

# SOMARAKIS™

## SV™ LIQUID RING VACUUM PUMPS AND COMPRESSORS



### Designed Maintenance Tough



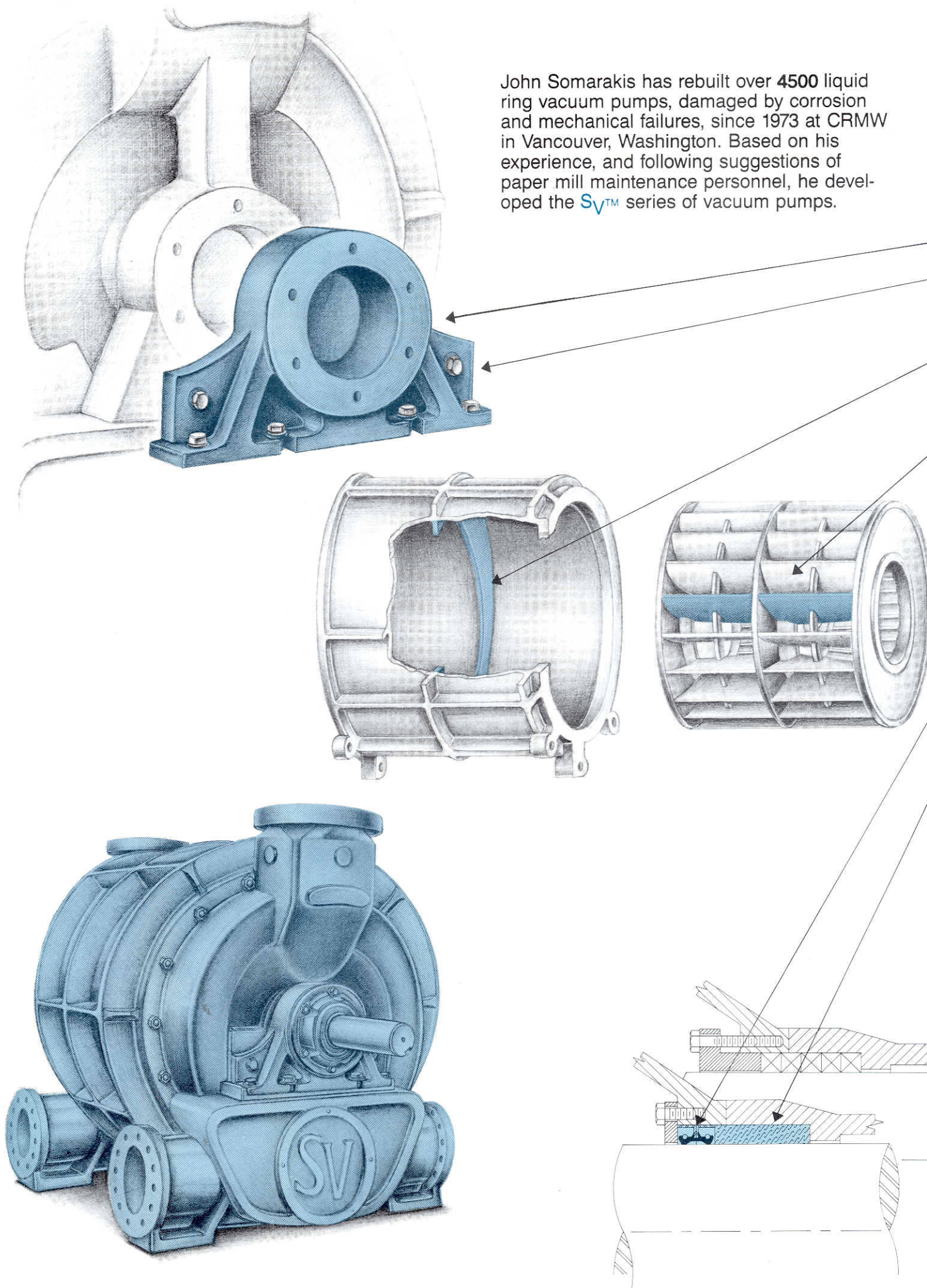
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John Somarakis has rebuilt over **4500** liquid ring vacuum pumps, damaged by corrosion and mechanical failures, since 1973 at CRMW in Vancouver, Washington. Based on his experience, and following suggestions of paper mill maintenance personnel, he developed the **SV™** series of vacuum pumps.





