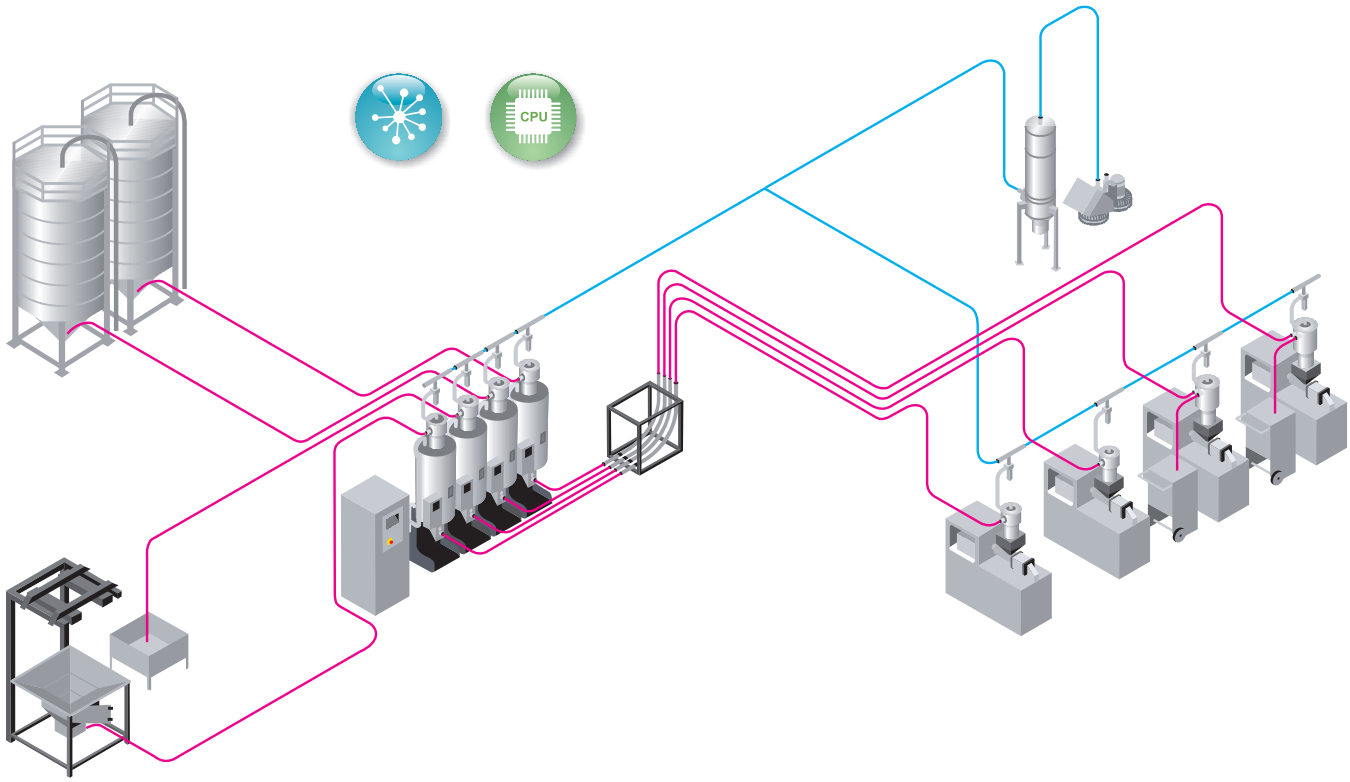
Labotek
Power in Plastics



System Components

Vacuum stations, Central filter systems,
Vacuum receivers & Piping systems

System Components

Introduction

Labotek centralised systems are recognized for their high level of durability and performance. Labotek's advanced technology offers frequency controlled vacuum stations and dust separation technologies reduce energy requirements dramatically.

Labotek systems are quiet, maintenance free and modularly constructed with one or two blowers connected in series that maintain a deep vacuum at low air speed. Vacuum receivers type SVR are supplied in stainless steel AISI 304, with spring return vacuum valves. Vacuum receivers from Labotek can be equipped with internal or external dosing valves for regrind.

Vacuum Stations

Labotek Vacuum stations are used either as single, double, or dry claw pump executions. This is to maintain a deep vacuum at the lowest possible air-speed, achieving gentle conditions for the polymer being conveyed.

