

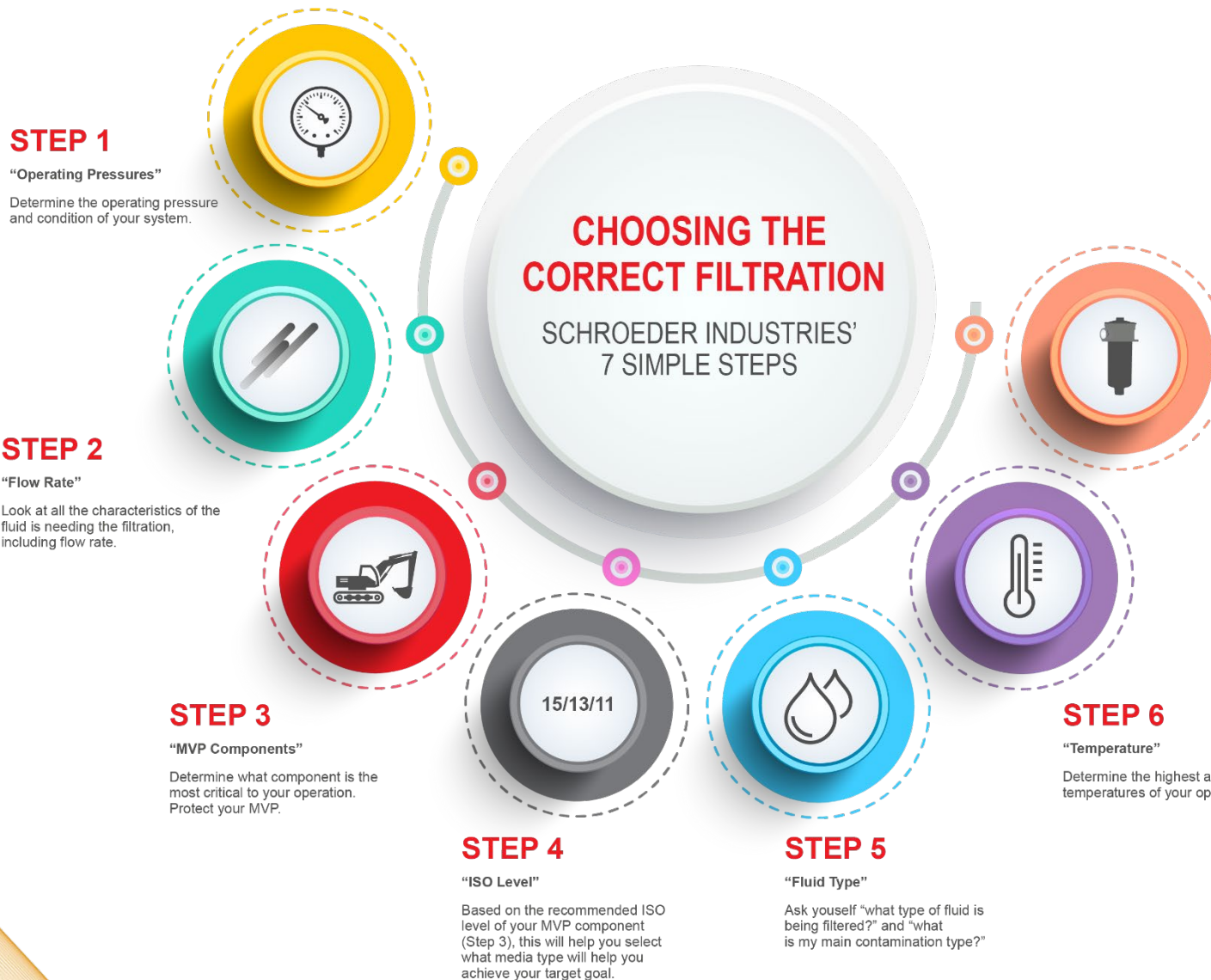


## The 7 Steps For Choosing the Correct Filtration

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# 2021 DISTRIBUTOR TRAINING

# The 7 Steps for Choosing the Correct Filtration

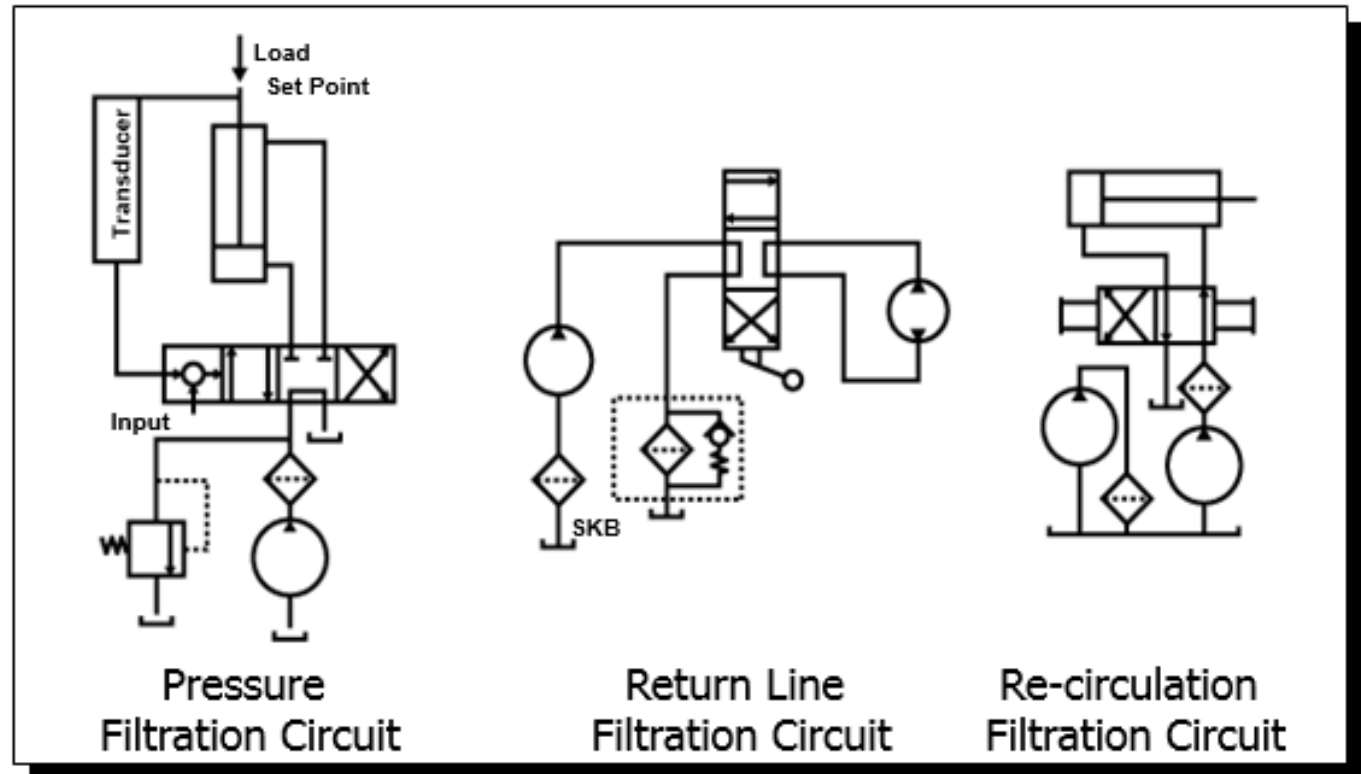


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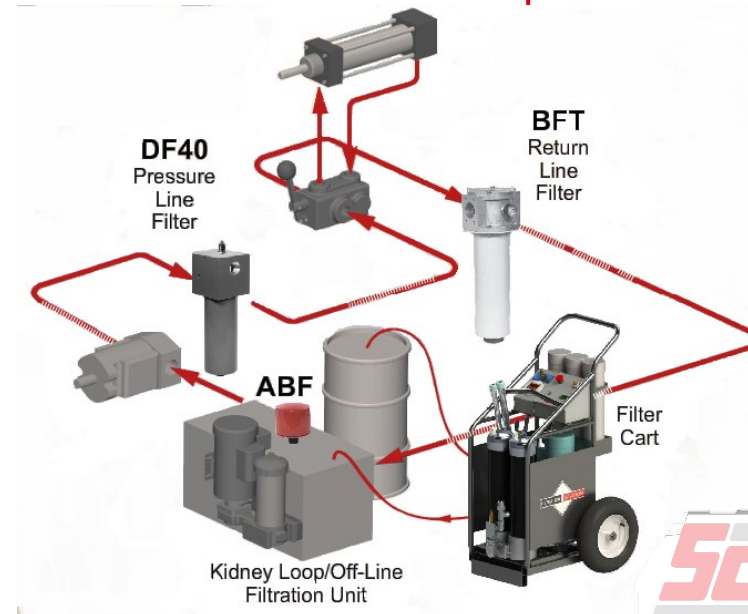
# The 7 Steps – Step 1 "Operating Pressures"

- Determine the filter's operating pressure and condition
  - System Operating Environment
  - Filter location
