

## STRIKE 300 - Rotary Evaporator

### A philosophy of safety

The rotary evaporator STRIKE 300 combines excellent operating characteristics and high performance levels, all in an ergonomic design. STRIKE 300 has been projected in complete respect of safety needs and in compliance with the existing directive regarding equipment construction and electromagnetic compatibility.

### Evaporate laboratory solvents in maximum safety

Health and safety at the workplace are undoubtedly one of the foundations of international social policies. Several official documents regulate the objective of progressive improvement at workplace well-being. This law focuses on accident and disease prevention by limiting the use of dangerous substances (when possible) or by minimizing contact at the workplace and with workers. A common aim of the numerous publications is to define good practice, make it known and then develop it to the point where working conditions favour greater worker safety and health. To instill a culture of prevention and to change attitudes, it is necessary to improve understanding of risk for the people directly involved, through education, by making them aware as well as and helping them anticipate new risks. It is also essential to integrate health and workplace safety into company management and in other activities that lead to a systematic approach to workplace well-being, thus adapting to all the changes that normally take place. The risk prevention attitude must be consolidated by demonstrating that effective workplace safety and health policies are a strategic factor in market competition and that, in contrast, absence of these policies brings added costs.



Multifunction touch-screen

Maintenance-free vacuum and solvent sealing

Powered glassware lifting equipment as standard

Removable safety shield

Removable thermostatic bath

Easy to use

Compact design



## Innovations

The following are the technical innovations applied to the construction of the STRIKE 300 Rotary Evaporator making it a fast, efficient, safe and maintenance-free instrument.

### Design

Compact and modern. All controls are placed on the central column to guarantee user-friendly and handy use.



### Sealing system

The exclusive STEROGLOSS sealing system allows a perfect vacuum-tight anti-corrosion seal without gaskets or other materials that can be damaged by solvent contact. This sealing system is a standard feature in all strike models and can be used with all types of glassware.



### Control panel

The touch screen is wide and easy to read. The microprocessor is multi-programmable and GLP compliant.



### Rotary evaporator innovations

The following are the technical innovations applied to the construction of the STRIKE 300 Rotary Evaporator making it a fast, working, efficient, safe and maintenance free instrument.



### Powered glassware

Compact and modern. All controls are placed on the central column to guarantee user-friendly and handy use.



### Flask assembly

System used to assemble the evaporation flask. The evaporation flask is screwed onto the steam passing pipe to ensure easy assembly and dismantling operations as well as a perfect seal. (You may also use conventional unthreaded cone flasks and spring-clamps to mount the flasks).



### Integrated vacuum controller

The optional vacuum controller is managed by the touch screen display that comes as standard



### Safety shield

The shield is standard for all models. It can be removed by the operator and fitted beside the instrument.



## Standard features and performance:

- > Removable safety shield
- > Glassware lifting made possible with or without protective shield
- > Maintenance-free PTFE and carbon graphite seals
- > Powered glassware lifting equipment with safety release (in case of power failure)
- > 3,5" monochromatic LCD touch screen
- > Quick Start/Stop control and parameter selector
- > Rodavis evaporation flask connection system
- > Removable thermostatic bath, PTFE coated
- > GLP-compliant instrument (with USB interface)
- > Optional fume temperature probe
- > Optional vacuum controller
- > Rotation speed from 20 to 280 rpm (150W induction motor)
- > Thermostatic bath ambient temperature: 185°C (2 possible settings: water and oil)
- > Bath heater: 1200W
- > Bath capacity: 5 liters
- > Bath material: PTFE coated
- > Removable bath for emptying
- > Models available with vertical or slanting, standard or plastic-coated glassware
- > Evaporating flasks: 1000ml (optional 50 to 3000ml)
- > Collecting flasks 1000ml: (optional 250 to 2000ml)
- > Overall dimensions: 690x700x430mm (vertical version)
- > Weight: 26,5 Kg (vertical version)
- > Overall dimensions: 690x790x430mm (slanting version)
- > Weight: 26 Kg (slanting version)
- > Voltage: 230 V AC, 50Hz
- > Power consumption: 1400W



## Control panel and microprocessor

- > 3.5" LCD graphic display touch screen (320 x 240 pixel)
- > START/STOP control and quick basic parameter selection
- > Real-time display of all basic operating parameters (bath temperature, rotation speed, vacuum level and fume temperature (if optional probe and vacuum controller are present))
- > Real-time display of working method
- > Method saving and retrieving (up to 10 methods)
- > Timer
- > Possibility to operate according to fume temperature (if optional probe is present)
- > Possibility to create manual and automatic ramps according to time, by differentiating all working parameters (if vacuum controller is present)
- > Possibility to download working method to PC through USB port and retrieve it at any time
- > USB updatable multi-language software.