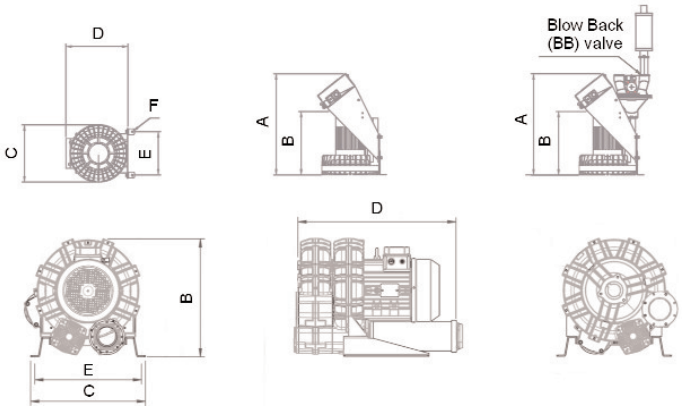
The blowers are maintenance-free. Labotek blowers are available from 0.4 kW, with endless combination options.

Example vacuum station LT6

Example vacuum station CP25

Vacuum station CP 30-40-50

Type	kW		A	B	C	D	E	G
LT3	0.4		498	290	240	420	184	Ø 11
LT4	1.1		475	265	290	420	225	Ø 11
LT5	1.3		665	395	340	375	260	Ø 11
LT6	3.4		685	430	390	425	290	Ø 11
LT12	4.0		580	467	410	403	330	Ø 11
LT18	5.5		580	618	410	387	330	Ø 11
LT5	1.3	BB	665	395	340	375	260	Ø 11
LT6	3.4	BB	685	430	390	425	290	Ø 11



Type	Lenght	Width	Height	Weight
CP 25	1144	515	449	240 kg
CP 30	940	500	650	300 kg
CP 40	1085	580	795	450 / 470 kg (50/60 Hz)
CP 50	1100	580	795	468 / 472 kg (50/60 Hz)

Part no.	Description	Frequency control	Material pipe
101700	SVS LT5 1.5 kW	No	Ø 38
101701	SVS LT6 3.4 kW	No	Ø 50
101713	SVS LT6 3.4 kW Blow Back	No	Ø 50
206760	Frequency Control up to 4 kW	Yes	
102270	SVS LT12 4.0 kW	Yes	Ø 50
102286	SVS LT18 Blow Back	No	Ø 65
102271	SVS LT12 4.0 kW Blow Back	Yes	Ø 50
101729	SVS CP25 5 kW	Option	Ø 50
101726	SVS CP30 6 kW	Option	Ø 50
206761	Frequency Control up to 7.5 kW	Yes	
206762	Frequency Control up to 11 kW	Yes	

Frequency Inverters

Conveying air speed may be controlled via our frequency inverter range. The frequency controller is set in % air speed; herewith each station may have its own individual air speed setting, depending on material being conveyed.

Huge energy savings are obtained, raw materials are gently conveyed increasing the life span of pipe systems and hoses.

Labo-Sync

The Labo-Sync technology allows more synchronous conveying cycles simultaneously. The major advantages are higher output and higher reliability, as there is always backup vacuum available. Other important parameter is significant energy savings through the use of frequency inverters maintaining the constant vacuum level required to convey to several vacuum receivers at the same time. Smaller vacuum receivers are also an obvious benefit from the Labo-Sync systems, which are offered with Labo-Net control systems.

Central Filters

Labotek has four different filtration systems as standard. Processors may choose between either self purifying filter, dust cyclone, blow back valve, or compressed air filter cleaning.

Dust cyclone is used in medium to high dust applications, where a simple and efficient system is required. The dust cyclone is supplied with brackets for wall mounting.
Dust collectors are either 3, 10 or 20 litres.

Self purifying filter is selected where dust levels are high and processors are looking for a premium filter solution. The filter is supplied on floor stand with stainless steel filter construction, large filter surface and a quick purge system in base of filter for emptying of collected dust.

The Blow back valve is designed by Labotek; the valve changes the direction of the air stream, which turns the vacuum to pressure, which cleans the filter in the vacuum receiver after and/or before each conveying cycle.