| Comparison of SOMARAKIS SV<br>and Nash® Pumps | SOMARAKIS<br>SV | NASH CL | NASH 904™ |
|---|-----------------|---------|-----------|
| BELT DRIVE CAPABILITY                         | X               | X       | X         |
| GEAR DRIVE CAPABILITY                         | X               | X       |           |
| CAST STEEL BEARING HOUSINGS                   | X               |         |           |
| REMOVABLE BEARING ASSEMBLIES ●                | X               |         | X         |
| SHROUDED BODIES STANDARD                      | X               | X       |           |
| 20 VANE ROTORS ▲                              | X               |         | X         |
| DIMENSIONALLY INTERCHANGEABLE                 | X               | X       |           |
| PARTS INTERCHANGEABLE BETWEEN SERIES          | X               | X       |           |
| PUMPS TESTED BEFORE SHIPMENT                  | X               | X       | X         |
| SPLIT LIP SEALS INSTEAD OF PACKING            | X               |         |           |
| SECONDARY BEARINGS                            | X               |         |           |
| CHOICE OF THREE OUTLETS EACH END ■            | X               | X       |           |
| MANUFACTURED EXCLUSIVELY IN U.S.A.            | X               |         |           |

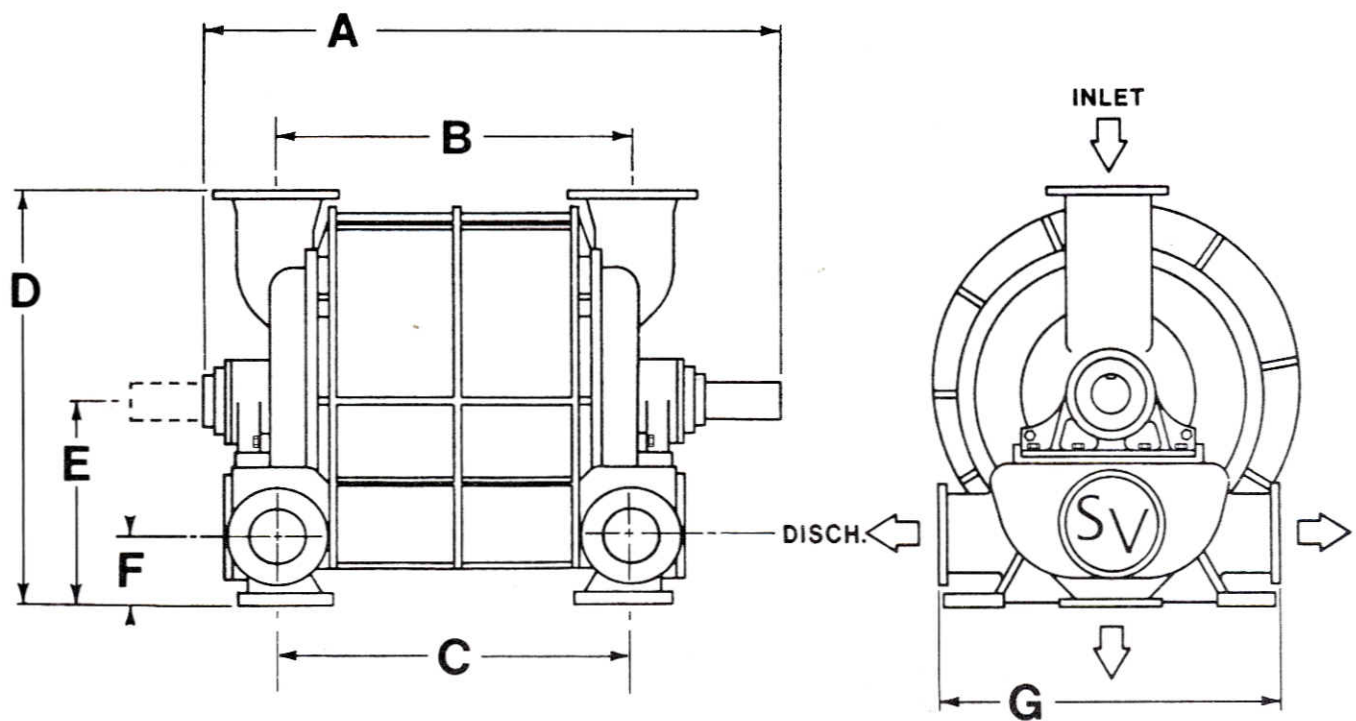
- REMOVABLE BEARING HOUSING ON SV-2023 AND LARGER MODELS  
▲ 16 VANE ROTORS ON SV-1211 AND SMALLER MODELS  
■ THREE OUTLETS ON SV-3028 AND LARGER MODELS

