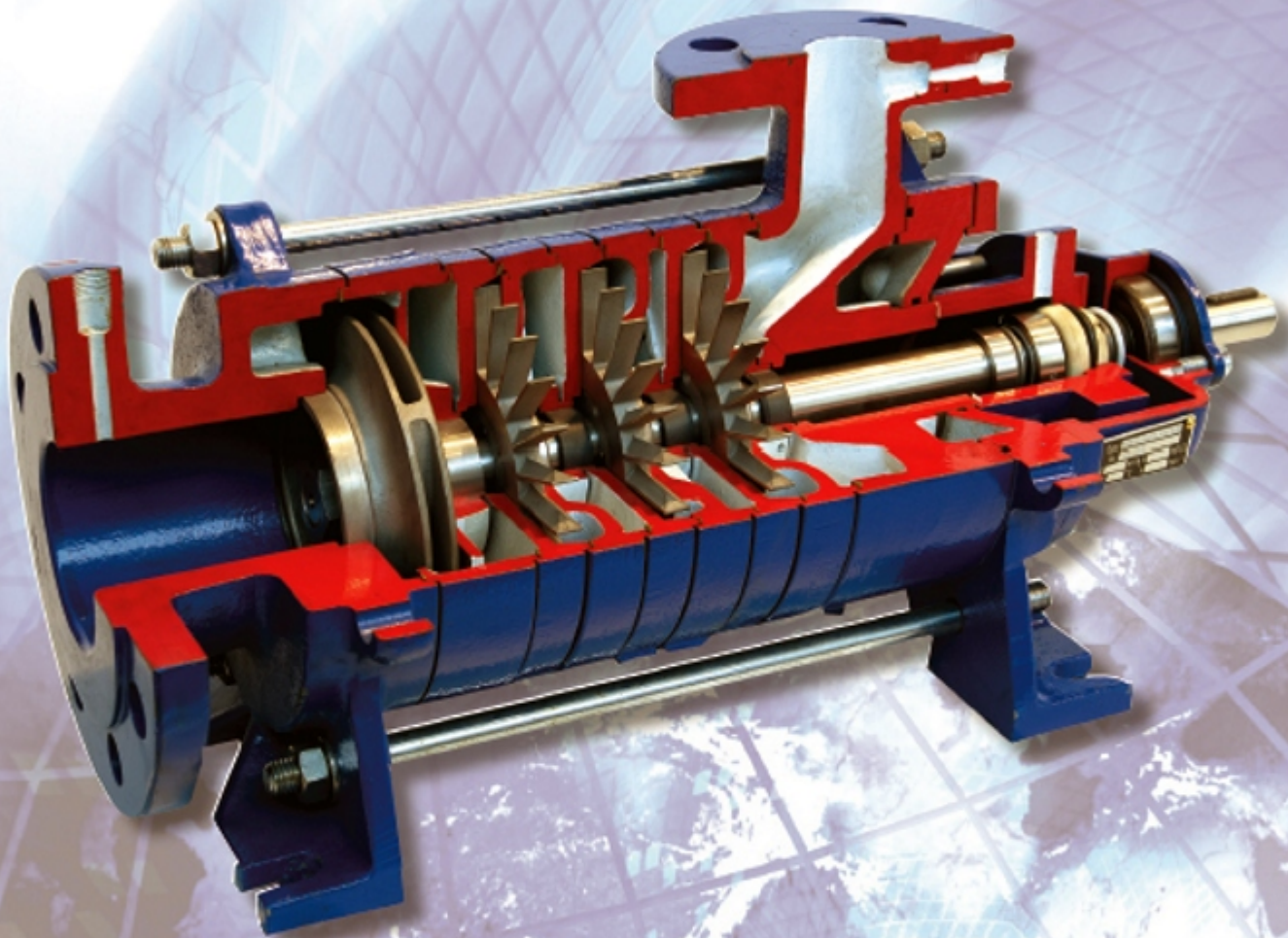


# SERO™

PumpSystems



*Multi-Stage Pumps Designed for  
Critical Process Services*

**SRZS™**



# SRZS™

(Multifunction Side Channel Pump)

# Engineered to meet demanding process conditions.

## The SERO Advantage

Headquartered in Germany, SERO PumpSystems is the world's only exclusive manufacturer of side channel pumps. Since the issuance of their first side channel pump patent in 1929, SERO has continued to revolutionize the industrial pump industry. Specializing in individually configured pumping systems, SERO has consistently been on the leading edge of side channel pump design and technology.

