

SHINCCI

ENERGY-EFFICIENT
LOW TEMPERATURE SLUDGE DRYING

ABOUT SHINCCI

A LEADER IN LOW TEMPERATURE SLUDGE DRYING

Shincci is a high-tech company devoting itself to the research and application in the field of environmental protection since 2003, who designs and provides the world's cutting-edge Low Temperature Sludge Drying Solution.

With its leading Low Temperature Evaporating-condensing-dehumidification Technology, Shincci creatively combines refrigerating system and thermal energy, making itself a pioneer in the industry. Starting with its first heat pump unit in 2004, Shincci has developed double-effect, triple-effect, quadruple-effect and multiple-effect dehumidification technologies thanks to its continuous innovation.

WE VALUE HIGH QUALITY

Shincci is committed to the upgrading of its production system, improves the collaborative capability of designing and manufacturing in the industrial chain, and has realized high quality standardized production.

WE PROVIDE CUSTOMIZED SOLUTIONS

Shincci has become a leading company with its customized solutions for on-site investigation, project designing, equipment manufacturing, installation, commissioning, and after-sales service.



OVERSEAS MARKETING

OVERSEAS FOOTPRINTS

To date, Shincci Sludge Drying Solutions have been successfully applied around the world such as USA, Italy, Poland, Romania, Russia, Turkey, South Korea, Thailand, Vietnam, Indonesia, etc. We are making every project a successful reference with the highest customer satisfaction.



APPLICATION & REUSE

With either electric power or waste-heat as heat source, the Shincci Sludge Dryer can simply reduce the moisture content of wet sludge from 83% to 30-10% (adjustable as required). It is energy-efficient and eco-friendly, and has been extensively applied in municipal and industrial sludge drying. And the dried sludge could be for resource utilization.



Municipal



Printing & Dyeing



Chemical



Pharmaceutical



Papermaking



Plating



Leather

SYSTEM FEATURES



10%

EFFICIENCY

- Sludge moisture content can be reduced from 83% to 30-10% (adjustable as required)
- Sludge volume is reduced by 67% and weight by 80%

1:4.2

INNOVATION

- By originally developed "quadruple-effect dehumidification technology", the dehumidifying capacity reaches as high as 4.2 kg.H₂O/kWh, which is the world's leading technology standard
- Energy-consumption saved by 50% compared to the traditional drying equipment



ENVIRONMENT

- No odor emission during the process in a closed cabinet; No need for any expensive odor removal equipment
Available to be built inside the factory for sludge centralized processing
- The clear condensate water from the drying process can directly drain to sewage pool without any secondary treatment.

100%

UTILIZATION

- No heat waste during the drying process in a closed loop system
- No need for high temperature heating like other open-type drying equipment

180 kWh/t

ECONOMICAL

- The running cost of drying wet sludge from 83% moisture to 30% is only 180 kWh/t



SAFETY

- Low processing temperature 40-75°C in a closed cabinet, no need for nitrogenization
Oxygen content < 12%, Dust concentration < 60g/m³, Dried sludge temperature < 70°C
- Outlet Sludge < 50°C, no need secondary cooling and can be stored directly



DURABILITY

- Adopting durable and anti-corrosive material to make sure a service life as long as 15 years
- Modularization design for easy assembly while saving floor space; Suitable for any working condition at high or low temperatures

