



### **I Application**

The RV-100R SP equipment consists of a high capacity helicoidal impeller pump (RV-100R) and a vacuum pump (SP module) that automates the priming process.

The main application is in the food-processing industry: transfer of olives with the self-priming capacity. The equipment transfers from 20.000 to 80.000 kg/h of olives, the capacity depends on the size of olives and their concentration determined by the position of the sliding screen situated in the aspiration pipe.

### **I Operating principle**

The operating principle of the helicoidal impeller pump borrows its characteristics from the mixed flow centrifugal pumps. The impeller has only one vane, it is housed inside the pump casing and rotates in conjunction with the shaft, conveying the kinetic and pressure energy to the liquid. Then, in the volute of the casing the transformation of this energy results in the form of pressure.

The vacuum module consists of liquid ring vacuum pump, separating tank and a level sensor to detect the presence of liquid in the casing.

The device permits to actuate the big size ball valve installed at the outlet of the pump.

The pump for the return of the excess brine (RV, Hyginox or Estampinox) is selected regarding the equipment pump capacity and the concentration of solid particles.

### **I Design and features**

Investment casting pump casing with drain port and eccentric volute.

Standard connections DIN 11851.

Mechanically balanced helicoidal impeller of double curvature with a single vane.

Bearing support in the lantern.

Sanitary mechanical seal.

Close-coupled pump with trolley.

Motor IEC IP55, F-class insulation.

Motor shroud.

Polyester control panel with frequency converter.

3A certified pump.

### **I Materials**

Parts in contact with the product

AISI 316L

Other st.st. parts

AISI 304

Gaskets

EPDM according to FDA 177.2600

Mechanical seal

SiC/SiC/EPDM

Internal surface finish

Ra ≤ 0,8 μm

External surface finish

Mirror polish



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## I Options

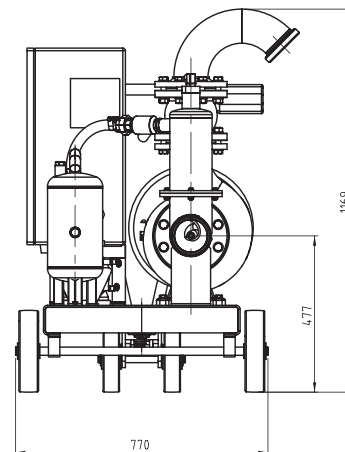
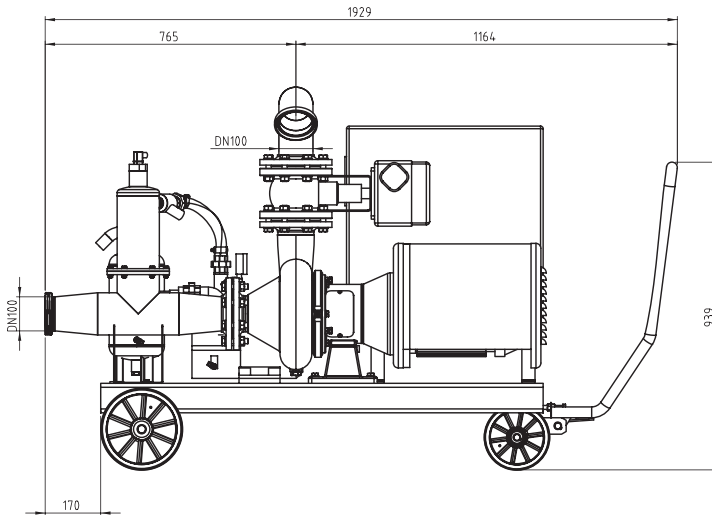
Other connections: Clamp, flange, SMS.  
 Motors with other protections.  
 St.st. control panel.  
 Remote control.

## I Technical specifications

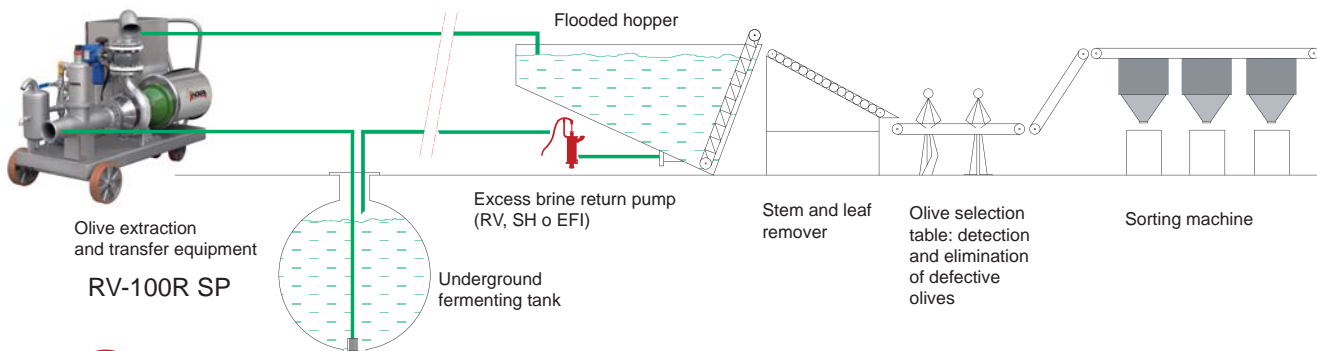
Max.flow	180 m <sup>3</sup> /h	793 US GPM
Max.differential head	22 mwc	72 ft
Max.working pressure	10 bar	145 PSI
Max.working pressure	-10 °C to +120 °C (EPDM)	14 °F to 248 °F
	+140 °C (SIP, max. 30 min)	284 °F
Max.speed	1800 rpm	



Power	Speed	Weight	Code
5,5 kW	1500 rpm	420 kg	C5810-014055
7,5 kW			C5810-014075



## I Process



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