

Rannie 275Q



The APV brand 275Q is a high performance homogenizer, capable of functioning at flow rates up to 14,500 gal/h (55,000 L/h) and pressures of 5,800 psi (400 bar). It provides the ideal solution for your homogenization applications.

The APV brand 275Q is equipped with an innovative oil treatment unit. Extensive monitoring and controlling equipment ensures ideal oil conditions and long life of the Power End parts.

The extremely efficient Micro-Gap valve is available for milk and other dairy applications. The Micro-Gap is capable of operating at reduced pressure while increasing homogenization efficiency.

SPX FLOW, Inc. (NYSE:FLOW) is a leading manufacturer of innovative flow technologies, many of which help define the industry standard in the market segments they serve. From its headquarters in Charlotte, North Carolina, it operates a sales and support network, centers of manufacturing excellence, and advanced engineering facilities, throughout the world. Its cutting-edge flow components and process equipment portfolio includes a wide range of pumps, valves, heat exchangers, mixers, homogenizers, separators, filters, UHT, and drying technology that meet many application needs. Its expert engineering capability also makes it a premium supplier of customized solutions and complete, turn-key packages to meet the most exacting of installation demands.

Incorporating many leading brands, SPX FLOW has a long history of serving the food and beverage, power and energy, and industrial market sectors. Its designs and engineered solutions help customers drive efficiency and productivity, increase quality and reliability, and meet the latest regulatory demands. In-depth understanding of applications and processes, state-of-the-art Innovation Centers, and advanced pilot/testing technology further assist in optimizing processes and reducing timescales to reliably meet production targets.

To learn more about SPX FLOW capabilities, its latest technology innovations and complete service offerings, please visit www.spxflow.com.

The Latest Technology Combining Operational Efficiency With Exceptional Reliability

COST EFFICIENT AND RELIABLE

The new homogenizer demonstrates exceptional operational efficiency. Its latest technology design combines low energy and water consumption with reliable operation. With flow rates ranging from 2,642-14,500 gal/h (10,000 – 55,000 L/h), customers can select exactly the right version for their needs.

INNOVATIVE SERVICE CONCEPT

Special attention has also been given to ease of maintenance and performance monitoring to ensure that the homogenizer runs at optimum efficiency at all times. In the event that homogenization pressure, feed pressure, cooling water flow, oil pressure, oil level or oil temperature move from prescribed parameters, electric signals can be passed to the control room to alert the operator.

This sophisticated set of diagnostics, which provides unique operational advantages, is APV's latest step in the development of the "intelligent" homogenizer. Additionally, they allow key operating parameters to be collected and saved into a database for review in order to determine optimum performance.

In addition visual indicators are placed on the machine itself. The Power End is prepared for installation of sensors for monitoring of roller bearings and gear wheel conditions.

ENVIRONMENTALLY FRIENDLY

The APV brand 275Q is equipped with a low noise cabinet as standard. Other environmentally friendly features include a cooling system, which minimizes the use of water by engaging automatically only when the oil temperature moves outside the critical range of 104-122°F (40-50°C). The APV brand 275Q is also designed to eliminate the risk of water contamination in the oil.

EASE OF INSPECTION

The low noise cabinet has panels and doors for inspection and maintenance. The interior of the APV brand 275Q is conveniently lit for ease of inspection.

BASIC MACHINE

The APV brand 275Q homogenizer, a five-plunger, reciprocating pump, is fitted with a single-stage homogenizing valve (optional two-stage) with hydraulic actuation.

The APV brand 275Q incorporates a durable slow-speed Power End that reduces vibration and noise. Easy access to the hydraulic actuation system, oil treatment unit and other auxiliary systems simplifies maintenance saving time and money.