  - Duty Cycle



## The 7 Steps – Step 1 "Flow Rate"

- Max and nominal flow rate
- Whether surge flow and back flow may be present
- Element sizing depend on max flow rate for the housing



# The 7 Steps – Step 3 "MVP Components"



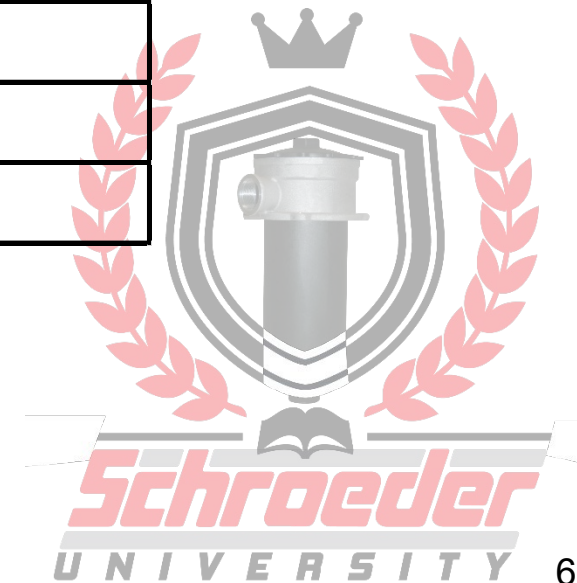
- Think of what component is breaking down/wearing out?
- Never hurts to go with the cleaner approach
- If there are several components in a system, pick the cleanest code
  - Identify the **Most Sensitive Component** in the System