## Models of STRIKE 300

### Configurations in standard glassware

Order Number	Model	Type	Voltage	Version
SQED059113	Rot.Evap.STRIKE 300 M1	Slanting glassware	220V	O
SQED059112	Rot.Evap.STRIKE 300 M2	Vertical glassware (Steam sinking type)	220V	V
SQED059111	Rot.Evap.STRIKE 300 M3	Vertical glassware(Steam rising type)	220V	U

### Configurations in plastic coated safety glassware

Order Number	Model	Type	Voltage	Version
SQED059419	Rot.Evap.STRIKE 300 M4	Slanting glassware	220V	O/P
SQED059418	Rot.Evap.STRIKE 300 M5	Vertical glassware (Steam sinking type)	220V	V/P
SQED059417	Rot.Evap.STRIKE 300 M6	Vertical glassware(Steam rising type)	220V	U/P
SQED059420	Rot.Evap.STRIKE 300 M7	Dry ice condensation type	220V	C

NOTE: Other glassware versions are available upon specific request



## Recommend for building up



Possibility to operate according to fume temperature (if optional probe is present)



Possibility to create manual and automatic ramps according to time, by differentiating all working parameters (if vacuum controller is present)



Cooling and temperature control of 1 to 4 rotary evaporators at an evaporation temperature of +40 °C

Model	0.5-1 liters	up to 2 liters		up to 4 liters		Up to 20 liters
Number of rotary evaporators	1	2	3-4	1	2	1-2
Chiller	FL300 F250	F601 F500	FL1201 FL1203 F1000	FL1201 FL1203 F1000	FL1701 FL1703	FL2503 FL4003



## Accessories and spare parts

### PT100 probe

Order No.	Description
SQEF059420	complete with trap for vapour temperature reading (directly interfaced and control led by Strike 300)



### Borosilicate glass adapter for multiple evaporation flask

Order No.	Description
SQFW029300	For multiple evaporation, N.4 sockets NS12 with central socket NS29/32
SQUA062435	For multiple evaporation, N.4 sockets NS29 with central socket RODAVIS 29
SQUA062434	For multiple evaporation, N.3 sockets NS29 with central socket RODAVIS 29
SQFW029301	For multiple evaporation, N.4 sockets NS19 with central socket RODAVIS 29



1

2

3

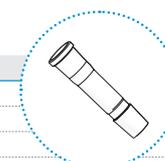
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### Borosilicate glass refrigerator

Order No.	Description	No.
SQEF059799	With internal coil, O version (slanting)	1
SQEF059798	Plastic coated, with internal coil, O version (slanting)	1
SQEF059796	With internal coil, V version (vertical, Steam sinking type)	2
SQEF059797	Plastic coated, with internal coil, V version (vertical, Steam sinking type)	2
SQEF059794	With internal coil, U version (vertical, Steam rising type)	3
SQEF059795	Plastic coated, with internal coil, U version (vertical, Steam rising type)	3
SQEF059793	Dry ice condensation type	4

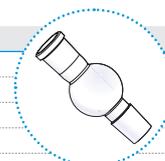
### Borosilicate glass adapter for connection

Order No.	Description
SQAD060001	NS29/32 to NS24/29
SQAD060002	NS29/32 to NS19/26
SQAD060003	NS29/32 to NS14/23



### Anti-sprinkling bubble in borosilicate glass (for evaporation flasks up to 500mL)

Order No.	Description
SQFW026451	BUBBLE volume 100mL, NS29/32 to NS29
SQFW026452	BUBBLE volume 100mL, NS29/32 to NS24
SQFW026453	BUBBLE volume 250mL, NS29/32 to NS29
SQFW026454	BUBBLE volume 250mL, NS29/32 to NS24



### Borosilicate glass rodavis evaporating flask 29/32

Order No.	Description
SQFY051170	Capacity 50mL
SQFY015938	Capacity 100mL
SQFY015939	Capacity 250mL
SQFY015940	Capacity 500mL
SQFY015934	Capacity 1000mL
SQFY015935	Capacity 2000mL



