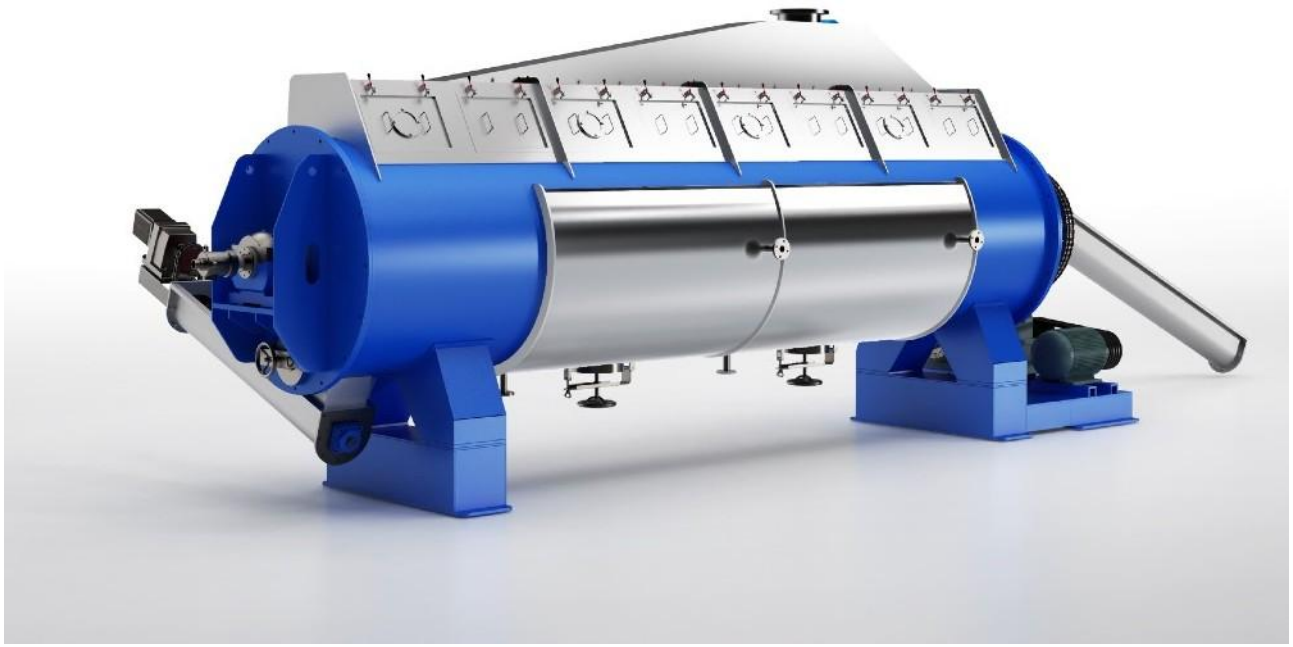


DISC DRYER

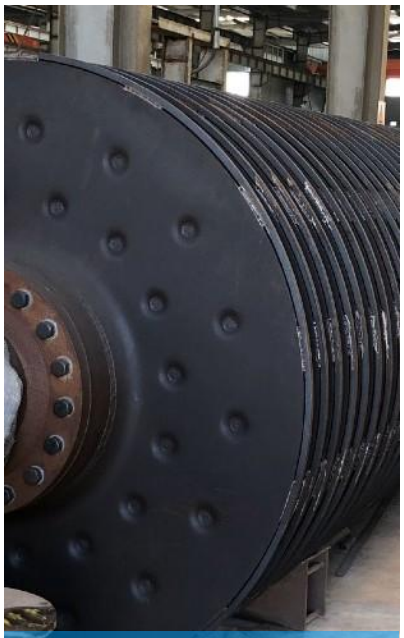
Feeds | Sludge | Starch | Chemical

BIOETP
www.bioetp.com

WHY CHOOSE QY DISC DRYER

Our disc dryer has a unique endurable rotor design without welded seams exposed to wearing and corrosion. Our disc dryer will serve longer time than any traditional dryers in the market. We can expect to run for more than 7 years in sludge drying plant and 10 years in a fishmeal plant.