THE LIQUID END INCLUDES:

- Inlet pressure gauge with low pressure switch
- Pressure gauge incl. 4-20 mA output for total product pressure (1st stage prepared for automatic control)
- Flow switch and solenoid valve for plunger lubrication
- Weld-stub product connections

THE POWER END CONTROL FEATURES INCLUDE:

- Oil filter alarm switch
- Oil condition monitoring and control equipment
- External cooler

THE HVA UNIT INCLUDES:

- Quick unloading valve
- Electrical proportional valve(s)
- Pressure gauges for total hydraulic pressure and individual actuator pressure(s)
- Oil temperature sensor (4-20 mA)

THE INSTRUMENTATION INCLUDES:

- Emergency stop
- Potentiometers for manual pressure control
- Display for total product pressure

All equipment wired to a terminal box. The APV brand 275Q is built into a low noise stainless steel cabinet.

STANDARD OPTIONS

- Two-stage hydraulic valve actuation (HVA)
- Aseptic cylinder design
- High-pressure outlet connections
- Micro-Gap homogenizing valve
- Motor starter
- Controllers for automatic pressure control
- Control cabinet, stainless steel
- Choice of materials for cylinder block, plungers, homogenizing valves, packings, pump valves, valve seats, and seals.
- Pulsation dampener(s): inlet and outlet
- Flow meter for lubrication oil, monitoring slide bearings condition
- Pressure transducer for lubrication oil pressure (4-20 mA output)
- External cooling fan/main motor

SPECIAL OPTIONS

We will be happy to discuss any other requirements you may have.



Transmission (Power End)



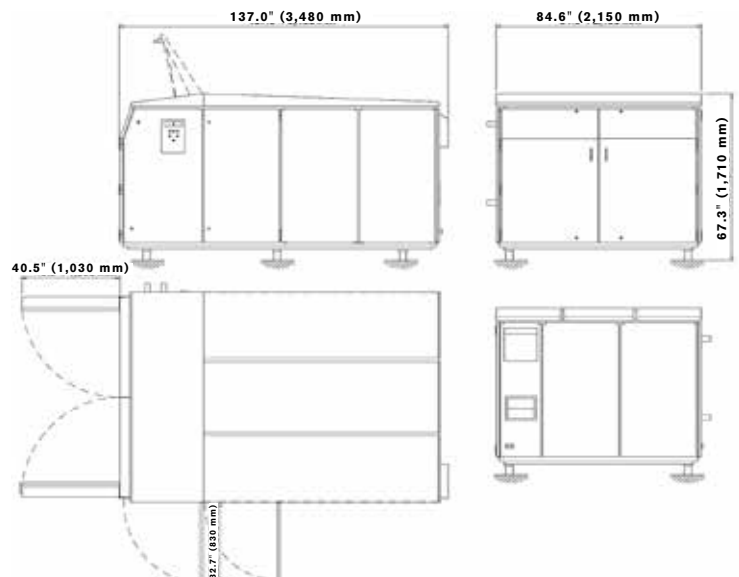
Control Panel



Oil and Hydraulic Units



Power Inlet





RANNIE/THREE-PIECE VALVE HOUSING POPPET/BALL TYPE VALVES

TYPE	U.S. MAX. CAPACITY /MAX. PRESSURE	
	GAL/H (L/H)	PSI (BAR)
90.5140	11,800 (45,000)	2,500 (170)
85.5140	10,500 (40,000)	3,000 (200)
75.5140	7,900 (30,000)	3,600 (250)
70.5140	7,100 (27,000)	4,300 (300)
60.5140	5,280 (20,000)	5,800 (400)
50.5140	3,300 (12,500)	8,700 (600)

DIMENSIONS

LENGTH IN (MM)	WIDTH IN (MM)	HEIGHT IN (MM)	DIMENSIONS PACKED IN A CRATE LXWXH IN (CM)	CUBIC MEASURE M ³
137 (3,480)	84.6 (2,150)	67.3 (1,710)	151X96.5X86.6 (384X245X220)	20

Note: Gross Weight in a Crate, including Motor: 20,944 lb (9,500 kg)

Based in Charlotte, North Carolina, SPX FLOW, Inc. (NYSE: FLOW) is a multi-industry manufacturing leader. For more information, please visit www.spxflow.com



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