

A RUTHMAN COMPANY  
[www.Gusher.com](http://www.Gusher.com)

# High Pressure Centrifugal Industrial Pumps

**Vertical & Horizontal  
Multi-Stage  
Coolant Series**



**RUTHMAN**  
Engineering Pump Solutions™

# Multi-Stage Series

## Features Available:

1. Pressure to 400 psi
2. Pressurized System.
3. Double Pump, High and Low Pressure with one common motor.
4. Balanced mechanical seal or silicon and tungsten available.
5. Available mounted in either 10 through 200 gallon reservoir.
6. Discharge available in either N.P.T. or B.S.P.T.
7. Available in Vertical or Horizontal.
8. Custom options available upon request.



## Services:

High Pressure Machine Tools

## Vertical Multi-Stage Versatility



**Models MS4 and MS5 End Suction Centrifugal Multi-Stage Available in 3 through 10 Stages and 1½ through 25 Horsepower.**

### Standard Features:

1. Rugged Grade 30 Cast Iron Construction.
2. Built in Mounting Flange.
3. Balanced Mechanical Seal.
4. Above Mounting Flange Discharge.
5. Greased For Life Bearings.
6. Standard Motors are 3 Phase, 230/460 Volt, 3450 rpm, and TEFC.
7. ¾" NPT and 1¼" NPT 2 Discharge.
8. Available in Base mounted or other Mounting Styles—contact factory.



## Multi-Stage Options:

- Offers Dual Discharges.  
One for low volume and high pressure, one for high volume and low pressure.  
Both driven by one common motor.
- Available up to 36" of immersion with intermediate bushing.
- Standard models available with column tank, with flanged or threaded intake for exterior tank mounting.

Due to the various pumps and pump applications this manual may not apply to your specific pump. If you have any questions please consult the factory: 859-824-3100 or Fax: 859-824-7248.



# Multi-Stage MSC3.5/ MSC4

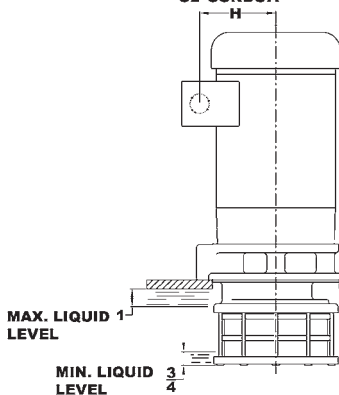
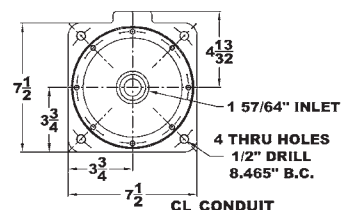
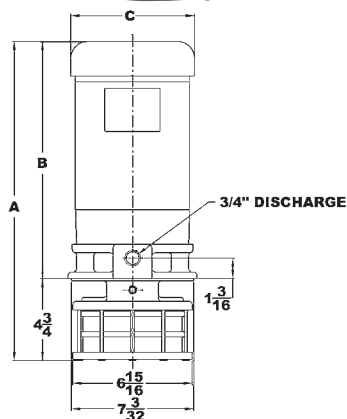


