

# Probably the best Speed Vacuum Concentrators in the world



# Speed Vacuum Concentration

Speed Vacuum Concentration from ScanVac allows easy and reproducible concentration of biological samples. Sample activity is preserved, cross contamination is avoided, and sample concentration is increased. Systems are environmentally friendly, maintenance free, and designed for specialist applications. Freeze drying can also be carried out where this is required.

## ScanSpeed

The ScanSpeed vacuum centrifuges come in 2 sizes: ScanSpeed 32, a compact, economical unit taking up to 120 x 1.5-2.0 ml Eppendorf tubes or ScanSpeed 40 offering increased capacity and larger sample size where automatic runs are required, taking 200 x 1.5 ml-2.0 ml Eppendorf tubes, 12 x 50 ml conical tubes or up to 4 x Microtitre plates. ScanSpeed may be delivered as a stand alone unit completing an existing system, or as a ready to use system including all necessary components to perform fast, reproducible vacuum concentration or as a combination with a freeze dryer.

## Cooling trap

By choosing a suitable cooling trap an effective, fast, reproducible, environmentally friendly and maintenance-free vacuum concentration is achieved. The lower the temperature of the trap the faster the drying and since most samples contain small or large amounts of aggressive or non-aggressive solvents or acids the traps protects the vacuum pumps and the environment. The choice is between CoolSafe 55 with 4 or 9 litres capacity, or CoolSafe 110 with 4 litres capacity

## Vacuum pump

By choosing a low pressure rotary vane pump vacuum concentration and freeze drying can be performed. By choosing a membrane pump vacuum concentration can be performed without pollution of the vacuum oil.



# ScanSpeed

The ScanSpeed concentrator range comprises 2 sizes both with the same technical specification except for the amount of sample they may take:

ScanSpeed 32 takes 120 x 1.5 ml – 2.0 ml Eppendorf tubes, or up to 6 x 50 ml Conical Tubes among others.

ScanSpeed 40 takes 200 x 1.5 ml – 2.0 ml Eppendorf tubes, up to 12 x 50 ml Conical tubes, and 4 x Microtitre Plates among others.

Both ScanSpeed 32 and 40 are characterized with

- large capacity rotor programme – any vial type may be adapted upon specification
- built-in heating adjustable from +5 degrees to + 80 degrees for the optimum evaporation speed.
- Rotation speed of 1400 rpm, which prevents sample boiling and frothing and protects against cross contamination.
- vacuum read out down to  $10^{-3}$  mBar for leak and full sample dryness control
- programmable timer function for automatic start/stop and runs
- build in vacuum valve and safety break for safer running
- stainless steel interior 316 L for longest life
- optional Teflon coating for protection against TFA and HCl
- compact



Technical specifications:

	ScanSpeed 32	ScanSpeed 40
Cat. No	7.008.100.011	7.008.100.001
Rpm	1400	1400
Dimension mm W x D x H	380 x 450 x 310	460 x 540 x 310
Temp. Range ° C	+ 5 to + 80	+ 5 to + 80
Power consumption W	1500	1500
Voltage V/Hz	230/50	230/50
Teflon coating	7.008.100.002	7.008.100.002



# CoolSafe

Choosing the right cold trap for the application can increase drying speed, guarantee a low product temperature and ensure biological activity is maintained. By trapping all vapours it can protect the laboratory environment and increase the life of the vacuum pump.

## Featuring:

- Seamless condenser for long life
- Cooling coil outside condenser allows faster de-icing and easy cleaning, whilst giving larger condensing surface.
- Condenser manufactured in 316 corrosion resistant stainless steel.
- Option Teflon coating for protection against TFA and HCl.
- Noiseless operation, less than 52dB(A)
- Microprocessor control with digital readout of temperature and alarms.

## CoolSafe 55-4 and 55-9

The CoolSafe 55-4 cooling traps have a lowest temperature of -55 degrees and take a maximum of 3 kg or 7 kg of ice prior to defrost depending on model size. 24 hour rates are 2.5 kg and 4 kg respectively.

The cooling traps are designed primarily for use with aqueous solvents and freeze drying of samples with freezing points above -40 degrees.

