

HEAT BOX



What is the purpose of our Heat Box?

The Heat Box is designed for using waste heat in order to dry stored goods.

Description:

- Complete assembled unit composed of :
 - 1 Heat exchanger + 1 fan
- Designed for outdoor and indoor installation
- Housing isopanel 60 mm – protection against rain – galvanized access doors
- Painting RAL 9006 – Metal roof
- 3 phase current / 400 V / 50 Hz
- Electrical connection included
- Connection for flexible hose D=300mm

HEAT BOX

How can you choose the type of Heat Box?

How can you choose the most proper heat-box type for your storage ?

It highly depends on the required air flow.

Example:

You have a storage with following dimensions : Length 5m x Width 4m and Height 4m = $5 \times 4 \times 4 = 80 \text{ m}^3$

For drying, we need **80-120 m³/h** pro m³ storage

➔ 80 m^3 (Storage) x $120 \text{ m}^3/\text{h}$ (air Flow required for drying) = $9600 \text{ m}^3/\text{h}$

Consequently you will need the Heat Box 150 that provides $12000 \text{ m}^3/\text{h}$

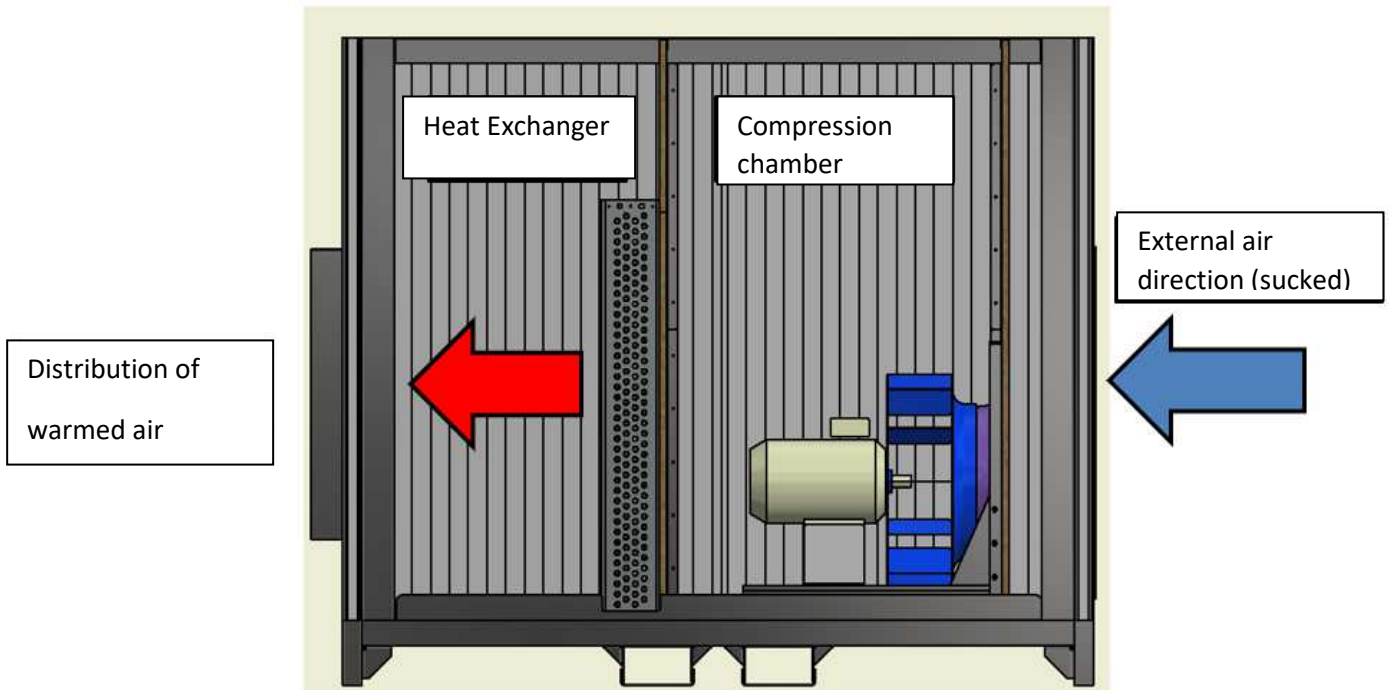
In order to receive appropriate advice on choosing the type of heat box, please send us the following information :

