

NOP Cyclone Filter Pump



NOP® 始まりつくるヒト!
Nippon Oil Pump Co., Ltd.

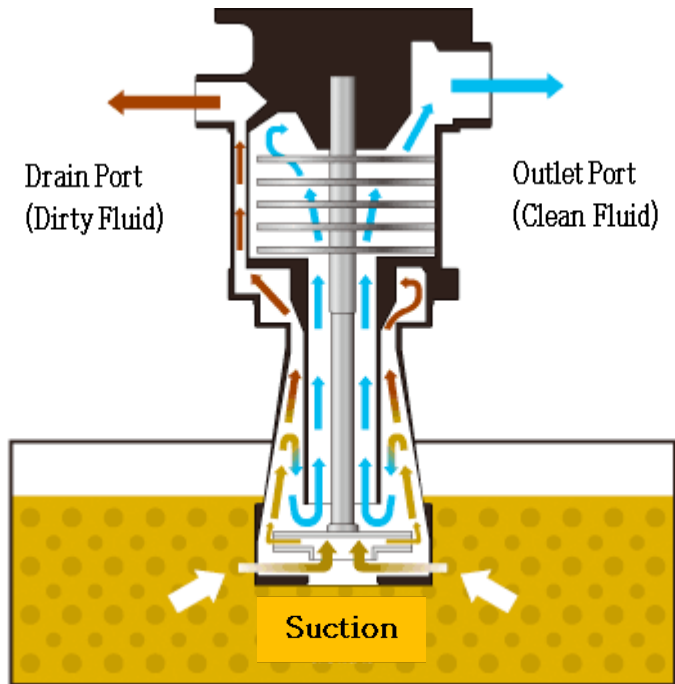


Built-In Filtration System



Cyclone Filter

Original reversal cyclone filter efficiently separates dirty and clean fluid. Dirty fluid upwards along cyclone case by centrifugal force and ejects chips and contamination to outside through drain Port. Only clean fluid upwards through a center tube and deliver to pump system which pressurizes clean fluid by multistage impeller.



