

### APV Paraflow Plate Heat Exchangers

FOR SANITARY APPLICATIONS



## Benefit From Our Experience

If you're in the market for a sanitary plate heat exchanger, look no further than SPX FLOW. Throughout our history, we've dedicated ourselves to the dairy, food, beverage and pharmaceutical industries. We draw on our extensive knowledge base to customize solutions for your unique application. Whether you are looking to maximize heat recovery, optimize run time or improve product quality, SPX FLOW will deliver the latest innovations to help you achieve your process objectives.

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.

### APV Plate Heat Exchangers For Sanitary Applications

SPX FLOW provides an unmatched range of sanitary plate heat exchangers that feature:

- 3A and FDA compliance
- Optimum run time
- DuoSafety system
- Manual or hydraulic closure
- Designed for ease of inspection and cleaning
- Efficient operation
- Compact size
- Durable construction
- Frame longevity
- Flexible configurations
- High and low-leg designs available

SPX FLOW offers innovative plate designs to match your requirements, including:

- Gasket attachment options
  - Glue free
  - Glued: FDA compliant heat cured for optimum bond
     An APV specialist will help you determine which method is most suitable for your specific application.
- Both parallel and, for tougher applications, diagonal flow
- Wide variety of plate configurations available
- Unique design ensures easy cleanability

MODEL	CONNECTION DIAMETER IN/(MM)	"HIGH LEG"	"LOW LEG"	SPINDLE	HYDRAULIC	MAX GPM (LPM)	ACTIVE AREA PER PLATE FT <sup>2</sup> (M <sup>2</sup> )	GASKETED	WELDED	DUO-SAFETY	MAX HEIGHT IN (MM)	MAX WIDTH IN (MM)	MAX LENGTH IN (MM)
SR1 R-12	<b>1.5</b> " (38.1)	Х	х			<b>125</b> (473.18)	<b>0.92</b> (0.085)	Х			<b>43</b> " (1,092.2)	<b>18</b> " (457.2)	<b>37</b> " (939.8)
SR11	<b>1.5"</b> (38.1)	Х		Х		<b>125</b> (473.18)	<b>0.92</b> (0.085)	Х			<b>37</b> " (939.8)	<b>11</b> " (279.4)	<b>69</b> " (1,752.6)
VEGA V017 R-14	<b>2.5</b> " (63.5)	х	х			<b>300</b> (1,135.62)	<b>1.85</b> (0.172)	х	х	х	<b>65</b> " (1,651)	<b>24</b> " (609.6)	<b>76</b> " (1,930.4)
VEGA V028 R-10	<b>2.5"</b> (63.5)	х	Х			<b>300</b> (1,135.62)	<b>2.96</b> (0.275)	х			<b>87</b> " (2,209.8)	<b>28</b> " (711.2)	<b>138</b> " (3,505.2)
VEGA V028 R-16	<b>2.5"</b> (63.5)	Х	х			<b>300</b> (1,135.62)	<b>2.96</b> (0.275)	Х			<b>87</b> " (2,209.8)	<b>29</b> " (736.6)	138" (3,505.2)
VEGA V028 B-13 BINARY DRIVE	<b>2.5</b> " (63.5)	х		х	х	<b>300</b> (1,135.62)	<b>2.96</b> (0.275)	х			<b>93</b> " (2,362.2)	<b>36</b> " (914.4)	168" (4,267.2)
NR5 R-15	<b>4"</b> (101.6)	х	Х			<b>800</b> (3,028.33)	<b>5.84</b> (0.542)	х			<b>112"</b> (2,844.8)	<b>38"</b> (965.2)	<b>231"</b> (5,867.4)
NR51T	<b>4"</b> (101.6)	х		х		<b>800</b> (3,028.33)	<b>5.84</b> (0.542)	х			<b>106</b> " (2,692.4)	<b>36"</b> (914.4)	<b>205</b> " (5,207)
NR5 Q-15 QUAD DRIVE	<b>4"</b> (101.6)	х		х	х	<b>800</b> (3,028.33)	<b>5.84</b> (0.542)	х			116" (2,946.4)	<b>41</b> " (1,041.4)	<b>348</b> " (8,839.2)
SR6GLSH	<b>4"</b> (101.6)	х				<b>800</b> (3,028.33)	<b>6</b> (0.557)	X		х	<b>91</b> " (2,311.4)	<b>36"</b> (914.4)	<b>142</b> " (3,606.8)

#### **UPGRADE OPTIONS**

#### **Frames**

The innovative NR5 Quad Drive and Vega V028 Binary Drive PHE's can now be supplied for manual plate pack compression. This gives the opportunity of a lower initial investment. Effortless upgrade to automatic opening and closing is possible even while the process is running.