1. Dimensions of storage – length, width and height
2. Heat Exchanger – inlet temperature
3. Heating power (kw) inlet
4. Which material would you like to dry?

Then we will be able to send you the offer corresponding to your project.

Operating:

The external sucked air by fan will be directed to the air exchanger. This one will warm the external air that will be blased into the spiral hoses connected to the storage to be warmed.



The Heat-Box is a complete housing with one side for air sucking and one side for air blasing

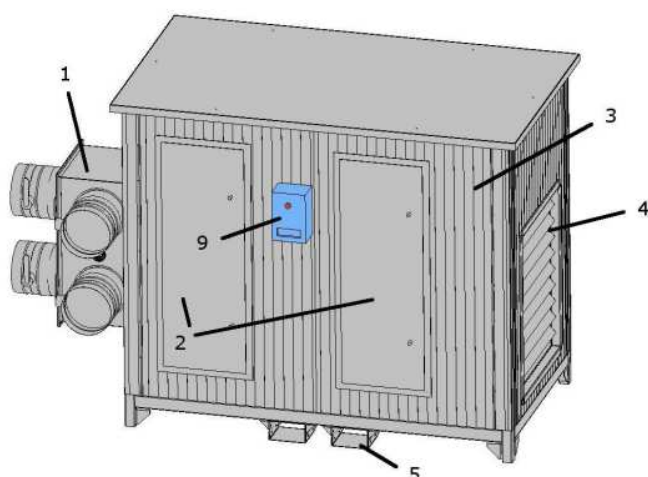
Several Heat Box sizes are available:

Depending on an inlet water temperature of 80°C (water temperature entering the heat exchanger) and an output water temperature of 65°C (water temperature leaving the heat exchanger) and an external air temperature of 20°C (sucked air by fan), you will obtain the following temperatures :

Type	Article	Air Flow m ³ /h with pressure 1000 Pa	KW	Output temperature
100	4015004015664	8000 m ³ /h	4,0	57 °
150	4015004015665	12000 m ³ /h	5,5	57 °
200	4015004015666	13000 m ³ /h	5,5	59 °
250	4015004015667	16000 m ³ /h	11	60 °
300	4015004015668	22000 m ³ /h	11	60 °
400	4015004015669	32000 m ³ /h	18,5	59°
500	4015004015670	38000 m ³ /h	18,5	58°
600	4015004015671			55°

Dimensions:

Type	Length mm	Width mm	Height mm
100 and 150	2430	1400	2030
200 to 650	3700	2420	2040



- 1 - Blowing connection
- 2 - Doors
- 3 - Container Heat Box
- 4- Suction grid (external air)
- 5 – Fork-lift plates
- 9 - Frequency converter (option)

Which material would you like to dry?

The Heat Box can be used to dry all cereals, as well as rapeseed

Heat-Box will be completely assembled for delivery. But the necessary accessories have to be ordered separately. (for example spiral hoses and trap-bands)

Basic information:

- Water connection – How strong should be the water pressure? Is it important?
- Inlet temperature in the heat exchanger has to be 80°
- **The maximal inlet temperature must in no case exceed 110°C.**
- Electrical connection: what is important ?
- What should be checked ?

Example:



Heat Box with main ventilation channel

Our website:

[Homepage - Schmelzer \(a-schmelzer.com\)](http://a-schmelzer.com)

Tel: +49 (0)9231/9792-0

zentrale@a-schmelzer.de