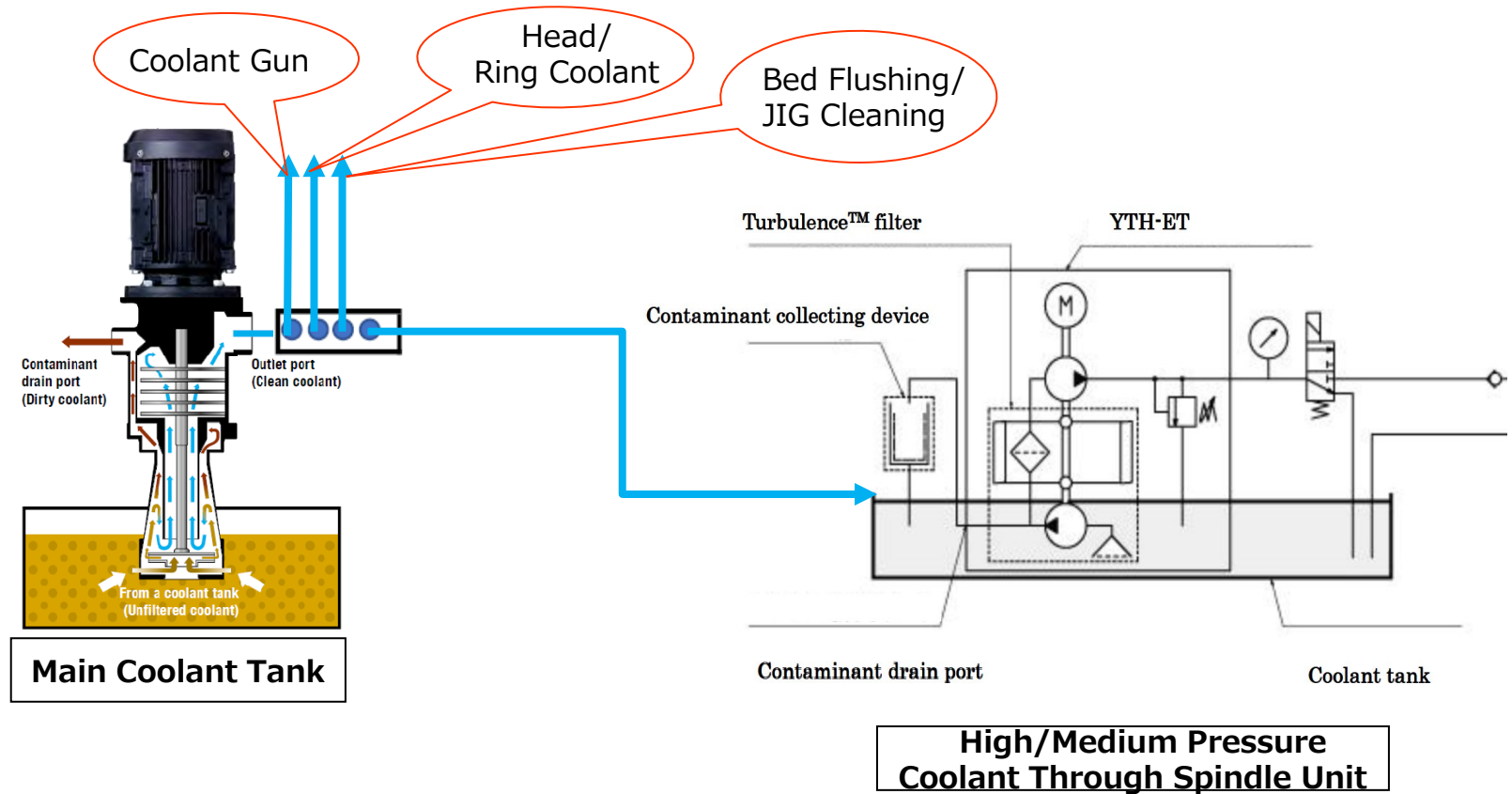
Compatible Type of Chips

Material	Iron	Casting	Aluminum	Copper
Compatibility	◎	◎	○	◎

Filtration performance

Suction strainer	3 mm (Solids larger than this must be removed from the tank)
Cyclone filter	Water-soluble coolant fluid 100 μ m : 99.9% (Silica sand : Specific weight : 2.7) Straight oil 100 μ m : 80% (Silica sand : Specific weight : 2.7)

