

### STRIKE® 20

STRIKE®20 is a 20L rotary evaporator designed for industrial systems and R&D purposes.

It meets all the process needs using 3.3 borosilicate glass and PTFE allowing aggressive substances treatment.

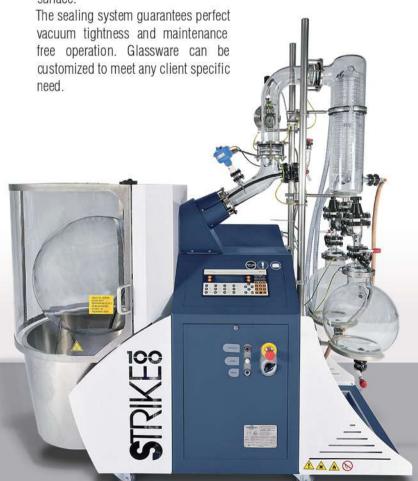
It works efficiently both under vacuum and at any ambient conditions. The rotation of the 6, 10 or 20L evaporation flasks inside the heating bath results in a forced convection and homogenous distribution of the product, preventing sedimentation while ensuring high evaporation exchange surface.



#### STRIKE® 100

STRIKE®100 is a large capacity rotary evaporator designed for industrial plants. It meets all the process needs by using borosilicate glass and PTFE permitting aggressive substances treatment.

It works efficiently both under vacuum or at any ambient conditions. The rotation of the 50 or 100 L evaporation flask in the heating bath results in a forced convection and homogenous distribution of the product, thus preventing sedimentation. In addition, STRIKE®100 ensures high evaporating exchange surface.



50 L or 100 L EVAPORATION VESSEI

1.43 m<sup>2</sup> EXCHANGE SURFACE

18 L/hour RECOVERY CAPACITY (ETHANOL 96%)

#### TOTAL SAFETY SYSTEM

STRIKE® 20 and STRIKE® 100 industrial safety rotary evaporators protect the user from any risk during work.

The heating bath (standard for Strike 100 and optional for Strike 20) is covered with a transparent shield providing the operator with utmost protection from glass breaking and spray at high temperature. It is lifted by means of a hydraulic system which, in case of power failure or doors opening, goes down automatically to prevent fluid overheating and the process will immediately stop.

A rupture disk protects from any risk of glassware breakage in case of accidental overpressure or malfunctioning.

Electric heater enhanced to 8Kw ensures continuous evaporation of the product even in the worst conditions.



# **MAINTENACE-FREE VACUUM SEALING**

Both STRIKE® 20's and STRIKE® 100's sealing systems are made of self-lubricating material allowing perfect vacuum tightness. The sealing system does not require any maintenance during the instrument's life. No gaskets, o-rings or consumables needed.



#### CONDENSER

The condenser ensures the largest exchange surface in order to obtain the best condensation as well as speed and recovery rates with very high performances.

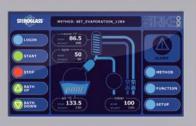
Optional: glass and stainless steel condenser for a very fast recovery in ethanol applications.



#### **USER-FRIENDLY DISPLAY**

STRIKE® 20 and STRIKE® 100 are equipped with a 7" touchscreen display and a anti-reflection coating glass panel.

STRIKE® 100 ATEX version is supplied with a PLC display and an industrial panel.



#### PLC PROGRAMMABLE LOGIC CONTROLLER



STRIKE® 100 ATEX is fully controlled by a PLC (Programmable Logic Controller) which allows for controlling the parameters as well as setting them directly by means of the keys.

User can acquire, on an external PC through serial communication, all the process parameters.

The following process operating conditions can be set and displayed:

- · Bath temperature
- · Rotation speed
- Vapour temperature
- Vacuum level

Any value error or anomalous temperature will block the electric power for safety reasons







#### **APPLICATIONS**

Distillation and extraction at low temperature (continuos/batch)
Solvent recycling
Reflux process reactions
Component drying
Fine chemical synthesis
Crystallization
Purifications
R&D studies
Scale-up



# **CHEMICAL & PHARMACEUTICAL**

The most efficient rotary evaporator to work in compliance with GMP and FDA regulations



## **HERBS**

The ideal solution for extraction and evaporation of officinal plants, medicinal plants (Cannabis)

The fastest way for ethanol removal and / or recycling

# **APPLICATIONS & TARGETS**



# **COSMETICS & PHYTOTHERAPY**

Utmost quality production thanks to gentle and natural extraction

Best ethanol recovery and purification guaranteed



# **LUXURY SPIRITS**

High quality production

Gently and natural extraction: low temperature combined with vacuum preserve all the aromatic properties of the botanics