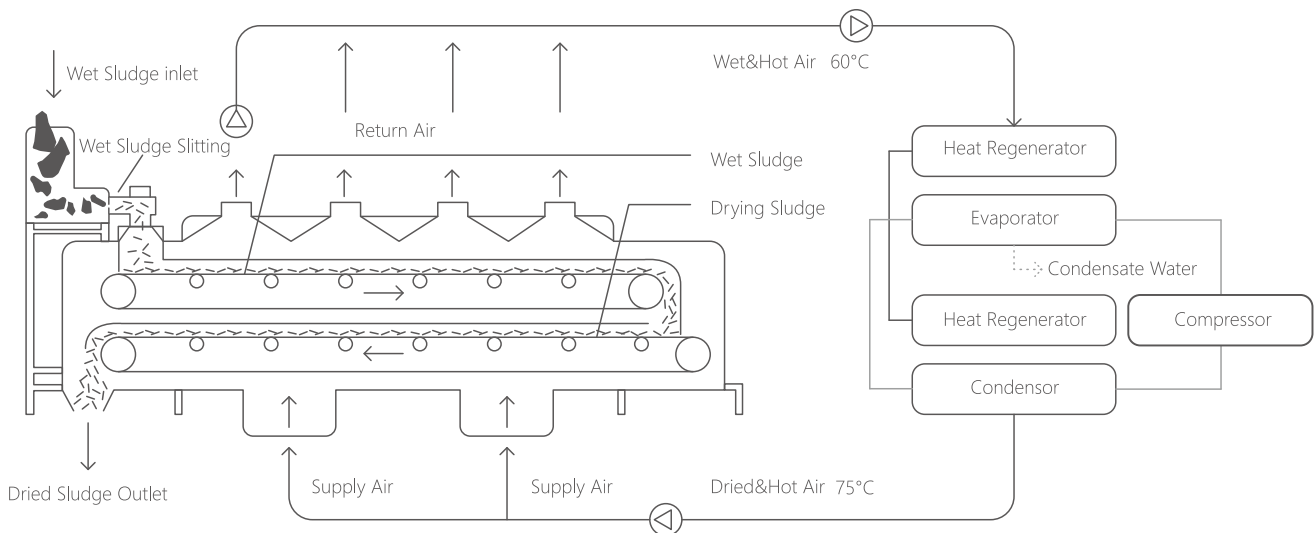


STERILIZATION

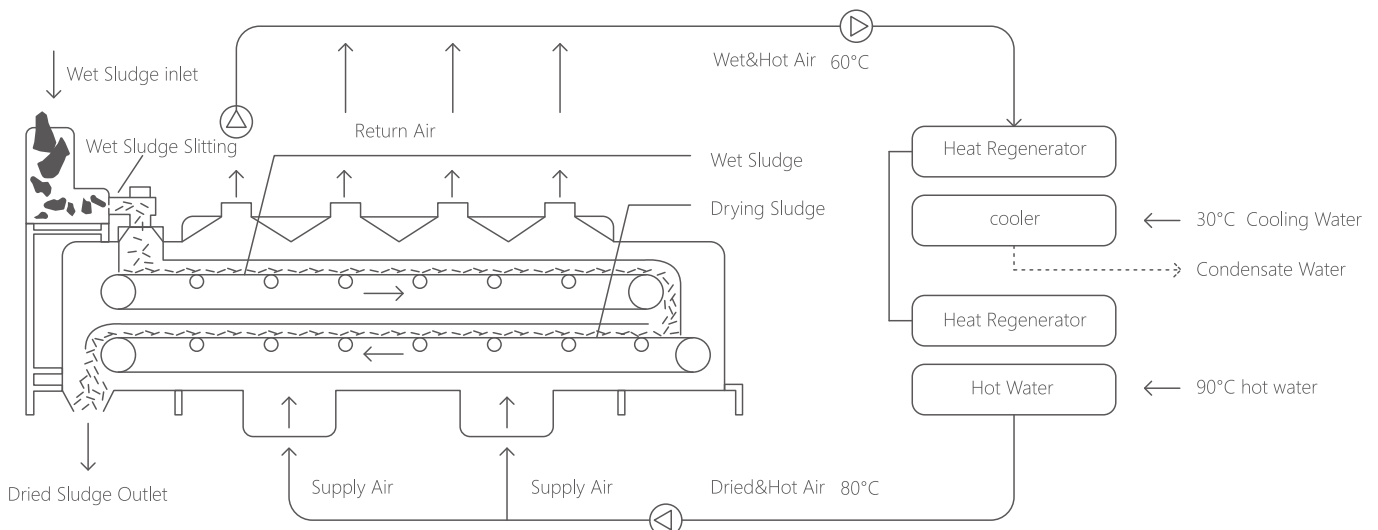
- With pasteurization (low temperature heating sterilization) at 70°C drying for 90-120 minutes, it can sterilize over 90% bacteria effectively

LOW TEMPERATURE DRYING PRINCIPLE

The Low Temperature Sludge Dryer works by the principle of Dehumidification Heat Pump. This system makes the circulating hot air go through the wet sludge laid on the conveyor belt, which evaporates the moisture of the sludge. Since the whole system is proceeded in a closed loop, there is no waste of any heat during the process.