## When Ordering Specify:

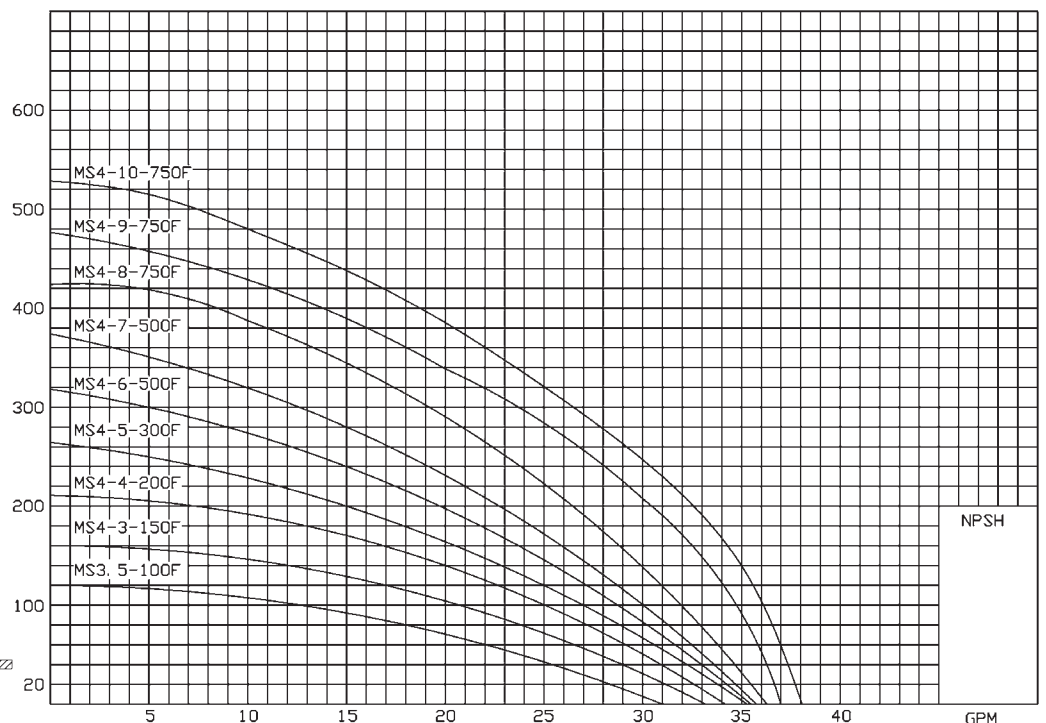
- Model No. MSC3.4 or MSC4
- Number of Stages
- Operating Conditions, gpm, and T.D.H. in feet or psi
- Motor Horse Power and Current Characteristics
- N.P.T. or B.S.P.T. Discharge
- Motor Speed 3450 rpm

## DIMENSIONS IN INCHES (mm)\*

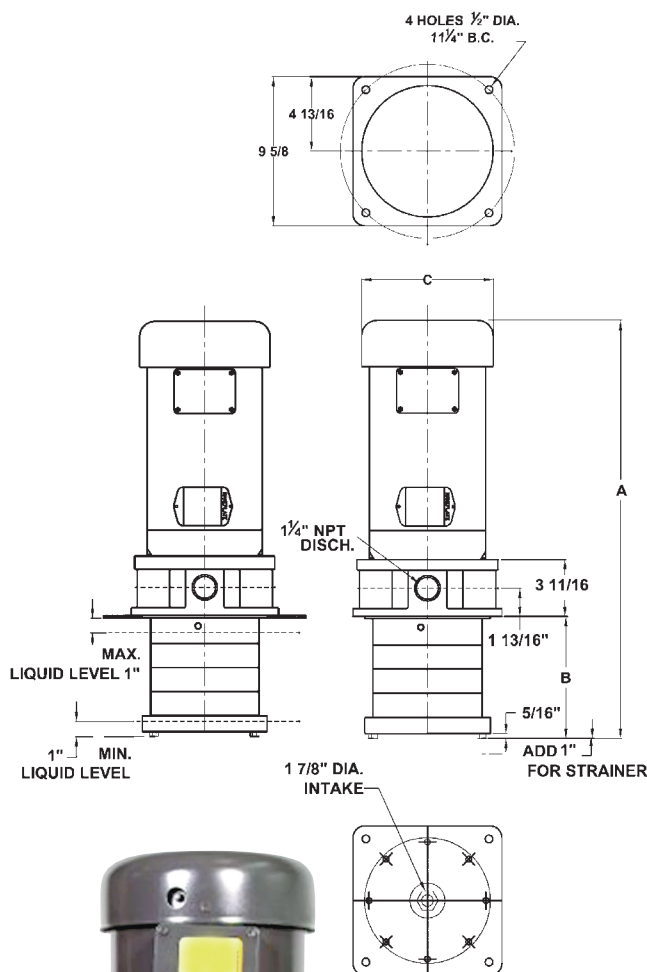
STAGES	MODEL	DISCH.	HP	A	B	C	G	H
1	MSC3.5-3-100FJ	3/4	1	17.49 (444)	12.75 (324)	7.0 (178)	5.25 (133)	4.25 (108)
3	MSC4-3-150FJ	3/4	1 1/2	17.49 (444)	12.75 (324)	7.0 (178)	5.25 (133)	4.25 (108)
4	MSC4-4-200FJ	3/4	2	19.69 (500)	13.75 (349)	7.0 (178)	5.25 (133)	4.25 (108)
5	MSC4-5-300FJ	3/4	3	21.63 (550)	14.50 (358)	7.0 (178)	5.25 (133)	4.25 (108)
6	MSC4-6-500FJ	3/4	5	24.08 (612)	15.75 (400)	8.5 (216)	5.87 (149)	4.87 (124)
7	MSC4-7-500FJ	3/4	5	25.50 (648)	15.75 (400)	8.5 (216)	5.87 (149)	4.87 (124)
8	MSC4-8-500FJ	3/4	5	26.75 (644)	15.75 (400)	8.5 (216)	5.87 (149)	4.87 (124)
8	MSC4-8-750FJ	3/4	7 1/2	28.25 (718)	17.25 (438)	8.5 (216)	5.87 (149)	4.87 (124)
9	MSC4-9-750FJ	3/4	7 1/2	29.25 (743)	17.25 (438)	8.5 (216)	5.87 (149)	4.87 (124)
10	MSC4-10-750FJ	3/4	7 1/2	30.50 (775)	17.25 (438)	8.5 (216)	5.87 (149)	4.87 (124)