## CoolSafe 110-4

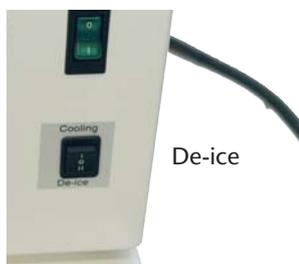
The CoolSafe 110-4 is a cooling trap with a lowest temperature of -110 degrees and a maximum capacity of 3 kg of ice prior to defrost, with a speed of 2.5 kg/24 hours. The low temperature allows the trapping of most kinds of organic, in-organic, aqueous and acidic solvents as well as speeding up drying times.

Optional Teflon coating, resistant to all aggressive agents including TFA and HCl, is available as well as a glass insert for particularly aggressive chemicals.

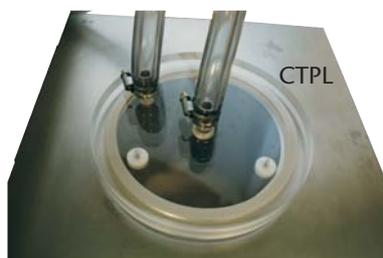


## Technical specifications:

	CoolSafe 55-4	CoolSafe 55-9	CoolSafe 110-4
Cat. No.	7.001.000.060	7.001.000.055	7.001.000.115
Ultimate temperature:	-55 °C at 20 °C room temperature	-55 °C at 20 °C room temperature	-110 °C at 20 °C room temperature
Condenser dimension, mm:	162 × 180	200 × 235	162 × 180
Total volume, L:	4	9	4
Cabinet dimensions H×W×D, mm:	500 × 400 × 500	500 × 400 × 500	500 × 400 × 500
Insulation, cm:	9	5	9
Condenser capacity per 24 hours, kg:	2,5	4	2,5
Condenser capacity/total, kg:	3	7	3
Cooling media:	R507	R507	R507/R1150
Power, V/Hz:	230/50, 115/60	230/50, 115/60	230/50, 115/60
Power consumption, W:	200	400	400
Materials:	Cabinet polyester coated steel Condenser stainless steel AISI 316	Cabinet polyester coated steel, Condenser stainless steel AISI 316	Cabinet polyester coated steel, Condenser stainless steel AISI 316
Weight, kg:	40	45	55
Drain tap:	Yes	Yes	Yes
Digital temperature read-out:	Yes	Yes	Yes
Microprocessor control with alarms:	Yes	Yes	Yes
Start delay for the compressors:	Yes	Yes	Yes



De-ice



CTPL



Glass ins.

Cat. No.	Code	Description
7.001.000.991	GlassIns	Glass insert for CoolSafe 55/110-4 including lid
7.001.000.990	GlassIns extra	Extra Glass insert for CoolSafe 55/110-4
7.001.000.061	CTPL	Cooling trap lid with 2 pipes
7.001.300.001	De-ice	Electrical De-ice function for fast de-icing of the condensor
7.001.300.002	Teflon	Teflon coating of CoolSafe 110-4 when drying aggressive acids
7.001.000.066	4Castors	Castors 4 pcs 2 is lockable mounted direct on CoolSafe or the Elevation Rack
7.001.000.990	GlassIns	Glass insert for CoolSafe 55/110-4 fitting lid

## Vacuum Pump

The choice of vacuum pump depends on the application:

When handling only organics / acids where water is not present, then the system should include the CS 110-4 to trap the volatile vapours, and a MP 2.2 membrane pump. This choice will minimize solvent bubbling and maintain good vacuum levels.

When handling samples containing a mixture of water and organic solvents, the system should include a CS 110 to trap the vapours, and a VP 2 rotary vane vacuum pump. This will allow the water to be trapped before the pump and will offer the option of freeze drying if required.

When handling mainly water as a solvent and if a low product temperature is not required, then the CS55-4/9 cooling traps are the choice with a traditional VP 2 rotary vane vacuum pump.