High-quality seamless steel shaft, withstand high tearing force



Unique rotor design, welding seams hidden, corrosion & abrasion-proof

Steel knives to prevent material clogging between discs

Features:

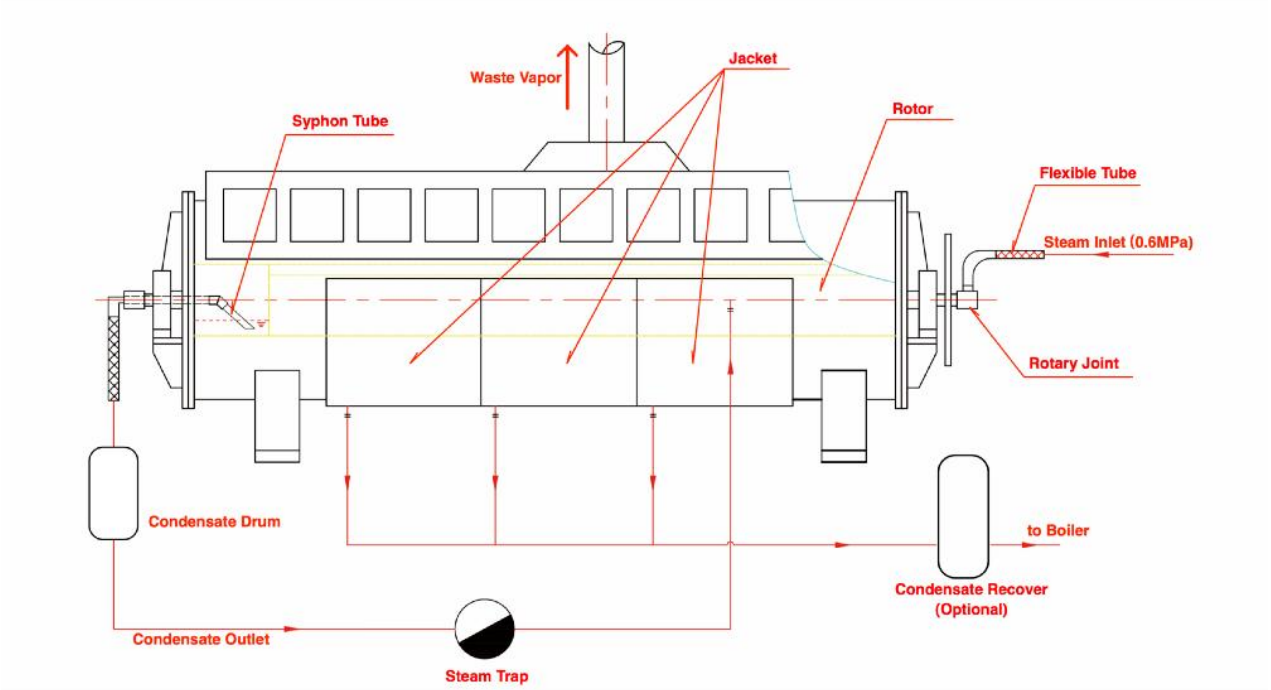
- Double disc design, large heating area, high energy efficiency.
- Slight vacuum condition to effect evaporation below 95 °C
- Special mechanical design for hiding all welding seams, to ensure long service time
- Optional heating jacket for extra heating area
- Condensate recover design for more than 20% energy saving

Applications:

SG series dryer is perfect for industrial and sewage wastewater sludge drying, also suitable for fish meal, starch, vinasse and other feeds or foods drying.