## MSC3.5 & MSC4 with Impeller 25128



# Multi-Stage MSC5



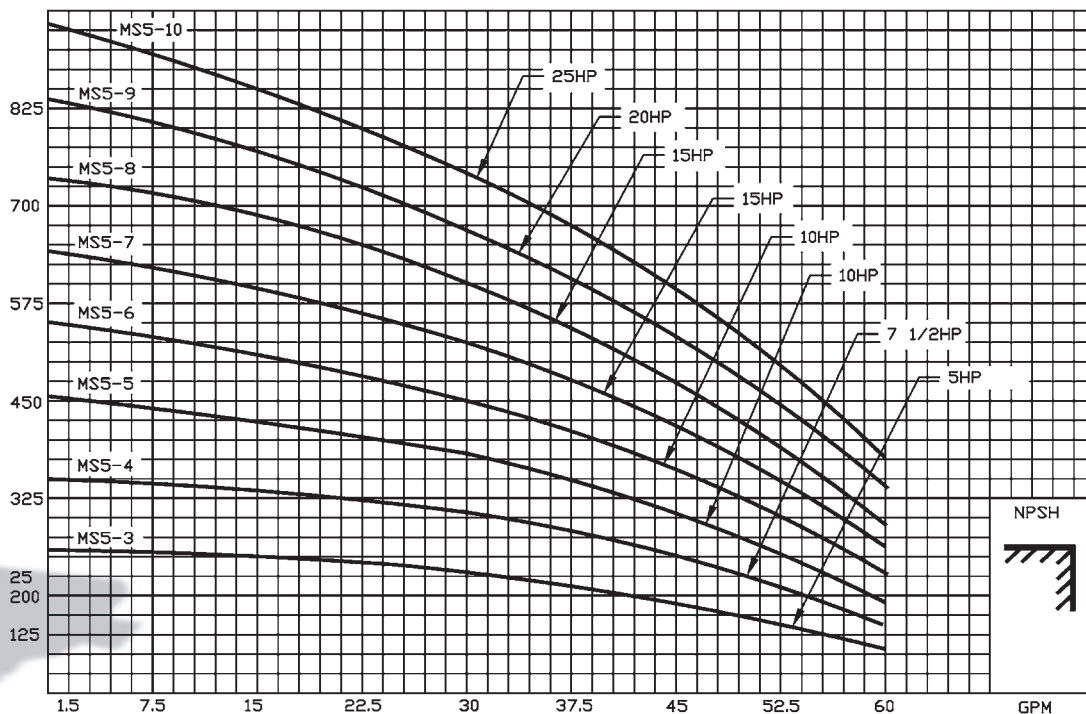
## When Ordering Specify:

- Model No. MSC5
- Number of Stages
- Operating Conditions, gpm and T.D.H. in feet or psi
- Motor Horse Power and Current Characteristics
- N.P.T. or B.S.P.T. Discharge
- Motor Speed 3450 rpm

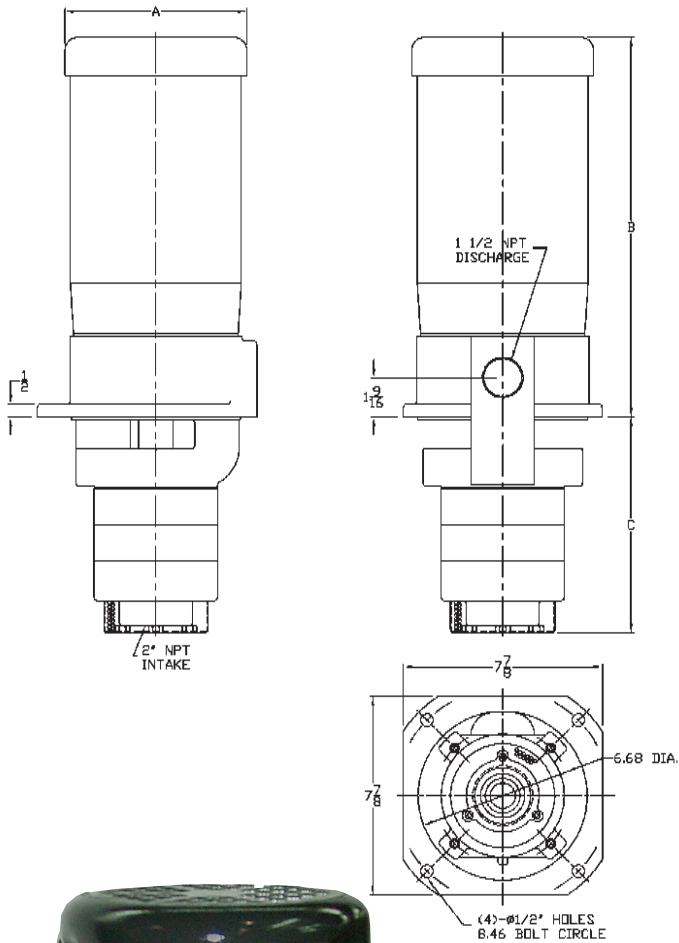
## DIMENSIONS IN INCHES

MODEL	HP	A	B	C
MSC5-3-500	5	25.26	6	8.5
MSC5-4-750	7.5	26.87	7.56	8.5
MSC5-5-1000	10	28.9	9.12	10.37
MSC5-6-1000	10	36.46	16.68	10.37
MSC5-7-1500	15	41.53	18.25	10.62
MSC5-8-1500	15	43.09	19.81	10.62
MSC5-9-2000	20	44.75	21.37	10.62
MSC5-10-2500	25	50	22.93	14.5

## MS5 with Impeller 25128



# Multi-Stage MSD4



## When Ordering Specify:

- Model No. MSD4
- Number of Stages
- Operating Conditions at gpm and T.D.H. in feet
- Motor Horse Power and Current Characteristics

