

Equipment Information



© Sealed Air Corporation 2011, VS96DC, EI_VS96DC_EU_1211.fm

INDEX:

DESCRIPTION AND KEY FEATURES
LAYOUT
NOMINAL TECHNICAL DATA
CONFIGURATION

Sealed Air GmbH

**Customer Systems Center
D4 Park 4
CH-6039 Root-Längenbold**

Telephone: +41 (0) 41 349 45 00
Telefax: +41 (0) 41 349 45 45
www.sealedair-emea.com

® Reg. U.S. Pat. & TM Off. © Sealed Air Corporation 2011. All rights reserved. Printed in Switzerland
The "9 Dot Logo" and "Sealed Air" are registered trademarks of Sealed Air Corporation (US).

No part of this manual may be reproduced or transmitted to any party without prior expressed written consent from Sealed Air Corporation.

1 Description and key features

1.1 Description

The Cryovac® VS96DC automatic belt vacuum chamber packaging machine is designed for packaging medium/large industrial size units of vacuum sensitive products (sensitive cheese or processed meat), as well as vacuum non-sensitive products in Cryovac® bags. The VS96DC is the right choice for packaging large Emmentaler cheese wheels or European cheese blocks. It incorporates many novel features made possible by the latest advances in vacuum packaging technology. Typical examples are the advanced Cryovac® DC vacuum system for sensitive products and the Advanced Vacuum Control System (AVCS) for non-sensitive products. Both functions make the VS96DC suitable for a wide range of applications across different market sectors and guarantee stable and optimal pack presentation. The VS96DC sets new standards regarding safety as well, with the integrated Active Safety System designed especially for the food sector.

The VS96DC is controlled by a PLC (programmable logic control) system which monitors and sequences each phase of the machine during operation. It incorporates several recipes with parameters that can be customized to suit particular requirements. Programming is self-explanatory and made via a touchscreen control panel.

Construction is simple and robust. All critical parts are treated against the corrosive environment often found in food production and packaging rooms. Designed with ergonomics, safety and hygiene in mind it is easy to use and clean, simple to maintain and meets all relevant European legislation for safety and hygiene. The machine is fully 'washdown' capable.

1.2

Key features

- Large chamber automatic belt vacuum packaging machine requiring 1 or 2 operators depending on line layout
- State-of-the-Art touchscreen interface with self-explanatory programming, incorporating product specific factory settings as well as open recipes to easily program your own settings
- Switchable from soft vacuum (sensitive products) to hard vacuum (non-sensitive products) mode
- The VS96DC achieves up to 2 cycles/min in soft vacuum mode and up to 3 cycles/min in hard vacuum mode (both dependent on product type, vacuum configuration and belt speed)
- Advanced vacuum technology to guarantee optimal and fast vacuum even when packaging wet and damp products (in hard vacuum mode)
- Advanced Cryovac[®] DC vacuum system technology guarantees even sensitive products are optimally packed
- Can be operated as a stand-alone machine or integrated into an automatic packaging line
- Start and stop pump remote control
- Automatic product transfer
- UltraSeal[®] system, improved sealing performance by optimized temperature control
- No water cooling system required
- Final cutting system with trim removal system
- Automatic power saving facility when the machine is not used for a set period
- Convenient cleaning mode and a fully 'washdown' capable machine
- Ultravac fitted as standard
- Low noise level and no peaks due to a frequency inverted booster pump (in hard vacuum mode)
- Integrated Active Safety System - reacts before physical contact
- Hygienic design makes cleaning easy and effective
- Good access for maintenance
- Robust, high quality build standard using food approved materials throughout