WORKING PRINCIPLE

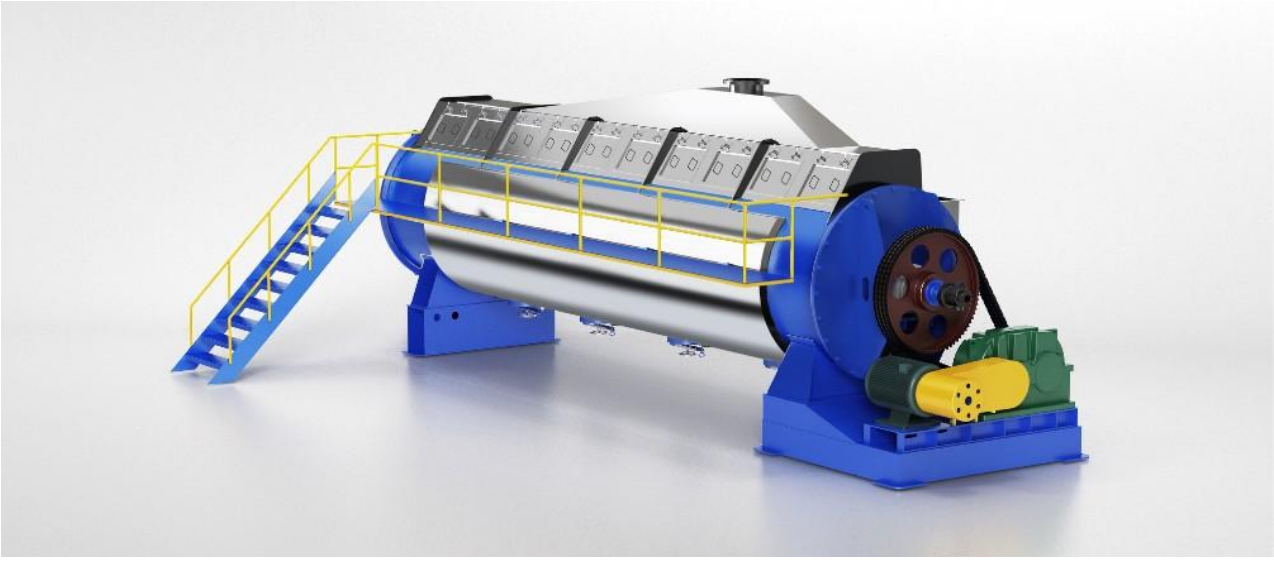
SG series dryer is designed for heating by 0.6MPa steam. The largest heating surface is the rotor and additional heating surface is provided by the jacket with live steam or condensate from rotor. The fish meal to be dried is slowly, transported from inlet to outlet ends by a paddle system mounted on the disc periphery. Product discharge is normally done continuously by a speed controlled screw conveyor. The discs are mounted on a heavy central shaft with a highly efficient condensate removal system integrated. Scraper bars ensure agitation between the discs, which are necessary for efficient evaporation. The moisture evaporated from the product is collected in a high top vapor dome, and will be reused in an evaporator.



MODEL SELECTION

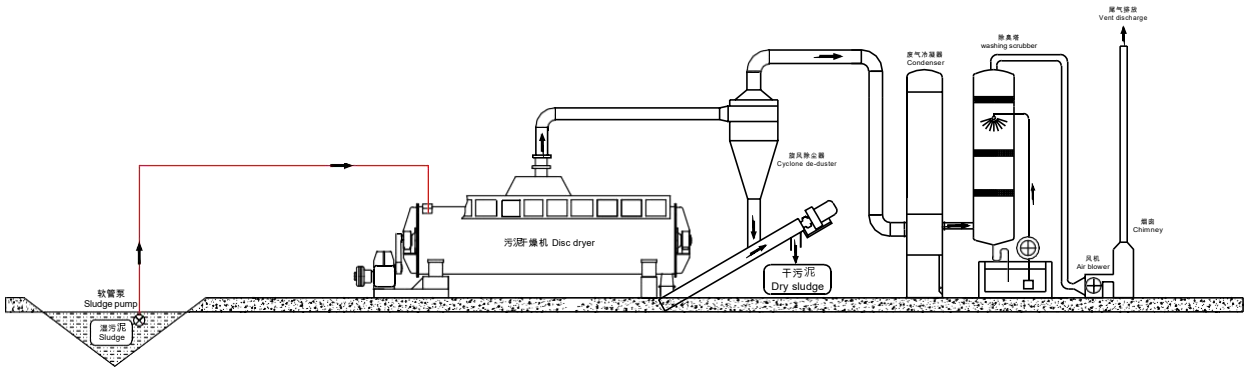
Model No.	Disc Nos	Disc diameter (mm)	Heating area (m^2)	Rotor shaft (mm)	Motor power (KW)	Processing Capacity* (MT/24h)
SG-50	42	1200	95.89	⌀480x25	37	21
SG-80	45	1450	157.64	⌀480x30	45	35
SG-100	45	1700	201.55	⌀680x35	55	45
SG-150	57	1700	260.73	⌀680x40	75	58
SG-200	59	1950	350.13	⌀760x45	110	78

*Remarks：Processing capacity for sludge is for sludge with 85% moisture input and 40% moisture output



SLUDGE DRYING

The complete sludge drying system contains screw conveyor, disc dryer, de-duster, vapor condenser and washing scrubber. Wet sludge from screw press sludge dehydrator usually contains 70-80% moisture. Sludge is continuously fed by the screw conveyor to the disc dryer where it will be heated. The moisture in the material vaporizes and drawn by air blower. The waste gas from the dryer will be de-dusted before entering vapor condenser. The condenser turns most vapor into condensate. The vent gas will be washed in a chemical washing scrubber before discharged through chimney. The dry sludge usually containers 30-40% moisture.