# **FOOD-AROMA**

The ideal solution for extraction of hydrolates / flavoured waters made of essential oils, preserving all the olfactory, nutraceutical and organoleptic properties of the original product





### **ACCESSORIES**

- 1 Trolley for evaporating flask handling
- 2 Glass/stainless steel condenser for very fast recovery
- 3 Automatic filling

Vacuum pump, chiller and other options available an request



# STRIKE®20 TECHNICAL FEATURES

Working range °C	[ambient 150]		
Accuracy °C	+/- 2		
Resolution °C	0.1		
Set point	(1°C step)		
Type of control	PID		
Maximum oscillation during checkout °C	+/- 3		
Power resistor KW	3		
Heater power density	≤3W/cm2		
Over-temperature protection	YES		
Temperature sensor	PT100		
Filling level	Manual		
Vapour temperature			
Working range °C	[ambient 150]		
Accuracy °C	+/- 2		
Resolution °C	0.1		
Temperature sensor	PT100		
Rotation			
Working range Rpm	[10; 150]		
Accuracy Rpm	+/- 2		
Rotation speed reading	YES		
Resolution Rpm	1		
Vacuum control	30		
Working range mbar	[8; 999 atmospheric]		
Accuracy mbar	±5		
Resolution mbar	1		
Absolute vacuum reading	YES		
Display	Digital		
Vacuum setting	[0; 999]		
Lift system			
On/off	YES		
Electric	YES		
- THOUSENESS			

YES		
YES		
YES		
YES		
Descending, reflux,		
customized		
0.5		
YES		
YES		
YES		
1.240x580x2060		
230Vac mono 3,4 Kw		
150		
YES		

Interface

**ACCESSORIES** 

TECHNICAL FEATURES

# STRIKE®100 TECHNICAL FEATURES

Thermic Bath Working Range °C	[ambient; 150]		
Accuracy °C	+/- 2		
Resolution °C	0.1		
Set point			
Type of control	YES (1°C step) PID		
Maximum oscillation during checkout °C	+/- 3		
Power resistor KW	8		
1, 2,1,2, 1,2,2,2,1,1,1,1,1,1,1,1,1,1,1,			
Heater power density	3W/cm2		
Over-temperature protection	YES		
Temperature Sensor	Three-wire PT100		
Level sensor	YES		
Filling Level	Yes -Manual		
Vapour Temperature			
Working Range °C	[ambient; 150]		
Accuracy °C	+/- 2 0.1		
Resolution °C			
Temperature sensor	Three-wire PT100		
Rotation			
Working Range Rpm	[5; 100]		
Accuracy Rpm	+/- 2		
Rotation speed reading	YES		
Resolution Rpm	1		
Engine 0,18KW, 380Vac	YES		
Vacuum Control			
Working Range mbar	[8; 999 atmospheric		
Accuracy mbar	±5mbar		
Resolution mbar	1		
Absolute vacuum reading	YES		
Display	Digital		
Vacuum regulation	YES		

Lifting			
Lifting control ON/OFF	YES		
Hydraulic lifting	YES		
Interface			
PLC controlled	YES		
Export data interface	YES		
Remote control interface	YES		
Alarms			
Thermal bath overheat	YES		
Bath temperature exceeding set point	YES		
Soft start rotation	YES		
Rotation speed monitoring	YES		
Security status (rotation, lifting, heating=off)	YES		
Evaporation flask protection opening	YES		
General			
100Lt evaporation flask	YES		
50Lt evaporation flask	YES		
20L evaporation flask	YES		
20Lt collecting flask	2		
Cooler exchange surface (mq)	1.43/custom		
Over-pressure Protection	YES		
Protection with rupture disk	YES		
Quick closing	YES		
ATEX certification	EPTI 15 ATEX 0181		
Dimensions Reflux (WxDxH mm)	900x1.850x2.285		
Dimensions Vertical model (WxDxH mm)	900x1.850x2.150		
Weight Kg	350-400		

#### Operation

Vapours cycle maximum temperature	YES		
Vapours cycle minimum temperature	YES		W
Vapours cycle Temp range	YES	1	11 (
Data acquisition on PC	YES		
Remote Control	YES		7 ( )
Lowering bath in case of alarm	YES		

Optional
Plastic coated glassware ON REQUEST