2 Layout

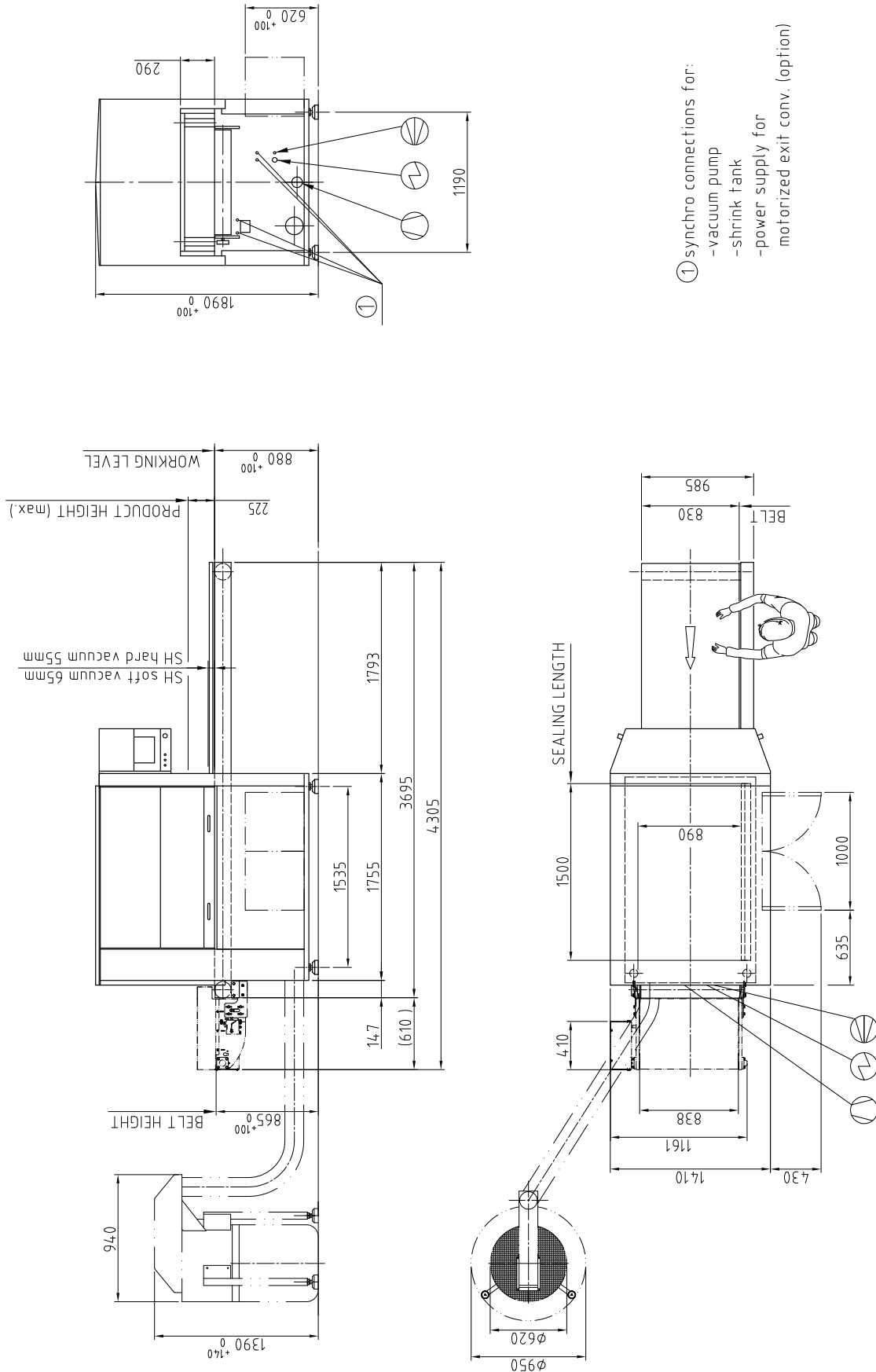


Fig. 2-1, Layout VS96DC

3 Nominal technical data

3.1 Machine dimensions

Length, width & height See machine layout

3.2 Weight

Weight 3000 kg approx. (standard configuration)

3.3 Utilities

3.3.1 Compressed air



Air type	Clean and dry
Pressure	0.6 MPa (6 bar)
Consumption	15 Nm ³ /h (nominal)
Connection type	G 1/2" thread

3.3.2 Electrical

All data includes booster pump



Voltage	400 V
No. of phases	3 + earth
Frequency	50 Hz
Energy consumption per hour (average)	4.6 kWh
Installed power	13.5 kW
Current protection	32 A delayed action type

3.3.3 Vacuum



	* SV/HV (standard)	* SV (version)
Main pump	630 to 1000 m ³ /h	630 m ³ /h
Booster pump	Busch Puma 1250 m ³ /h - with frequency inverter	
Connection to external pump	3 inch pipe	3 inch pipe

* SV = Soft Vacuum, HV = Hard Vacuum

3.4 Working characteristics

3.4.1 Product dimensions

Length / Diameter	845 mm max.
Height	225 mm max.
Weight	120 kg max.