SOMARAKIS SV liquid ring vacuum pumps provide six important mechanical improvements:

- 1) Unlike cast iron, **cast steel bearing housings** will not crack as the result of a bearing failure or when subjected to excessive upward thrust because of start-up with the pump body full of water.
- 2) **Removable bearing assemblies** can be rebuilt or repaired, without pump disassembly, should bearings seize and spin within the housing.
- 3) **Shrouded pump bodies** operate at greater efficiency than do pumps having straight walled cylinders. Shrouds also permit dual vacuum service from one pump.
- 4) **20 vane rotors** move air more efficiently than do 16 vane rotors.
- 5) **Patented seal arrangement**, split to facilitate installation, is vacuum evacuated to prevent leakage of seal water. Conventional packing is not required.
- 6) In the event of bearing failure the **secondary bearing**, located within the seal area, will support the shaft and prevent the cone from coming in contact with and destroying both cone and rotor.

SV vacuum pumps are manufactured in Vancouver, Washington in cast alloys including iron, 3% nickel iron, 22% nickel iron, 304L stainless steel and 316L stainless steel. All of the components of SV pumps, regardless of materials of construction, are manufactured in the United States.

**SOMARAKIS Design Improvements Add Years to the Life of  
Pumps Used for Increasingly Severe Service**



| SOMARAKIS<br>Vacuum<br>Pumps | Comparable<br>Nash<br>Sizes | Connections<br>Inches |             | Installation Dimensions<br>Inches |     |     |       |    |     |             |
|------------------------------|-----------------------------|-----------------------|-------------|-----------------------------------|-----|-----|-------|----|-----|-------------|
|                              |                             | Inlet                 | Disch       | A                                 | B   | C   | D     | E  | F   | G           |
| SV-808                       | CL-200                      | THD<br>1-3            | THD<br>1-2½ | 25                                | 12  | 12  | 1-17¾ | 6¼ | 4⅝  | C.L.<br>6½  |
| SV-1212                      | CL-400                      | 3                     | 2½          | 35½                               | 17⅝ | 17⅝ | 19    | 9  | 5   | C.L.<br>9   |
| SV-1414                      | CL-700                      | 4                     | 3           | 40¾                               | 21¼ | 21¼ | 22½   | 10 | 5   | C.L.<br>10  |
| SV-1818                      | CL-1000                     | 5                     | 4           | 47⅞                               | 26¾ | 26¾ | 26    | 12 | 7⅝  | C.L.<br>12½ |
| SV-2023                      | CL-1500                     | 6                     | 4           | 54½                               | 29⅞ | 29⅞ | 31⅞   | 14 | 9   | C.L.<br>16⅝ |
| SV-2523                      | CL-2000                     | 6                     | 5           | 59⅝                               | 35¾ | 35¾ | 36    | 17 | 8¾  | 30          |
| SV-3028                      | CL-3000                     | 8                     | 6           | 68                                | 40½ | 41½ | 44    | 21 | 7   | 35          |
| SV-3633                      | CL-4000                     | 10                    | 8           | 80¾                               | 51¼ | 50¼ | 49    | 25 | 8⅝  | 40½         |
| SV-4440                      | CL-6000                     | 12                    | 10          | 95                                | 56¼ | 56¼ | 66¼   | 33 | 11  | 53½         |
| SV-5348                      | CL-9000                     | 14                    | 12          | 95                                | 61½ | 61½ | 81    | 40 | 14  | 64          |
| SV-5372                      | CL-14000                    | 18                    | 14          | 127                               | 90  | 90  | 82    | 40 | 19½ | 64          |

SOMARAKIS SV Vacuum Pumps  
Are Dimensionally Interchangeable  
with the Nash CL Series.

**SOMARAKIS**  
**Quality Equipment**

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