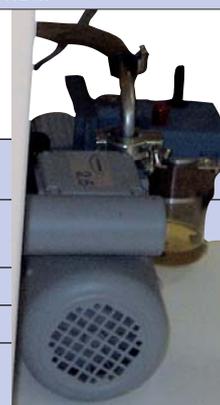
VP 2



VP 6

7.001.001.069	VP 2	Vacuum Pump 30 L/min, 1,8 m <sup>3</sup> /hour ultimate vacuum 0,001mBar	220V/50Hz
7.001.001.072	Anti-SucValve2	AntiSuc back valve for VP2	
7.001.001.070	Oilmist	Oil-mist filter for VP2/VP6	
7.001.001.071	HN	Hose Nozzle for VP2/VP6	
7.001.201.069	VP 6	Vacuum Pump 96 L/min, 5,8 m <sup>3</sup> /hour ultimate vacuum 0,0002 mBar	220V/50Hz
7.001.201.072	Anti-SucValve5	AntiSuc back valve for VP6	
7.001.001.070	Oilmist	Oil-mist filter for VP2/VP6	
7.001.001.071	HN	Hose Nozzle for VP2/VP6	
7.001.001.099	MP 2.2	Membrane pump 37 L/min, 2,2 m <sup>3</sup> /hour ultimate vacuum 9 mBar	

7.001.001.098	MZ 2.4	VacuBrand Membrane pump 40 L/min, 2,4 m <sup>3</sup> /hour ultimate vacuum 4 mBar
7.001.500.069	RZ 2.5	VacuBrand Vacuum Pump 2,5, 42 L/min, 2,5 m <sup>3</sup> /hour ultimate vacuum 0,001mBar - inclusive anti suck back valve
7.001.500.070	VHN	VaccuB Hose Nozzle for RZ 2.5/6.0
7.001.500.071	Voilmist	Oil-mist filter for RZ 2.5/6.0
7.001.510.070	RZ 6	VacuBrand Vacuum Pump 6,0, 100 L/min, 6,0 m <sup>3</sup> /hour ultimate vacuum 0,0001mBar with antisuck



# SS40 55/110

## Features

- ◆ ScanSpeed40
- ◆ Heating temperature +5 to +80 °C
- ◆ Allows automatic control of vacuum concentration
- ◆ Programmable Microprocessor controller
- ◆ Rotor for 200 x 1.5 to 2 ml Eppendorf tubes
- ◆ LCD read-out of the temperature for Condenser, Products and Vacuum

- ◆ Precise monitoring of the vacuum from 1000 mbar to 10<sup>-3</sup> mbar
- ◆ Multi System with Manual Over-ride.
- ◆ Built-in Heat Programmer
- ◆ Built-in Vacuum Break Device
- ◆ Compact Rack on lockable castors

Choose between -55 °C and -110 °C condenser temperature models



Cat. no	Code	Description
7.008.500.001	SS40 55-4	Scanspeed 40, -55 °C condenser temperature, 4 litres incl. microprocessor, connection kit, 200 x 1.5 ml, Eppendorf rotor, Rack, connection kits
7.008.500.002	SS40 110-4	Scanspeed 40, -110 °C condenser temperature, 4 litres incl. microprocessor, connection kit, 200 x 1.5 ml, Eppendorf rotor, Rack, connection kits
7.008.500.003	SS40 55-9	Scanspeed 40, -55 °C condenser temperature, 9 litres incl. microprocessor, connection kit, 200 x 1.5 ml, Eppendorf rotor, Rack, connection kits
7.008.500.004	SS-Lyo kit	Upgrading SS40 to freeze drying and vacuum concentration in one with 4 x ¾ inch quick seal valves and connection kits. For use with all ScanVac accessories

Cat. no	Code	Description
7.001.001.069	VP 2	Vacuum Pump 30 L/min, 1,8 m <sup>3</sup> /hour ultimate vacuum 0,001 mBar
7.001.001.070	Oilmist	Oil-mist filter for VP2/VP6
7.001.001.072	AntiSucValve2	AntiSuc back valve for VP2
7.001.001.071	HN	Hose Nozzle for VP2/VP6
7.001.001.099	MP 2.2	Membrane pump 37 L/min, 2,2 m <sup>3</sup> /hour ultimate vacuum 9 mBar

