



# Compressed Air Dryer

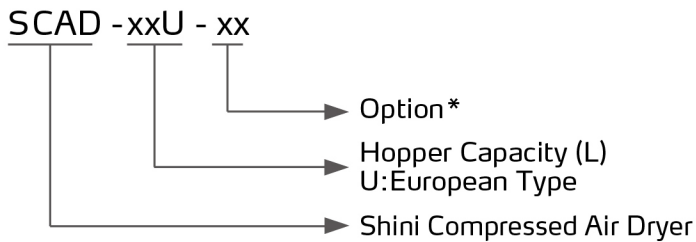
SCAD-12U



Refer carefully to this manual before operation.

# SCAD-U Series

## ■ Coding Principle



## ■ Features

- P.I.D. temperature controller with LCD can reach an accuracy of  $\pm 1^{\circ}\text{C}$ , and is easy to operate.
- The weekly timer with an auto On/Off function.
- The unit utilizes compressed air to dry plastic materials with a good and stable drying effect, and it is not influenced by ambient temperature and humidity.
- Compressed air pressure detection lets the unit operate smoothly and safely.
- Temperature control with an SSR relay can effectively prolong the unit's lifespan.
- The controller has built-in overheat protection to avoid excessively high drying temperatures.
- The unit has a built-in warning light that can visualize the status of the unit.
- It has an RS485 communication interface to realize remote monitoring or automatic production.
- The visualized drying hopper of SCAD -1~6U adopts a double-layer high-temperature-resistant tube.
- SCAD-1~6U has an air discharge filter before the dry air is released outside.
- The double-layer drying hopper of SCAD-12~40U is made of stainless steel to ensure no material contamination and prevent heat loss.
- SCAD-12~40U has a pipe heater temperature protector to prevent the unit from overheating or dry burning.

## ■ Options

- Entry-level dew point monitor, and add "Y.D." at the end of the model code.
- VAISALA dew point monitor, and add "D" at the end of the model code.
- For the unit with a polished hopper inside (only for SCAD-12U and above), add "P" at the end of the model code.
- Add "H.D." at the end of the model code for a heatless regenerative air dryer.