Waste-Heat-Exchanger Sludge Dryer makes use of waste heat source via hot water to remove the moisture out from sludge through hot air in the closed convectional recycling, condensing, dehumidifying and drying. Waste heat source can be low grade heat source, such as steam, hot water from anaerobic digestion gas, cooling water from generator set.



LOW TEMPERATURE CONTAINER-TYPE SLUDGE DRYER

Movable Container-type
Feasible for small project with sludge from filter press



FEATURES



EFFICIENCY



MOVABLE



ENVIRONMENT



UTILIZATION

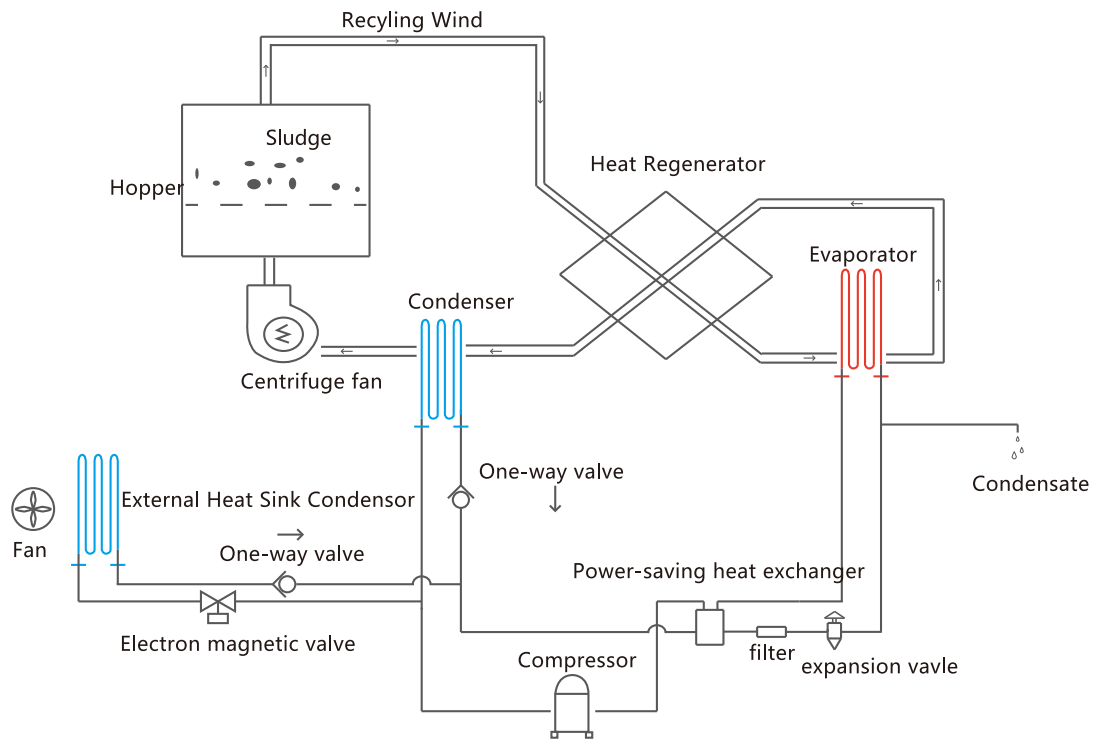


FLEXIBLE



SAFETY

FLWSHEET



TECHNICAL PARAMETERS

Model	SCODD200FL	SCODD400FL	SCODD800FL
Standard Dehumidification Capacity/24h	200kg	400kg	800kg
Standard Dehumidification Capacity/h	8 ~ 13kg/h	15 ~ 23kg/h	30 ~ 46kg/h
Working Power	3.5kw	6.0kw	12kw
Hopper Size(mm)(L*W*H)	800 (L) *800 (W) *750mm (H)	1000 (L) *1000 (W) *900mm (H)	1200 (L) *1200 (W) *1100mm (H)
Size(mm) (L*W*H)	1650*1150*1500	2200*1350*1700	2600*1500*2000
Structure	Whole set	Whole set	Whole set
Weight	580kg	900kg	1430kg
Compressor Amount	1set		
Cooling Method	Forced-air cooling FL		