Hydraulic Servo Valves	15/13/11
Hydraulic Proportional Valves	16/14/12
Hydraulic Variable Piston Pump	16/14/12
Hydraulic Fixed Piston Pump	17/15/12
Hydraulic Variable Vane Pump	17/15/12
Hydraulic Fixed Vane Pump	18/16/13
Hydraulic Fixed Gear Pump	18/16/13
Ball Bearings	15/13/11
Roller Bearings	16/14/12
Journal Bearings (>400 rpm)	17/15/13
Journal Bearings (<400 rpm)	18/16/14
Gearboxes	18/16/13
Hydrostatic Transmissions	16/14/11
Pumps	16/14/12

## The 7 Steps – Step 4 "ISO Level"

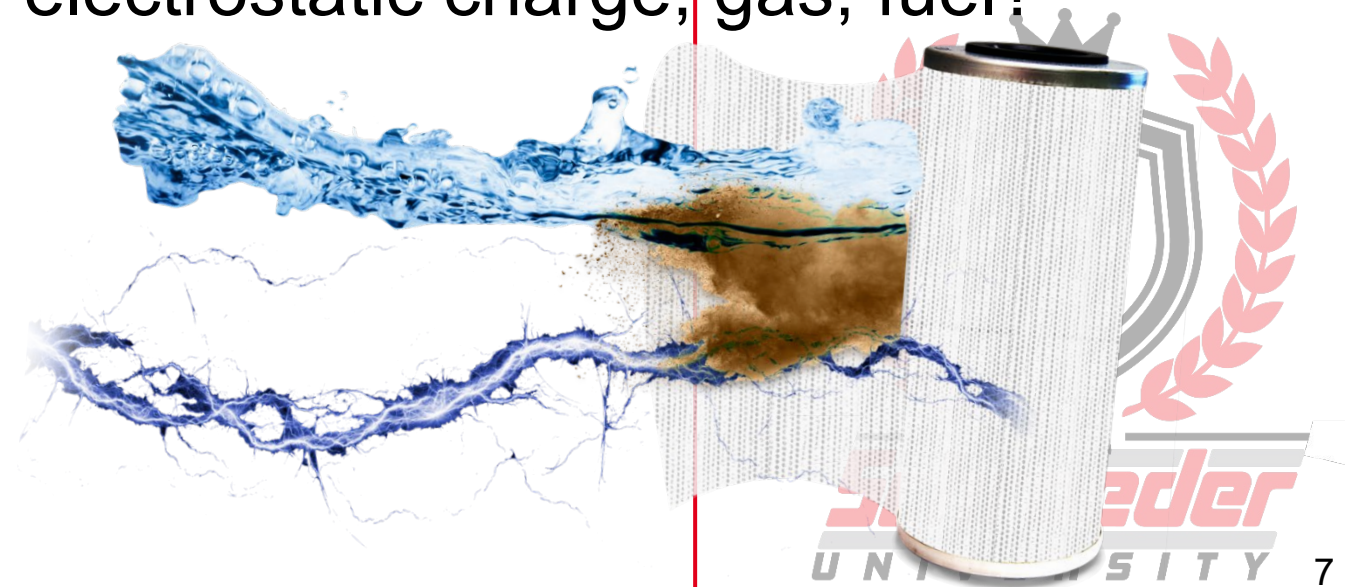
- Select the proper micron rating to implement

Desired Cleanliness Level (ISO Code)	Media Type
20/18/15 - 19/17/14	Z25
19/17/14 - 18/16/13	Z10
18/16/13 - 15/13/10	Z5
15/13/10 - 14/12/9	Z3
14/12/9 - 13/11/8	Z1



## The 7 Steps – Step 5 "Fluid Type"

- What type fluid runs in the system will determine the seal type
- Selecting media type
  - What media best accommodates what you're protecting
  - What is your contamination issue?
- Removing contaminant, water, electrostatic charge, gas, fuel?
  - There is a filter for all!



# The 7 Steps – Step 6 "Temperature"

- Temperature will determine proper housing size and, more importantly, viscosity
- Viscosity will affect differential pressure, and need close attention





# The 7 Steps – Step 7 "Piecing it all together"

- Calculate Overall System Differential Pressure
- Ensure it is around half of the cracking pressure
- Apply the correct porting
- Add any indicator options needed



**Schroeder has a filter for every  
application and market!**

# End Results

- See the results
  - Seeing cleaner fluid?
  - Is everything working to expectations?
  - System parts lasting longer?
  - Saving Money?





***THANK YOU FOR YOUR ATTENTION!***

**Together we Succeed**