#### **Plates**

The novel NR5 plates will fit in all installed R5 frames to enhance for example energy recovery in regenerators. The ER5 Freeflow plates fit in all R5 or NR5 frames for an improved handling of products with suspended solids. The novel Vega V017 plate fits in all SR2 frames and features enhanced process runtime capability relative to the SR2 plates.

### SPX FLOW OFFERS INNOVATIVE PLATE DESIGNS TO MATCH YOUR REQUIREMENTS, INCLUDING:

#### **ER5 FreeFlow Plate**

The ER5 is tailored for processing liquids with suspended material. With 90% fewer contact points than standard plates, the ER5 provides clear passage of products with less risk of pulp or fiber hang-up. ER5 fits all R5 and NR5 frames.

#### **NR5 EasyFlow Plate**

The plate design of the NR5 EasyFlow is quite unique. Classic diagonal flow with naturally superior distribution means an increase in heat transfer and a reduction in CIP time. The plates equipped with Easyclip gaskets allow rapid replacement without glue and the ConerLock interlocking system secures correct plate alignment adding resistance against plate damage. Contact points per area are always looked upon with great interest - especially by manufacturers of products containing fibers/solids. Again, the NR5 stands out. Only 174 contact points/ft² versus 400+ on traditional hygienic plates. EasyFlow plates fit into all R5 frames and vice versa.

#### Vega EasyFlow Plate (V017 and V028)

The Vega is ideally suited for a broad range of food processing duties where there is a tendency for the product to foul the heated surface or where large temperature induced viscosity changes are likely to occur. Vega V017 EasyFlow plates fit all SR2 frames.

# Typical sanitary product applications

Baby food

Beer

Broth/gravies

Cream

Culture media

Evaporated milk

Formula

Ice cream mix

Juices

Juice concentrates

Margarine

Sauces

Soft drinks

Soy milk

Sterile water

Table syrup

Tea

Tomato products

Vegetable oil

Whey

Wine

Milk

Yogurt









#### START BENEFITING TODAY

APV plate heat exchangers offer all the benefits you need to improve your process profitability.

- Multiple duties in a single frame
- Highly efficient design maximizes regeneration during heating and cooling
- Computer aided design tools that allow configurations to optimize process run-time

SPX FLOW's experienced engineers will work with you every step of the way, from system design to implementation, to ensure you get the solution that best meets the needs of your process.

To learn more about how SPX FLOW can help you improve the profitability of your process, call us today.

APV Paraflow Plate Heat Exchangers

FOR SANITARY
APPLICATIONS

### **SPXFLOW**

#### Global locations

AMERICAS

SPX FLOW, Inc.

+1 919 735 4570

1200 West Ash Street Goldsboro, NC 27530 United States of America APAC

SPX FLOW - APAC

7F, No. 1568, Huashan Road, Shanghai, 200052

China

+86 21 2208 5888

**EMEA** 

SPX FLOW - EMEA

Platinvej 8 6000 Kolding Denmark +45 70 278 278

#### SPX FLOW, Inc.

1200 West Ash Street Goldsboro, NC 27530 P: (919) 735-4570 F: (919) 581-1167

E: answers.us@spxflow.com

 $SPX\ FLOW\ reserves\ the\ right\ to\ incorporate\ our\ latest\ design\ and\ material\ changes\ without\ notice\ or\ obligation.$ 

Design features, materials of construction and dimensional data, as described in this bulletin, are provided for your information only and should not be relied upon unless confirmed in writing. Please contact your local sales representative for product availability in your region. For more information visit www.spxflow.com.

The green ">" is a trademark of SPX FLOW, Inc.

ISSUED 10/2015 1103-01-08-2008-US COPYRIGHT © 2015 SPX FLOW, Inc.