Model	SCODD1600SL	SCODD3200SL
Standard Dehumidification Capacity/24h	1600kg	3200kg
Standard Dehumidification Capacity/h	60~92kg/h	120 ~ 184kg/h
Working Power	24kw	48kw
Hopper Size(mm)(L*W*H)	1560 (L) *1560 (W) *1500mm (H)	1560 (L) *1560 (W) *1500mm (H)
Size(mm) (L*W*H)	3380*2150*2820	4000*3485*3200
Structure	Whole set	Whole set
Weight	2800kg	5000kg
Compressor Amount	1set	2set
Cooling Method	water cooling	

»Appendix:

Energy consumption	2.0 ~ 3.5kg.H2O/KW.h
Refrigerant	R134a
Power Supply	220V\380V\440V/3H/50Hz(60Hz)
Drying Temperature	40 ~ 50°C(recycle air)/60 ~ 80°C(supply air)
Control System	Touch screen + PLC programmable control system
Applicable Range for Outlet Sludge	10%-40%

PROJECT REFERENCES

With its mission of "Solving the sludge problem", Shincci is proud to play its part for the sustainable development of cities and industries in the globe, by which enabling itself to be an admirable brand.

For the past years, Shincci has achieved rapid development in Low Temperature Drying Technology, with hundreds of project references all over the world.

> Just review some of our customers and projects as below



中南市政设计院



华北设计院



上海市政设计院



西北市政设计院



西南设计院



北京排水集团
BEIJING DRAINAGE GROUP CO., LTD



北京首创股份



sembcorp
胜科集团



中国节能



HITACHI
Inspire the Next
日立



MITSUBISHI
ELECTRIC



鲁抗
LUKANG
PHARMACEUTICAL



齐鲁制药
QILU PHARMACEUTICAL



LUXI
鲁西集团



RUNTU
润土



BEKAERT
better together



健康元
Jolncdre



FOXCONN



京东方
BOE



BASF

FOSHAN JIALIDA EPC

SLUDGE TYPE	SLUDGE SCALE	DEWATERING TYPE	MOISTURE OF WET SLUDGE	MOISTURE OF DRIED SLUDGE
Textile	1000T/D	Screw Press	85%	30%



SHENZHEN, BINHE WWTP

SLUDGE TYPE	SLUDGE SCALE	DEWATERING TYPE	MOISTURE OF WET SLUDGE	MOISTURE OF DRIED SLUDGE
Municipal	250T/D	Screw Press	80%	50%



SHENZHEN, FUTIAN WWTP

SLUDGE TYPE	SLUDGE SCALE	DEWATERING TYPE	MOISTURE OF WET SLUDGE	MOISTURE OF DRIED SLUDGE
Municipal	250T/D	Filter Press	70%	40%



JIAOZUO JOINCARE BIOTECHNOLOGICAL

SLUDGE TYPE	SLUDGE SCALE	DEWATERING TYPE	MOISTURE OF WET SLUDGE	MOISTURE OF DRIED SLUDGE
Medicine residue	180 T/D	Screw Press	65%	30%



YUMA SEWAGE TREATMENT PLANT (USA)

SLUDGE TYPE	SLUDGE SCALE	DEWATERING TYPE	MOISTURE OF WET SLUDGE	MOISTURE OF DRIED SLUDGE
Municipal	6.5m ³ /d	Screw Press	98%	30%



NAPLES SCALEA WWTP (ITALY)

SLUDGE TYPE	SLUDGE SCALE	DEWATERING TYPE	MOISTURE OF WET SLUDGE	MOISTURE OF DRIED SLUDGE
Municipal	3T/D	Filter Press	75%	20%



POLAND PHARMACEUTICAL PLANT

SLUDGE TYPE	SLUDGE SCALE	DEWATERING TYPE	MOISTURE OF WET SLUDGE	MOISTURE OF DRIED SLUDGE
Pharmaceutical	5T/D	Filter Press	83%	30%



SIGHISOARA SEWAGE TREATMENT PLANT (ROMANIA)

SLUDGE TYPE	SLUDGE SCALE	DEWATERING TYPE	MOISTURE OF WET SLUDGE	MOISTURE OF DRIED SLUDGE
Municipal	20T/D	Screw Press	80%	10%



STATEMENT:

We reserve the right to alter the specifications in case of technological upgrading without prior notice.

VERSION: 201907001



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