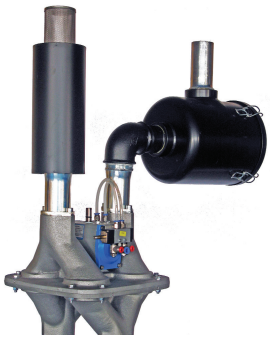
At the same time the blow back valve enables a fast purge of the vacuum receiver after conveying cycle, resulting in higher conveying capacities.

Cyclone & Selfcleaning Filter

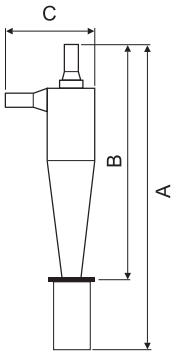
Part no.	Ø	Description	A	B	C
204568	Ø 50	Cyclone 3 L	1030	774	331
204539	Ø 50	Cyclone 10 L	1025	774	331
204567	Ø 50	Cyclone 20 L	1153	774	331
208804	Ø 50	Self purifying filter	1840	1375	763
208805	Ø 65	Self purifying filter	1840	1375	763

Compressed air filter cleaning

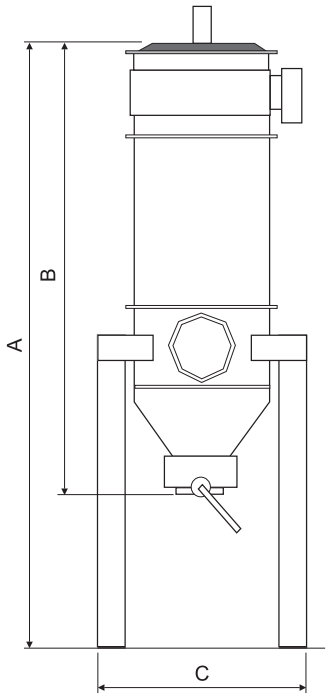

Dust Cyclone


Blow Back Valve


Self purifying Filter



204568 - 3 L
204539 - 10 L
204567 - 20 L

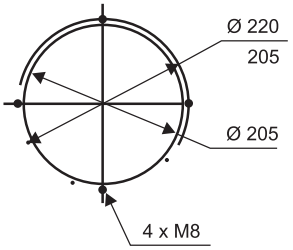


Vacuum
Receiver SVR 1.5

Vacuum Receivers

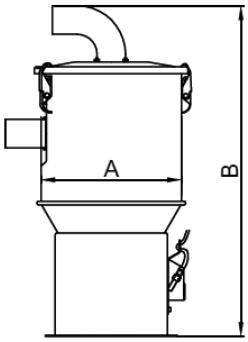
Labotek Vacuum Receivers type SVR are supplied in sizes from 1,5 litres up to 200 litres.
The range is made in stainless steel grade AISI 304. Receivers are modular and allow users to change configuration as the requirements changes.

This receiver is among the most flexible available in the market. Level control in receiver is controlled via bottom flap magnet read switch, optionally the receivers may be equipped with high level sensor. The receivers have numerous filter types to select from, such as cartridges, coarse wire screens and others, enabling the receiver to adapt into almost any conveying application.



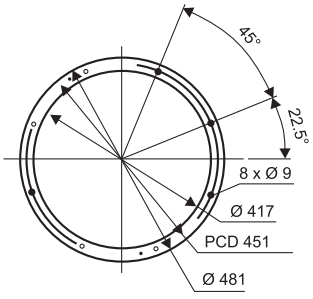
Mounting Pattern: SVR 1,5-50 L

Part no.	Description	Litres	A (mm)	B (mm)
208563	SVR 1.5	1.5	180	370
204564	SVR 4	4	245	530
204565	SVR 8	8	245	570
204566	SVR 16	16	310	650
204583	SVR 26	26	310	790
204593	SVR 50	50	310	1087
206825	SVR 50 / Ø 400	50	420	917
204627	SVR 75	75	420	1284
204628	SVR 100	100	420	1404
204629	SVR 150	150	600	1287
204630	SVR 200	200	600	1512



Vacuum reciever SVR 4-50

Labotek uses a unique vacuum valve which is remotely installed, separate from the vacuum receiver, hereby there are no pneumatic installations on the vacuum receiver.
This gives an extremely simple and durable vacuum receiver design which is easy to clean and maintain.



Mounting Pattern: SVR 75-200 L
& SVR 50 / Ø 400

Vacuum receiver SVR 75-200

The vacuum valve is fitted with large internal spring, which always secures a positive seal in the vacuum line, eliminating risk of vacuum leaks.