NOP Cyclone Filter Pump: Usage Concept



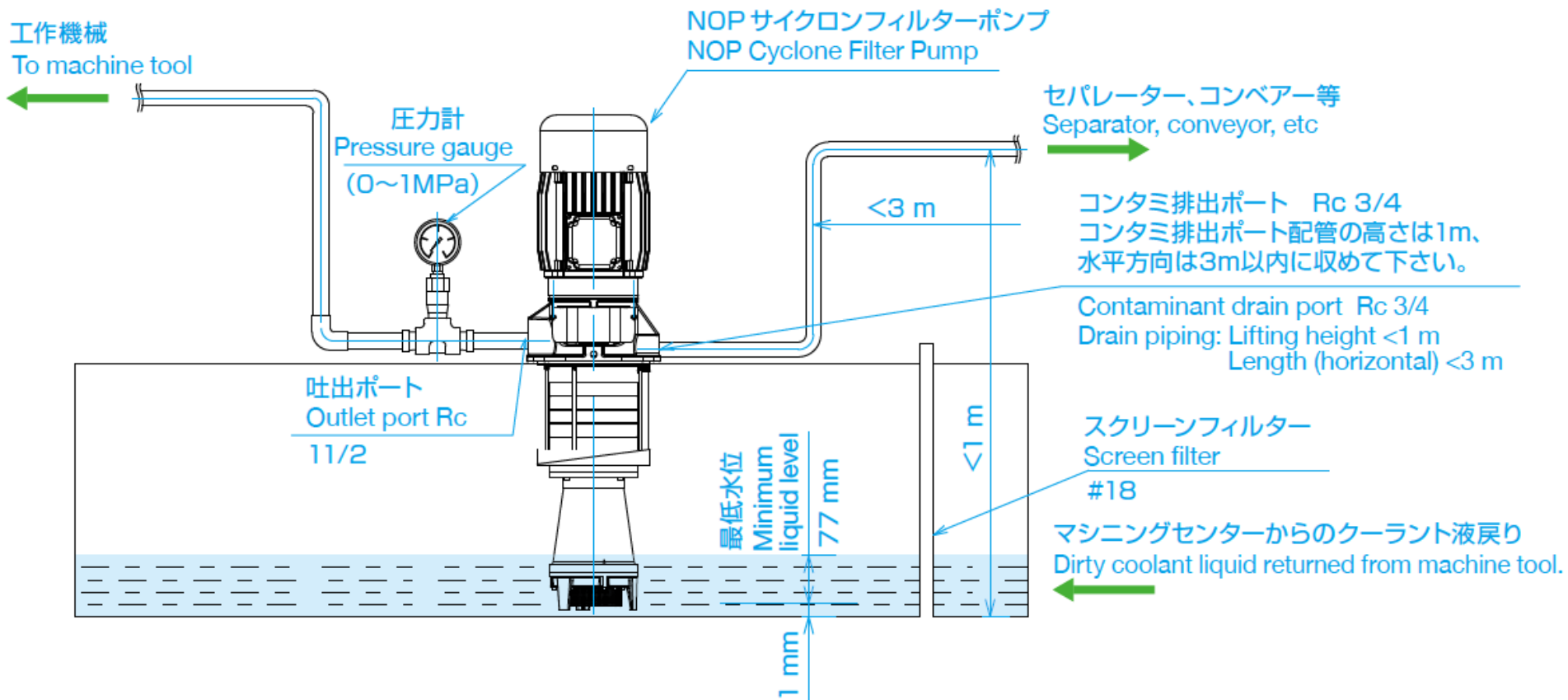
NOP Cyclone Filter Pump

Compact Solution for Coolant & Chip Management



- ☐ Supply Filtered coolant to Machines for Niagara, Bed-Flushing, Wall Flushing, Fixture Cleaning, Hand-Gun and High-Pressure Coolant Tank
- ☐ Ensures more productive time on your machines
- ☐ A must for Automated Manufacturing and IOT environment
- ☐ Avoid damage to surface of work piece & Seat-check alarm
- ☐ High capacity filtering cyclone system can automatically clean the tank and substantially cut down coolant tank maintenance Time
- ☐ Clear the pipe clogging by filtering contaminant with cyclone
- ☐ Easy to retrofit as cyclone filter and pump are compactly combined in one & minimize Energy consumption

構成例 / A Sample System Layout



NOP Cyclone Filter Pump: Model GCI-135/132



Big Flow Coolant Pump with Built-in Cyclone Filter

- Total Pump Head : 50 m
- Maximum Discharge : 135 Litre/min
- No Suction Filter
- No Clean Tank