SCAD-3U



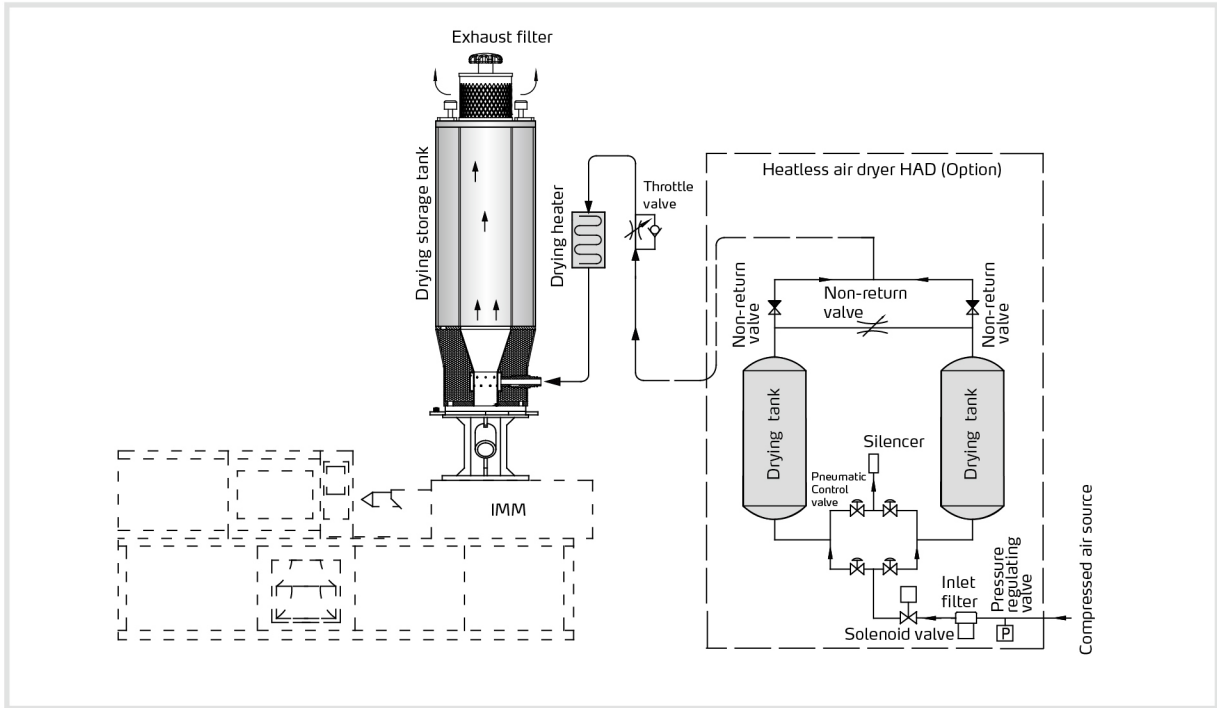
SCAD-20U-HD



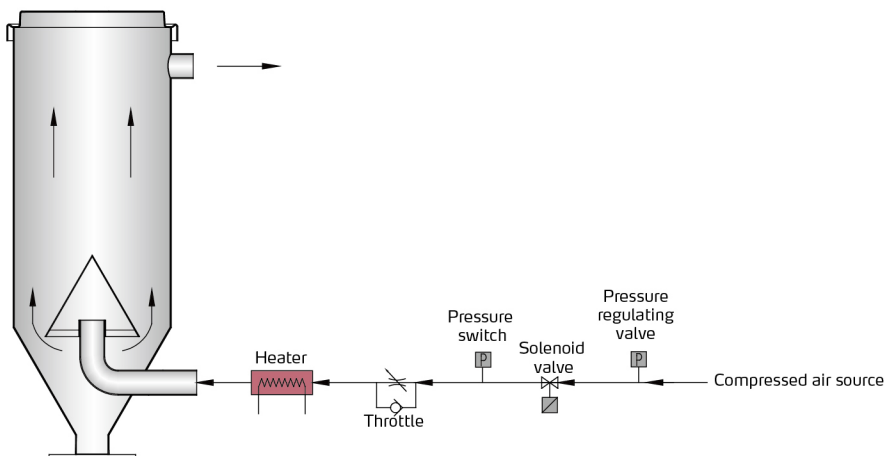
Control Panel

## Application

Applicable for small batch drying of commonly-used engineering plastics such as ABS and PS, also suitable for pre-heating treatment before plastics molding.

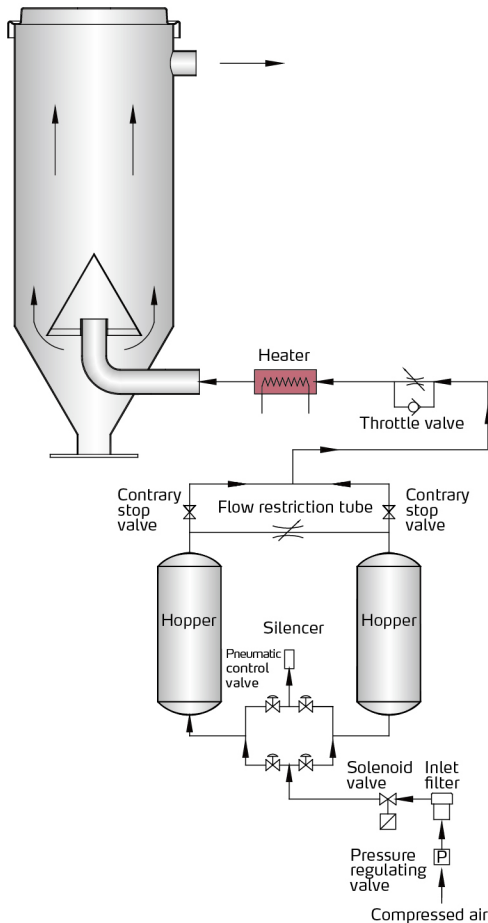


## Working Principle



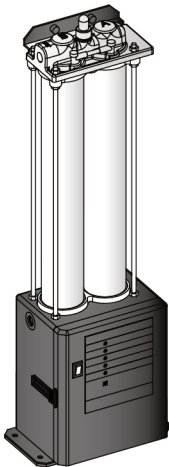
# SCAD-U Series

## Working Principle (SCAD-U-HD)



After machine startup, the system immediately opens the solenoid valve to open the gas pipeline. Then, the high-pressure air generated by the compressor passes through the filter & pressure regulating valve and inlet filter (including an oil mist filter and a micro-particle filter) for pressure regulation and removal of oil objects and impurities. The adjusting range of filter & pressure regulating valve is 0~1Mpa, and the gas pressure entering the machine must be  $\geq 0.4$  MPa. After pressure regulation and impurity removal, the high-pressure air enters the heatless regenerative air dryer, which utilizes the pressure swing adsorption principle to adsorb moisture by desiccants under pressure, and release moisture under reduced pressure to dehumidify the high-pressure air. The high-pressure air dew point after dehumidifying can reach  $-40^{\circ}\text{C}$ . The throttle valve controls the gas flow rate, and the high-precision P.I.D. heater uniformly heats the high-pressure air, with an accuracy of  $\pm 1^{\circ}\text{C}$ . Finally, the high-temperature high-pressure air is evenly blown onto the materials in the drying hopper via an air diffuser. The moisture in materials is evaporated by heat, taken away by the high-pressure air, and discharged into the ambient air, thereby achieving material efficient drying.