Vacuum Valve & El-box

Local on/off

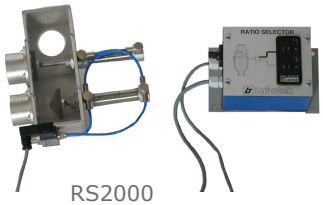
IDV

The integrated Dosing Valve type IDV is a unique built-in dosing system for non critical proportioning of two materials into the same receiver.

SVR with IDV and Vacuum Valve

RS2000

RS2000 is an external mounted proportioning valve, for non critical dosing of two materials into same receiver.



RS2000

The RS2000 unit is made in lightweight aluminium housing and features a glass window.

Coupling Stations

A coupling station is used when a number of different raw materials are transferred to the same production machine.

Labotek coupling stations are available in numerous combinations, even with a control monitoring function.

All fittings are made in stainless steel AISI 304 or optionally in glass execution for minimizing wear, when conveying glass reinforced materials.
Labotek coupling stations are tailored to each application, our unique pipe fittings are not welded together, making it possible to expand/replace single parts.

Labotek pipe supports are supplied in 40x40 square tube with holes made through flow drill technique, securing a tidy pipe installation where all pipes are fully aligned and secure.

Coupling station with optional control monitoring feature

Example, Coupling station, 20 inlets/60 outlets

Piping Systems

Labotek piping systems are available in a number of different types of materials, based on standard pipe dimensions Ø 38, Ø 50 & Ø 65 mm, in either aluminium or stainless steel AISI 304.

Bends are made of stainless steel AISI 304, or alternatively of glass, if glass-reinforced raw materials are used.
Line cleaning valves and closed loop systems are used for the efficient emptying of pipes, protecting raw materials from absorbing unwanted moisture during conveying.

Coupling station examples

Pipes and Fittings

Dimensions	Dim.	Alu	SS
Pipe L = 6 m	Ø 38	408203	408200
Pipe L = 6 m	Ø 50	408204	408201
Pipe L = 6 m	Ø 65	408205	408202

Bend 45°	Dim.	R	LT #
	Ø 38	250	544007
	Ø 38	500	544008
	Ø 50	250	544009
	Ø 50	500	544010
	Ø 65	500	544011
	Glass		
	Ø 56*	500	544002

Bend 90°	Dim.	R	LT #
	Ø 38	250	544012
	Ø 38	500	544013
	Ø 50	250	544014
	Ø 50	500	544015
	Ø 65	500	544016
	Glass		
	Ø 56*	500	544003

*) Dimension to fit Ø 50 pipe

	Dim.	LT #
Coupling Station	Ø 50	207011
Coupling Station	Ø 65	207013
Coupling Station, Glass	Ø 50	207012

	Dim.	LT #
Pipe Cleaning Valve	Ø 38	203459
Pipe Cleaning Valve	Ø 50	203178
Pipe Cleaning Valve	Ø 65	203184

	Dim.	LT #
T-Branch	Ø 38	544019
T-Branch	Ø 50	544020
T-Branch	Ø 65	544021
T-Branch	Ø 50 / 65	544046

	Dim.	LT #
Pipe Coupling	Ø 38	501300
Pipe Coupling	Ø 50	501304
Pipe Coupling	Ø 65	544043
Pipe Coupling for Glass bend	Ø 56 / 50	544001

	Dim.	LT #
Quick Coupling	Ø 50	204713
Quick Coupling	Ø 65	203864

	Dim.	LT #
Reduction Pibe	Ø 50 - 38	408304
Reduction Pibe	Ø 50 - 32	408306

Vacuum receivers type SVR and insulated hoppers

Material Hoppers

Labotek manufactures a wide selection of Material hoppers in either square or round design, with raw material contact surfaces in stainless steel AISI 304.

The series are supplied in uninsulated and insulated versions, where 20 mm insulation thickness maintains material temperature while waiting on machine throat.

The range spans from 2 up to 200 litres as standard, however we are able to produce Material hoppers upon request.

The insulated Material hoppers also features sight glass lid prepared for Labotek vacuum receivers and standard flange for production machine. A purge valve is available as option.

Labotek
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3 years warranty

Labotek offers 3 years warranty
- excluding wear parts

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Representive