*Aqueous solution with 2% or more water-soluble coolant fluid

Cyclone Filter

Cyclone Filter removes chips from coolant fluid



Impeller Pump

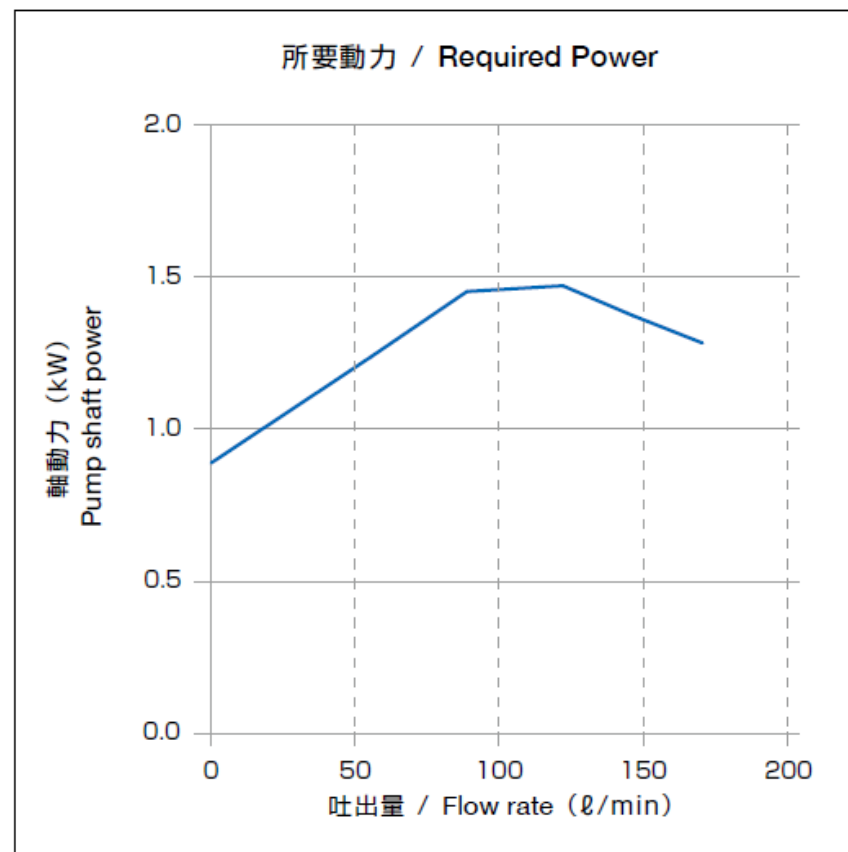
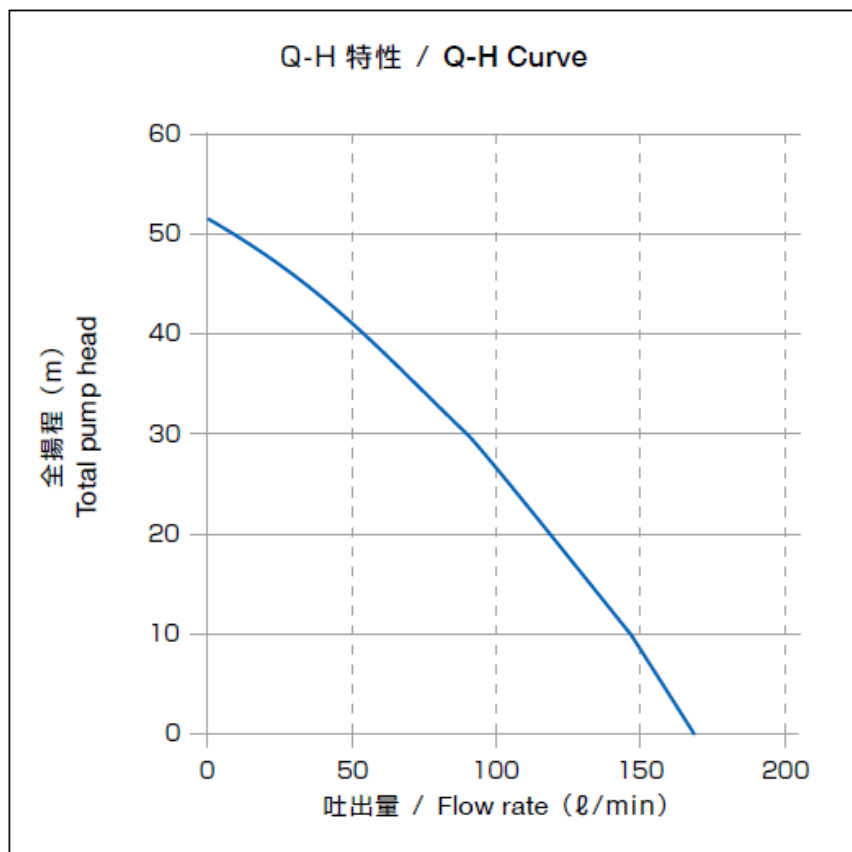
Impeller generates pressure rotating and driving fluid.
Developed for fluid transfer pump.