### Joint clips, Plastic

Order No.	Description
FLMU016720	For 29/32, pk/1
FLMU016721	For 24/29, pk/1
FLMU016722	For 19/26, pk/1
FLMU016723	For 14/23, pk/1



### Evaporating flasks for powders

Order No.	Description
SQFY046060	Capacity 500mL
SQFY046062	Capacity 1000mL
SQFY046061	Capacity 2000mL



### Tightening clame

Order No.	Description
FLMM016694	Tightening clamp for flask with spherical joint



### Borosilicate glass collecting flask 35/20

Order No.	Description
SQUA015797	Round collecting flask with spherical Joint capacity ml.250
SQUA015798	Round collecting flask with spherical Joint capacity ml.500
SQUA015796	Round collecting flask with spherical Joint capacity ml.1000
SQUA015792	Round collecting flask with spherical Joint capacity ml.2000



### Sleeves, PTFE

Order No.	Description
KAMY011542	For 29/42, pk/1
KAMY011543	For 29/32, pk/1
KAMY011544	For 24/29, pk/1
KAMY011545	For 19/26, pk/1
KAMY011546	For 19/22, pk/1
KAMY011547	For 14/23, pk/1



### Plastic coated borosilicate glass collecting flask 35/20

Order No.	Description
SQUA015788	Round collecting flask with spherical Joint capacity ml. 250
SQUA015791	Round collecting flask with spherical Joint capacity ml. 500
SQUA015789	Round collecting flask with spherical Joint capacity ml. 1000
SQUA015790	Round collecting flask with spherical Joint capacity ml. 2000



### Rubber vacuum resistant tube

Order No.	Description
AEHA024253	8×16mm silicone vacuum resistant tube, 1meter, uncut



# Vacuum Pumps and Solvent Recovery Systems for STIRKE 300

## Chemical Resistant Pumps - A Series

The new Chemical Resistant Diaphragm Vacuum Pump is Wiggins' most efficient, reliable and economical model to date, which can be widely used to hard acidic, basic and solvent vapors by utilizing corrosion proof PTFE on all the wet surfaces.

- > High chemical resistant
- > No air pollution, maintenance free
- > Quiet and low vibration
- > Thermal protection device
- > International safety certification Ultimate Vacuum Down to 2 mbar
- > High Flow Rates Up to 40L/min
- > Easy Maintenance

### Specifications

Model	A 410	A 510
Power	220-240V/50Hz	220-240V/50Hz
Max.powe( W )	150	150
Max.current(A)	0.6	1
Max.vacuum(mbar)	13	8
Max.Flow Rate(L/min)	25	40
Motor Speed(rpm)	1450	1600
Number of Stages	Double	Double
Outlet (mm)	10	10
Size WxDxH(mm)	230x155x173	290x190x210
Weiht(kg)	4.5	10
Noise Level(db)	50	60



## Chemical Resistant Diaphragm Pumps - C Series

C series are chemical resistant diaphragm vacuum pumps which can be widely used to hard acidic, basic and solvent vapors by utilizing corrosion proof PTFE on all the wetted surfaces. Through innovative mechanical technology and human considerations, we have made Chemvak C series to be quiet, safe, maintenance-free and cost effective vacuum pumps.

### High chemical resistant

All wetted parts of Chemvak C series pump are made of PTFE material which are ideal for extremely aggressive / corrosive gases and vapors.

### No air pollution, maintenance free

Chemvak C series pumps are driven by Diaphragm, without the need of lubricant, regular oil changes and maintenance; with no oil pollution.

### Quiet and low vibration

Driven direct by motor with no additional belt-driven transmission; the quality vibration-proof assembly makes Chemvak C series run at the lowest noise level among all other equivalent pumps.

### Thermal protection device

Every motor of Chemvak C series pumps has a built-in thermal protection device to shut off the pump automatically when overheated and then resume working when the temperature cools down.