## Side Channel Pump Technology

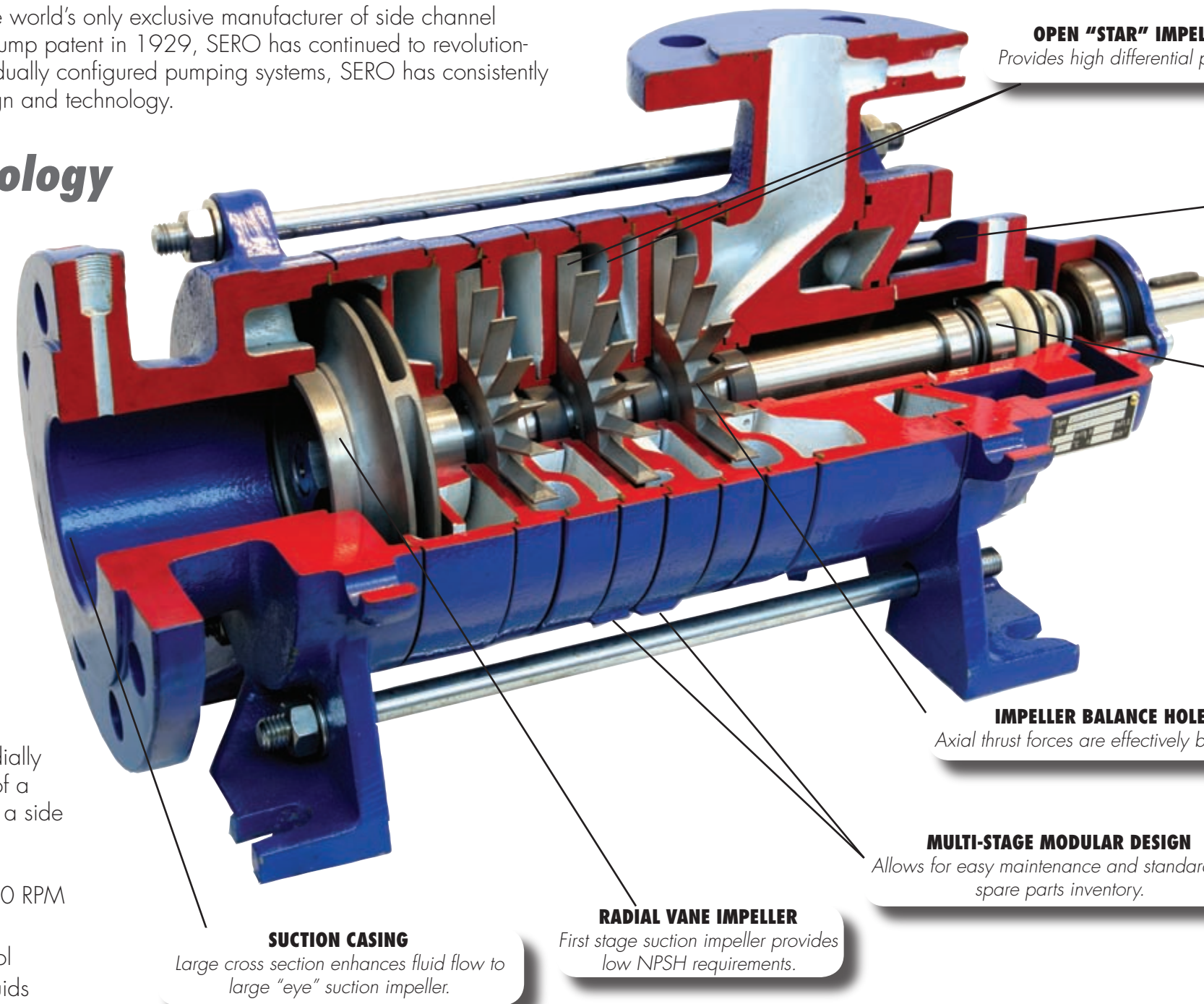
Side channel designs fill the hydraulic performance void between positive displacement pumps and centrifugal pumps. Fully open "star" impellers interact with the side channel casing creating an intense transfer of energy to the pumped liquid or liquid / gas mixture. The corresponding pressure increase (pump head) equals 5 to 10 times the amount generated by a similar size centrifugal pump at the same RPM. Additionally, the centrifugal effect of the impeller combined with the unique SERO internal flow patterns, allow our pumps to effectively handle fluids with gas entrainment of up to 50% and also be self-priming. All this in one compact package!

## SERO Model SRZS

### Specialty Pumps Engineered for a Wide Range of Industrial Services

Model SRZS is a proven state-of-the-art multi-stage, radially split segmented pump that combines the functionality of a low NPSH first stage impeller with the performance of a side channel design. The SRZS features include:

- Exceptional Differential Pressures Developed at 1750 RPM
- Hydraulic Flexibility - Low Flows with High Head
- Steep Performance Curves for Precise System Control
- Ability to Pump Vapor Laden (up to 50%) Process Fluids
- Low NPSH Requirements to Prevent Cavitation
- Self-priming
- Multiple Sealing Options
- Modular Construction with Standardized Parts
- Field Interchangeability with Existing Units
- "Crafted In Germany" for Increased Reliability and Lowest Cost of Ownership