NOP Cyclone Filter Pump – GCI135



50Hz (I135CG)

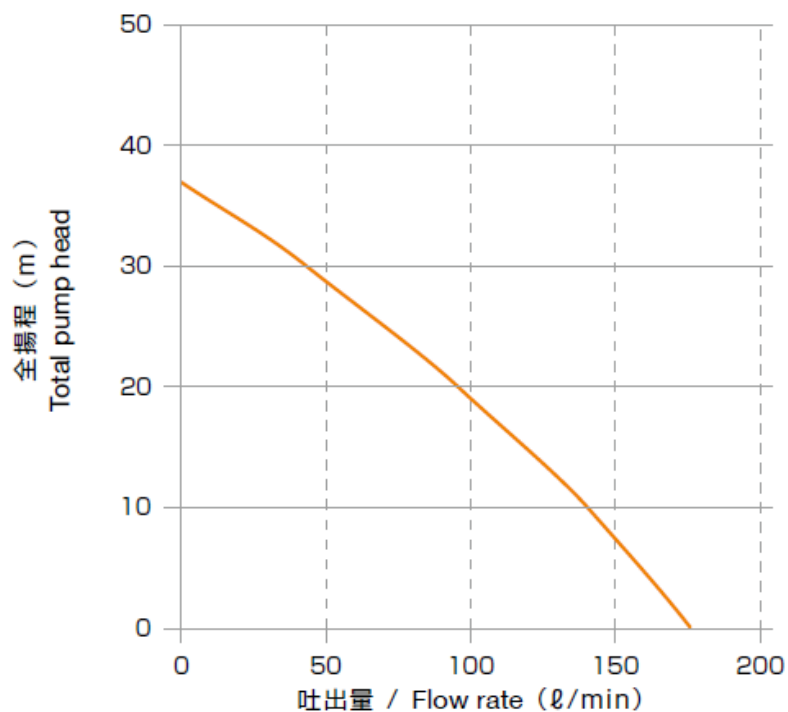


NOP Cyclone Filter Pump – GCI132

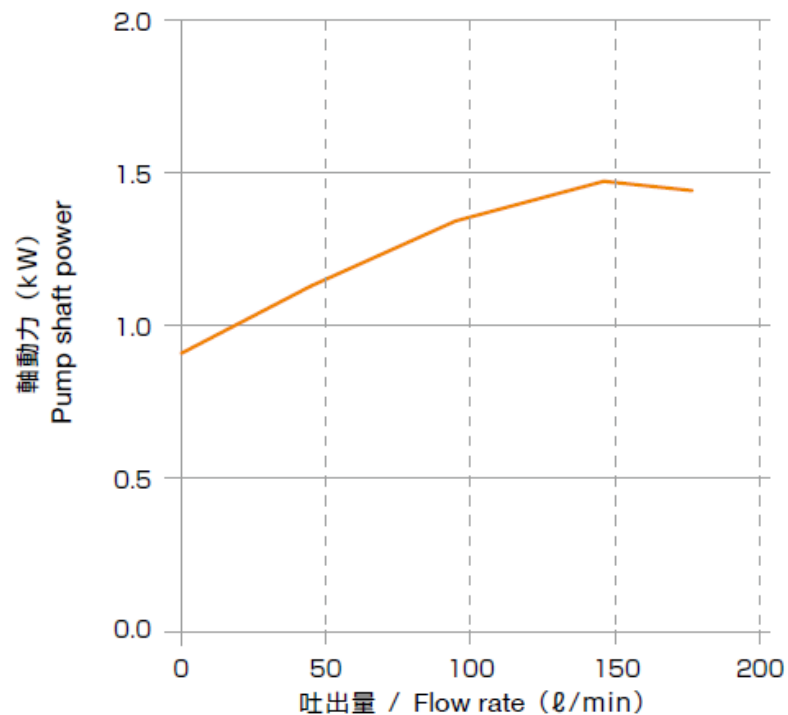


60Hz (I132CG)

Q-H 特性 / Q-H Curve



所要動力 / Required Power



NOP Cyclone Filter Pump: Model GCI-303/302



Big Flow Coolant Pump with Built-in Cyclone Filter

- Head : 50 m
- Maximum Discharge : 300 Litre/min (@ 20m)
- No Suction Filter
- No Clean Tank