Note: 208/230/460 volts

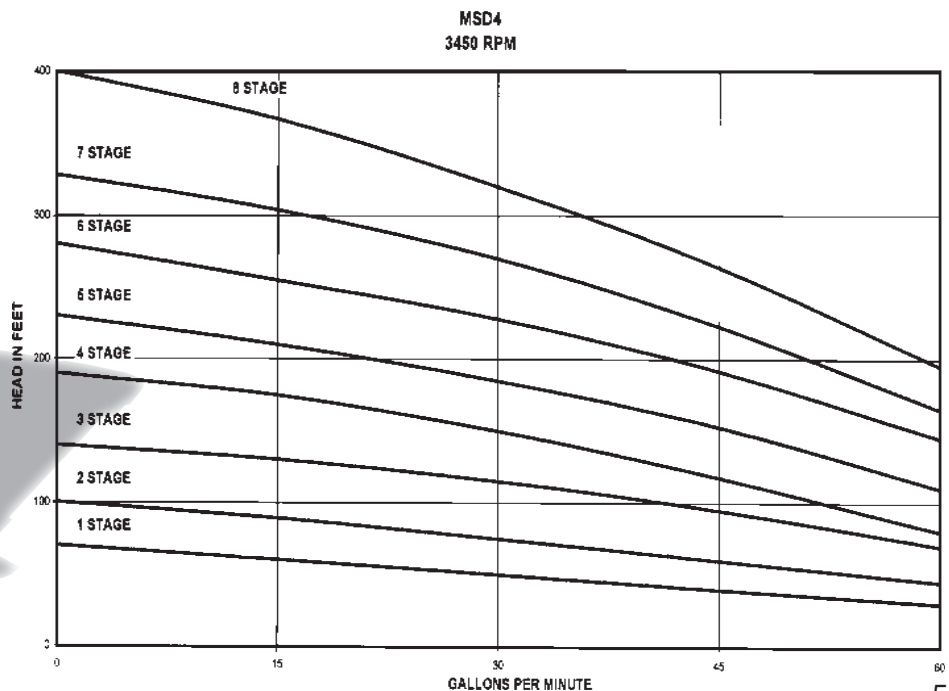
60 cycles – Standard

Mounting Hole Size: 6.75

Other current characteristics available.

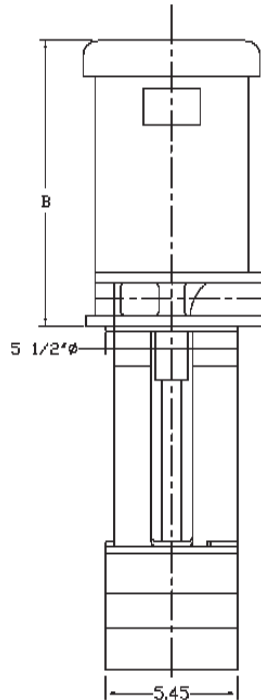
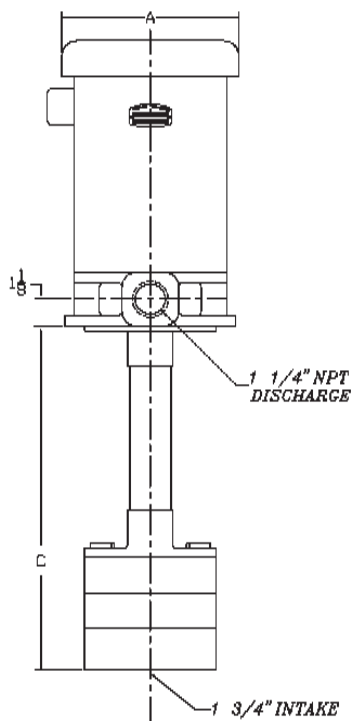
## DIMENSIONS IN INCHES

STAGES	HP	A	B	C
1	1.0	7.25	12.0	5.25
2	2.0	7.25	13.0	6.68
3	3.0	7.25	13.68	8.12
4	5.0	8.50	15.18	9.56
5	5.0	8.50	15.18	11.00
6	5.0	8.50	15.18	12.43
7	7.5	8.50	16.93	13.87
8	10.0	10.25	17.43	15.31





# Multi-Stage MSV



## When Ordering Specify:

- Model No. MSV
- Number of Stages
- Operating Conditions at gpm
- Motor Horse Power and Current Characteristics
- 'C' Dimensions in Inches