### International safety certification

CE certification, UL certification

### Specifications

Model	C410		C510		C610	
	115V / 60Hz	220V / 50Hz	115V / 60Hz	220V / 50Hz	115V / 60Hz	220V / 50Hz
Power	90	95	250	245	250	245
Max. power (W)	90	95	250	245	250	245
Max. current (A)	1.4	0.5	2.4	1.1	2.4	1.1
Max. vacuum (mbar)	13		8		2-4	
Max. Flow Rate (L/min)	25	25	41	34	37	37
Motor Speed (rpm)	1700	1450	1700	1450	1700	1450
Number of Stages	Double		Double		Double	
Outlet (mm)	10		10		10	
Size WxDxH (mm)	294*156*195		380*156*226		380*171*226	
Weight (kg)	8.5		13.2		13.8	
Noise Level (dB)	50		60		60	
Order No.	169410		169510		169610	



## Solvent Recovery Systems

- > Sealed system to enable a good distillation environment
- > Precise control of the evaporation process
- > Compact and environmental friendly design
- > Low noise
- > Buffer bottle prevents particles from damaging the pump
- > Direct electric connection
- > Ultimate vacuum range: 2 – 13 mbar
- > Flow rate range: 10 – 34 L/min

### CSH System

The inlet of the CSH System is connected to a segregation bottle, whereas the outlet is connected to a condenser, which is used to condensate and recover the solvent.



Model	CSH 410	CSH 510
Build in Pump Type	C410	C510
Power (W)	95	245
Ultimate Vacuum (mbar)	13	8
Max. Flow Rate (l/min)	25	34
Outlet Size (outer diameter in mm)	10	10
Order No.	900512	900513

### CSH system contains

Chemical resistant diaphragm pump, Separator, Condenser, Set of tubing, Casing

### CSC System

The inlet of the CSC System is connected to a segregation bottle, whereas the outlet is connected to a condenser, which is used to condensate and recover the solvent. In addition, the system contains a vacuum controller to set, display, and control the vacuum.

Fully automated vacuum generation system comprising Chemical resistant diaphragm vacuum pump, base plate, high performance condenser, segregation bottle, Vacuum control device, valves and control unit.



Model	CSC 410	CSC 510
Build in Pump Type	C410	C510
Power (W)	150	150
Ultimate Vacuum (mbar)	13	8
Max. Flow Rate (l/min)	25	40
Outlet Size (outer diameter in mm)	10	10
Order No.	900522	900523

### CSC system contains

Chemical resistant diaphragm pump, Vacuum controller, Separator, Condenser, Set of tubing, Casing

## Vacuum controller



DVR 480 Series



ST300

### DVR Series High-precision vacuum controller

- > Large measurement and control range
- > Supports the programming of up to 5-step control
- > All parts that come into contact with gases are made of PTFE or highly durable ceramic to ensure high chemical resistance
- > RS-232 and analog connection available
- > Direct electric control of the vacuum pump
- > Suitable for continuous operation

### ST300 vacuum controller

- > ST300 vacuum controller can be attached on the side of rotary evaporator
- > Complete with valve (directly interfaced and controlled by Strike 300).
- > The vacuum tube is not included.

Model	DVR480 / DVR480-Pro	ST300
Voltage	100-240V, 50/60Hz	12VDC
Displayed Vacuum Accuracy	0.1 mbar	1 mbar
Controllable Range	0.1~1000 mbar	1~1000 mbar
Measurement Accuracy	0.25 level / 0.1 level	1 level
Display	LED	Display on the STRIKE 300
Control Mode	On-Touch	Controlled by STRIKE 300
Timer / Program	Yes / Up to 5 Steps	-
Pressure Release Feature	Yes	No
Electrical Control of the Pump	Yes	Yes
Protection Category	IP40	IP40

Corrosion resistance All parts that come into contact with gases are made of PTFE or highly durable ceramic to ensure the resistance to various acid, base, or organic solvent gases.

**Note:** CSC Solvent Recovery Systems already contains a vacuum controller.

## Recirculating cooler

saving water, accurate temperature control, high efficiency condensing for Strike 400

### Your advantages

- > Environmentally-friendly operation with low energy consumption
- > Compact design
- > Splash-proof membrane keypad with LED temperature display
- > Straightforward filling and draining
- > Filling level indicator
- > May be used with water, water/glycol, JULABO Thermal G



JULABO	Model	Working temp. range	Temp. stability	Cooling capacity ( kW )				Pump capacity	Flow rate/pressure	Filling volume liters	Dimensions	
Order No.		°C	°C	20	10	5	0	-5	L/min	bar	L	WxLxH cm
9 620 025	F250	-10~40	± 0.5	0.25	0.22	0.21	0.18	0.09	15	0.35	1.7~2.6	24x40x52
9 620 050	F500	0~40	± 0.5	0.50	0.40	0.30	0.25	-	24	0.5	5~7.5	37.5x44x59
9 620 100	F1000	0~40	± 0.5	1.00	0.70	0.65	0.35	-	23	1.0	7~9.5	37.5x49x64