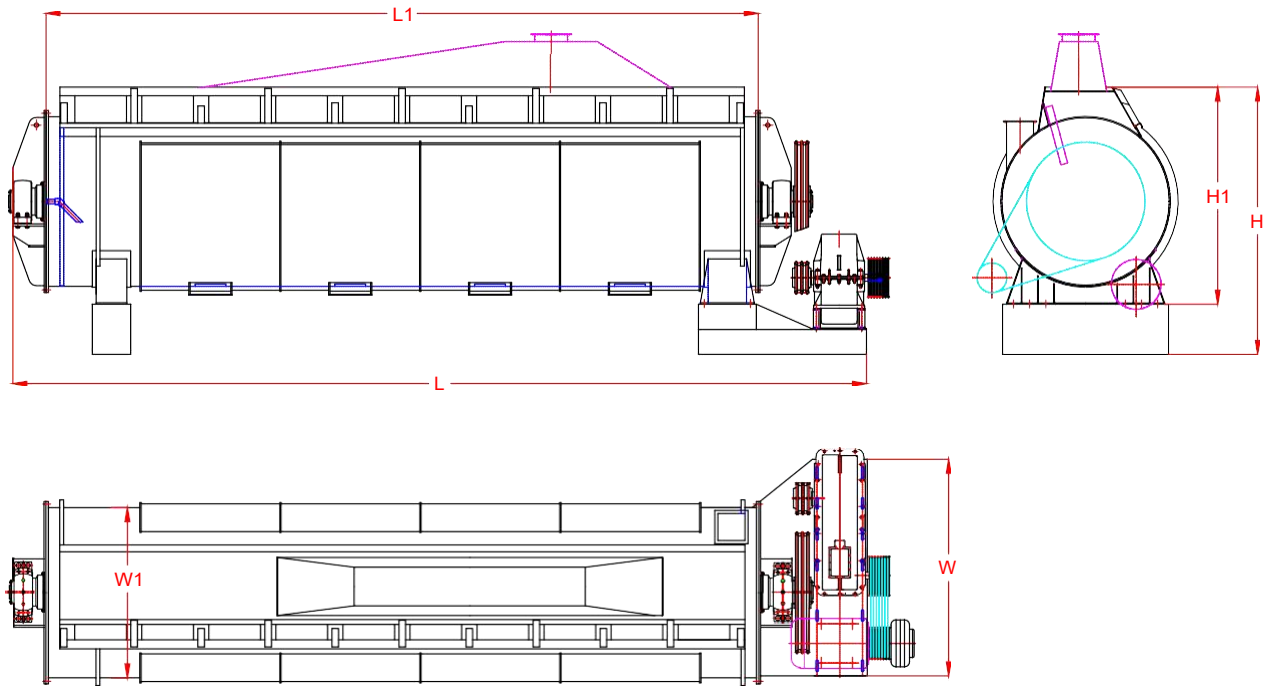


Related Equipment in Sludge Drying

- Screw pump or screw conveyor for sludge feeding
- Steam trap for condensate removal
- Air suction fan
- Screw conveyor for output control
- Washing scrubber to dust and smell abatement
- Operation platform
- Condensate recover for energy saving up to 15%
- Cyclone for dust removal
- Air/water cooling condenser
- Control panel

DIMENSIONS

Model	L (mm)	L1 (mm)	H (mm)	H1 (mm)	W (mm)	W1 (mm)	Weight (MT)
SG-50	7850	6450	2660	2250	1850	1500	22
SG-80	7410	6600	2950	2450	2100	1690	26
SG-100	7410	6600	3150	2560	2450	1940	30
SG-150	10700	8950	3150	2560	2530	1940	42
SG-200	11090	9300	3460	2810	2800	2200	50



CASES

SG-200 Dryer (Oman)

SG-200 Dryer (India)

SG-200 Dryer (India)

SG-100 Dryer (Shandong)

Condenser (Oman)

Scrubber & Biofilter (India)

Wastewater (India)

WORKSHOP

Dryer Welding

Dryer Insulation

Spray painting

SG-150 Installation

SG-200 Was Making

2 Sets SG-150 Dryer Loading

SG-100 Packing