## Options



Heatless Air Dryer HAD

### Function

The dew-point of compressed air can reach  $-40^{\circ}\text{C}$  under standard atmosphere which meets the requirement of drying materials and molding of plastics.

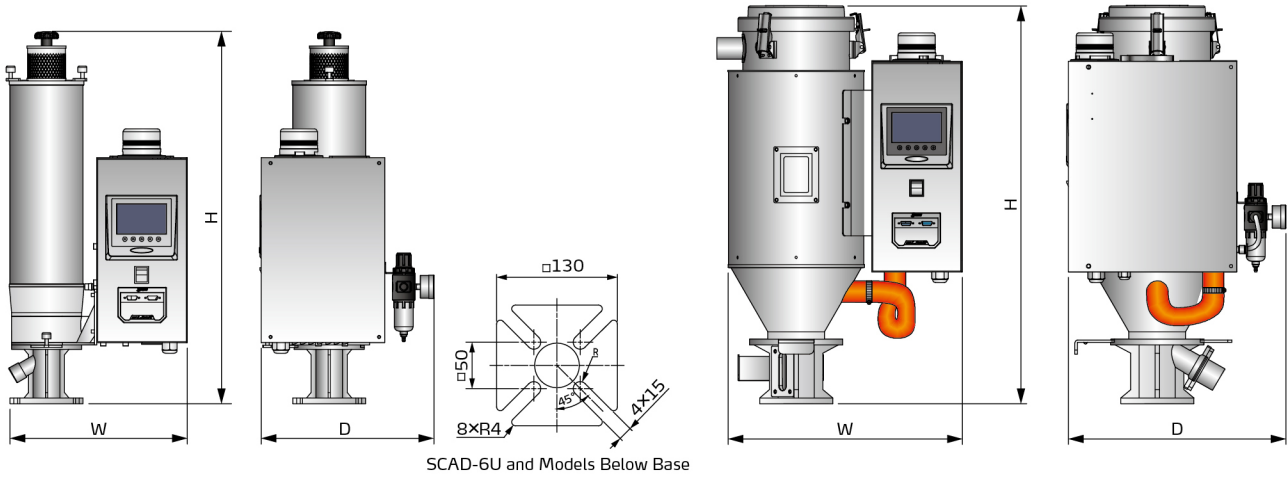
### Installation

It can be fixed on the molding machine or column of the foot stand. The air outlet and air inlet of SCAD-U are connected with air pipelines.

### Notes

Please clean up the filter regularly for fear that water or oil enters the drying hopper which damages the molecular sieve and influences the dehumidifying performance.

## Outline Drawings



SCAD-6U and Models Below

SCAD-12U and Models Above

## Specifications

Model	Drying Temp. max (°C)	Drying Hopper Capacity (L)	Heater Power (W)	Pressure Air		Dimensions (mm) (H × W × D)	Weight (kg)
				Pressure (kgf/cm <sup>2</sup> )	Air Consumption (m <sup>3</sup> /hr)		
SCAD-1U	140	1	300	6-10	2.4	664 × 316 × 308	10
SCAD-3U		3			3.0	693 × 316 × 308	13
SCAD-6U		6			3.75	880 × 316 × 308	15
SCAD-12U		12	600		4.25	710 × 418 × 391	25
SCAD-20U		20	1200		7	907 × 470 × 388	30
SCAD-40U		40			14	1117 × 510 × 404	45

Notes: 1) Compressed Air: Oil content  $\leq 3\text{mg/m}^3$ .  
 2) Power supply: 1 $\phi$ , 230VAC, 50Hz / 60Hz.

We reserve the right to change specifications without prior notice.

## Shini Group

Addr: No. 23, Minhe St., Shulin Dist.,  
New Taipei, Taiwan

Tel: +886 2 2680 9119

Fax: +886 2 2680 9229

Email: [shini@shini.com](mailto:shini@shini.com)

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