3.4.2 Sealing bar

	* SV/HV (standard)	* SV (version)
Length	1500 mm	1500 mm
Height	SV = 65 mm / HV = 55 mm	65 mm

* SV = Soft Vacuum, HV = Hard Vacuum

3.4.3 Bag details

Length	To suit product
Width	To suit product
Bag type(s)	Current range of Cryovac® shrink bags (automatic feeding only with OSB™ bags)

3.4.4 Functional details

Working speed	* SV = 2 / * HV = 3 cycles/min (depending on product type and pump used with belt at maximum speed)
Noise level	76 dB (A) at operator's working position
No. of operators	1 to 2 operators

* SV = Soft Vacuum, HV = Hard Vacuum

4 Configuration

4.1 Standard

- Siemens PLC S7-300
- Right hand version of the machine
- Standard infeed conveyor
- Belt motor with frequency inverter (pulley motor type, stainless steel)
- Touchscreen panel with self-explanatory programming
- Flat surfaced conveyor belt with fast locking system, easy to change
- Anti-stick profiles on bag supports
- UltraSeal® sealing system giving improved sealing performance by optimized temperature control with:
 - Pre-cutting system
 - Final cutting system
 - Anti-stick device
 - Bag clamping device removable (for hard vacuum mode only)
- Fixed sealing bar height * SV = 65 mm / * HV = 55 mm
- Ultravac system
- Switchable soft/hard vacuum
- Advanced vacuum technology inside incorporating the following features:
 - Double vacuum-valve for smoothness and silence
 - Advanced Cryovac® DC vacuum system including soft reventing
 - Advanced vacuum control system for full control and convenience
 - Self adjusting vacuum algorithm for stable quality
 - Booster (1250 m³/h from Busch) with frequency inverter for maximum vacuum power at a minimum noise level
- Active safety guard for infeed and outfeed
- Built-in ventilator with air injectors for removing the trim
- Photocell for product sensing
- 'Electronic eye' cycle start
- Interface for a loading conveyor
- Safety interface (emergency stop) upstream and downstream
- Functional interface upstream and downstream
- Anti-ballooning rubber net, removable (for hard vacuum mode only)
- Dirt tray
- Spare parts kit
- Installation kit
- Technical manual
- Declaration of Conformity

* SV = Soft Vacuum, HV = Hard Vacuum

4.2 Versions

- Left hand machine
- VS96DC with short infeed
- VS96DC with critical components in stainless steel
- VS96DC with only soft vacuum process (no built-in booster)
- VS96DC without built-in booster

On special request (please ask for delivery time and price):

- Alternative power supply

4.3 Options

The following items are available as optional extras for the Cryovac® VS96DC. Please contact your local Cryovac® office for more details.

- Fixed sealing bar height 40 mm (for machines with only soft vacuum process)
- External precutting device with basket
- External precutting device without basket
- Trim collector
- Vacuum pump 630 to 1000 m³/h
- Gravity exit rollers
- Exit conveyor short (length 600 mm)
- Exit conveyor long (length 1200 mm)
- Exit rollers to conveyor
- Synchronizing inverter for exit conveyor
- PC camera (including lighting and chamber installation)
- High friction belt

4.4 Recommended line assembly

- VS96DC + exit conveyor short + exit rollers to conveyor + ST99 + WR81-800
- VS96DC + exit conveyor long + synchronizing inverter for exit conveyor + ST98-800 + WR81-800

Note: Product width is limited for ST98-800 lines (please refer to the individual Equipment Information Sheet).

Note: Product width is limited for WR81-800 lines. To maintain optimal production capacity, products must be correctly orientated and separated before entry.