Note: 230/460 volts

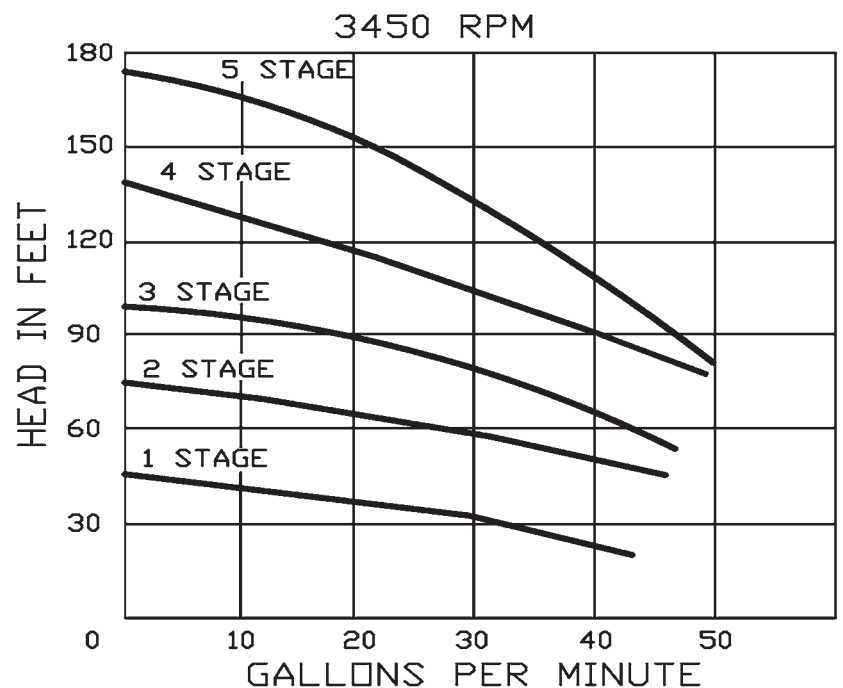
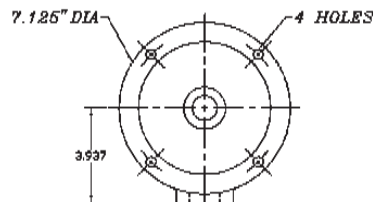
60 cycles – Standard

Mounting Hole Size: 5.625

Other current characteristics available.

## DIMENSIONS IN INCHES

STAGES	HP	A	B	C
1	1.0	7.0	13.12	3.68
2	2.0	7.0	14.12	5.25
3	3.0	7.0	14.87	6.81
4	3.0	7.0	14.87	8.37
5	5.0	8.5	16.12	9.93



## Notes

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.



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[www.Gusher.com](http://www.Gusher.com)

## GUSHER PUMPS LOCATIONS

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### Dry Ridge Manufacturing

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### Dry Ridge Training Facility

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### New Castle Sales & Service

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**Fax:** 765.521.0008  
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## Ruthman Companies: A family-owned business supplying pumps for over 100 years



Ruthman Companies was co-founded in 1912 by brothers Alois and Edward Ruthman as the "Ruthman Machinery Company." Based in Cincinnati, the company serviced the steamboats that traveled the Ohio River.

In 1924, Alois conceived the first sealless centrifugal pump, coining the term 'coolant pump.' The brothers named this new pump "Gusher," giving birth to what is now Ruthman Companies' flagship brand, Gusher Pumps.

Alois' son Thomas R. Ruthman joined the family business in 1949, growing the business globally through organic growth and the acquisition of complementary technologies. In the early 1990's, Alois' grandson, Thomas G. Ruthman, became the third generation of Ruthmans in the pump business. Over the years, Ruthman Companies has expanded its product line from the original centrifugal coolant pumps to include valves, vertical turbine pumps, positive displacement pumps, gear pumps, and other specialized pump equipment, while upholding its reputation as a leader in the custom engineering of pumps for the most challenging applications.

## RUTHMAN COMPANIES MANUFACTURING DIVISIONS

### BSM Pump Corp.

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**Email:** [Sales@BSMPump.com](mailto:Sales@BSMPump.com)  
[www.BSMPump.com](http://www.BSMPump.com)

### Fulflo Hydraulic Valves

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**Fax:** 937.783.4983  
**Email:** [Info@Fulflo.com](mailto:Info@Fulflo.com)  
[www.Fulflo.com](http://www.Fulflo.com)

### Nagle Pumps

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**Fax:** 708.754.2944  
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[www.PSI4Pumps.com](http://www.PSI4Pumps.com)

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### Ruthman Pumps & Service

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