**OPEN "STAR" IMPELLER AND SIDE CHANNEL CASING**  
Provides high differential pressures with effective gas separation.

**SECTIONED SEAL CHAMBER**  
Mechanical seal can be maintained without having to "pull" the pump.

**SEALING FLEXIBILITY**  
Single & Double Seals to meet a range of service conditions.

**IMPELLER BALANCE HOLES**  
Axial thrust forces are effectively balanced.

**MULTI-STAGE MODULAR DESIGN**  
Allows for easy maintenance and standardized spare parts inventory.

**SUCTION CASING**  
Large cross section enhances fluid flow to large "eye" suction impeller.

**RADIAL VANE IMPELLER**  
First stage suction impeller provides low NPSH requirements.

## Services

- High Pressure Chemical Process
- Light Hydrocarbons
- Specialty Chemicals
- Heat Transfer
- Tank Farms / Transfer / Loading
- Boiler Feed
- Condensate
- Liquid Gases
- Shower
- Injection
- Pressure Boosting

**SERO™**  
PumpSystems

**SERO Side Channel Pumps**  
Engineering Expertise - German Quality - Reliability  
*Designed for the Future*



# SRZS Engineering Details

SIZE	110	220	330	440	550	660
NUMBER OF STAGES	1 TO 8					
SUCTION FLANGE INCHES (MM)	1½ (40)	2½ (65)	2½ (65)	3 (80)	4 (100)	4 (100)
DISCHARGE FLANGE INCHES (MM)	¾ (20)	1¼ (32)	1¼ (32)	1½ (40)	2 (50)	2½ (65)
RPM (60HZ)	1750					
MAXIMUM WORKING PRESSURE PSI (BAR)	580 (40)					
CAPACITY RANGE, GPM (m3/h)	6 - 12 (1.4-2.9)	13 - 24 (2.9-5.4)	26 - 40 (5.8-9)	47 - 64 (10.6-14.5)	76 - 106 (17.3-24.1)	130 - 186 (29-42.2)
HEAD RANGE @ MIN FLOW, FT (m)	100-740 (30-225)	140-1080 (40-330)	110-790 (35-240)	106-800 (32-250)	130-1000 (40-300)	160-1150 (50-350)
TEMPERATURE RANGE °F (°C)	-40° - 430° (-40° - 220°)					
MAXIMUM VISCOSITY SSU (CST)	1050 (230)					
MAXIMUM ALLOWABLE ENTRAINED VAPOR	50%					

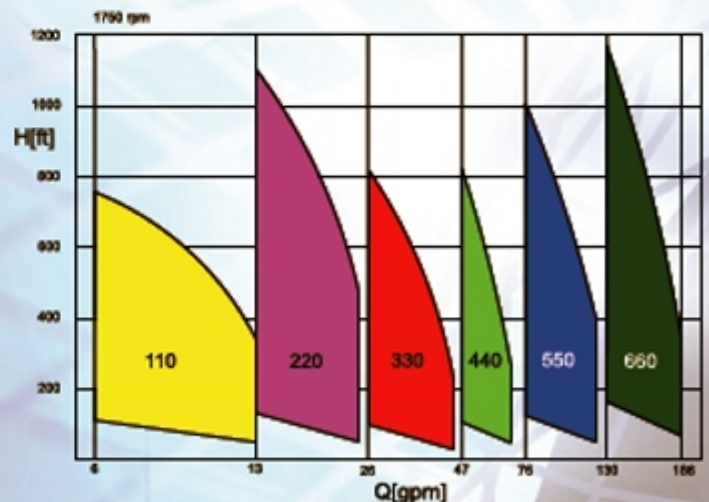
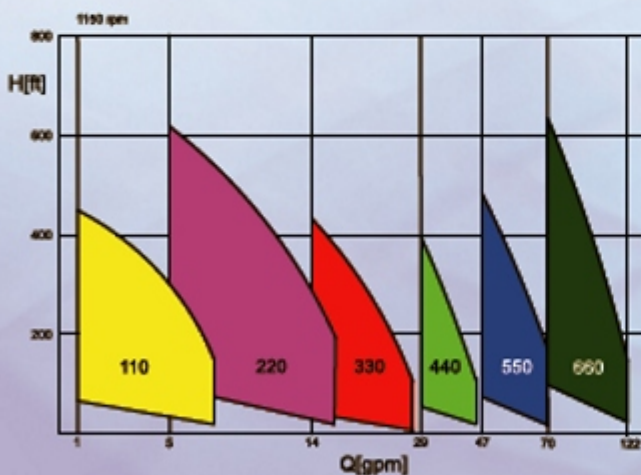
## DESIGN OPTIONS

### Sealing Flexibility:

- Single Mechanical Seal - Unbalanced, Balanced. Available Quench Feature
- Double Mechanical Seal - Unbalanced, Balanced

### High Temperature Construction Features:

- Jacketed Seal Chamber with NPT Connections
- High Temp Bearings
- Modified Internal Clearances



**SERO**™  
PumpSystems

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