## Choice of rotors

	Rotor Model	Tube Volume	Number of Tubes	Tube dimensions	Tube Type	
	* R1.5-120	2ml	120ea		Eppendorf Tube	
	■ R1.5-200	2ml	200ea			
	* R5-72	5ml	72ea		Test tube	
	■ R5-200	5ml	200ea(192ea)			
	* R10-32	10ml	32ea			
	■ R10-98	10ml	98ea			
	■ R15-48	15ml	48ea			
	■ R50-12	50ml	12ea			
		* R15-12	15ml	12ea		Conical Tube
		* R50-6	50ml	6ea		
		■ R50-12	50ml	12ea		
		* R10-18	10ml	18ea		
		* R20-12	20ml	12ea		Vials
		■ R20-30	20ml	30ea		
■ R30-24		30ml	24ea			
■ R8-60		8ml	60ea			
	■ MTR96-4	96hole x 4plates			Micro-titre Plate	

\* ScanSpeed 32

■ ScanSpeed 40

The rotors are black for best heat adsorption. Other rotors are available please specify tube length dimension and bottom shape.



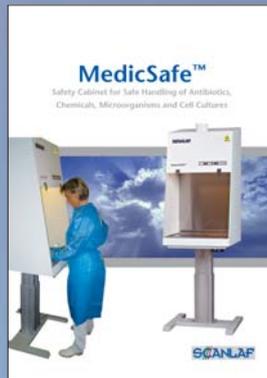
# Other Accessories

Cat. No.	Code	Description
7.001.200.101	Flask300	Freeze drying flask/chamber 300 ml with rubber lid for connection to 3/4 inch rubber valves
7.001.200.102	Flask600	Freeze drying flask/chamber 600 ml with rubber lid for connection to 3/4 inch rubber valves
7.001.200.103	Flask1200	Freeze drying flask/chamber 1200 ml with rubber lid for connection to 3/4 inch rubber valves
7.001.200.100	Flask150	Freeze drying flask/chamber 150 ml with rubber lid for connection to 3/4 inch rubber valves
7.001.100.065	EIStand	Electrical Elevation Rack for CoolSafe, Vacuum pump and VacControl
7.001.000.066	4Castors	Castors 4 pcs 2 is lockable mounted direct on CoolSafe or the Elevation Rack
7.001.000.067	VC	Vacuum hose 1 m incl 2 hose clamps
7.001.000.168	VacCon	VacControl VAP 5 for documentation of vacuum from atm. to 10-3 mBar(0,001hPA) 220V/50Hz
7.001.000.068	VacConTrans	VacControl transportable for documentation of vacuum from atm. to 10-3 mBar(0,001hPA) 220V/50Hz
7.001.000.078	T-KitVac	T-kit for connection of Vacuum controller to freeze drying system
7.001.000.076	AmpMan16	Ampoule manifold for 3/4 inch rubber valves with 16 x 6 mm pipes
7.001.000.072	C29/32	3/4" aluminium cone 29/32
7.001.000.073	C34/36	3/4" aluminium cone 34/36
7.001.000.074	C24/29	3/4" aluminium cone 24/29
7.001.000.077	T-kit	T-kit with 2 x 3/4 inch rubevalves, 2 x PC for connection of 2 x CoolSafe to 1 vacuum pump
7.001.000.991	GlassIns	Glass insert for CoolSafe 55/110-4 including lid
7.001.000.990	GlassIns extra	Extra Glass insert for CoolSafe 55/110-4

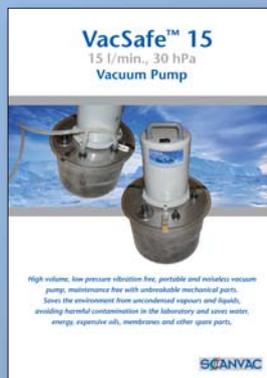
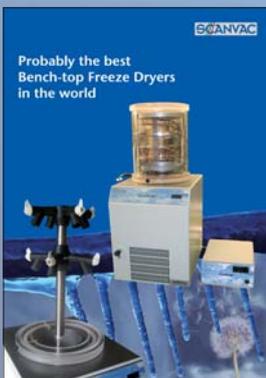


# Our other Products

**SCANLAF**



**SCANVAC**



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