*Aqueous solution with 2% or more water-soluble coolant fluid

Cyclone Filter

Cyclone Filter removes chips from coolant fluid

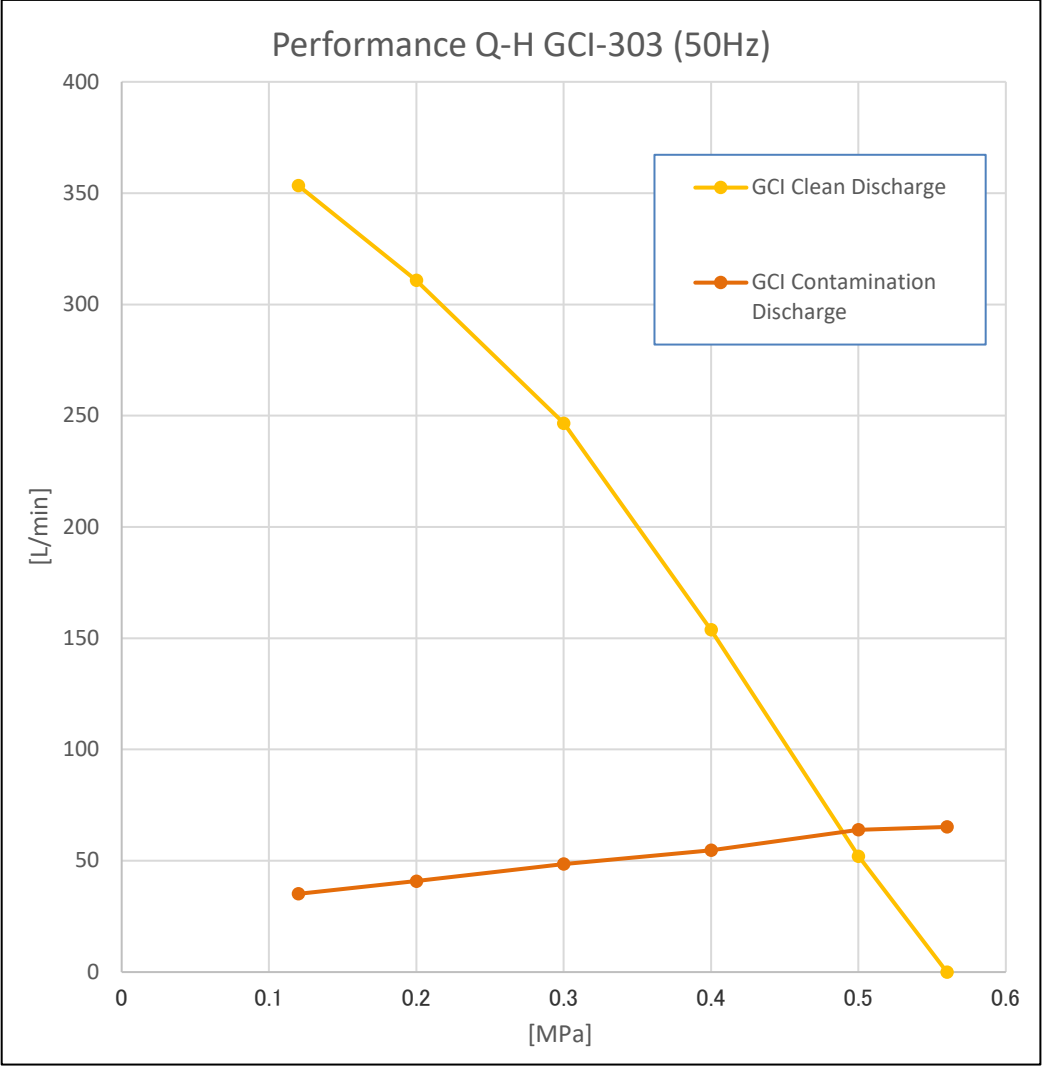


Impeller Pump (3 Impeller – 50 Hz / 2 Impeller – 60 Hz)

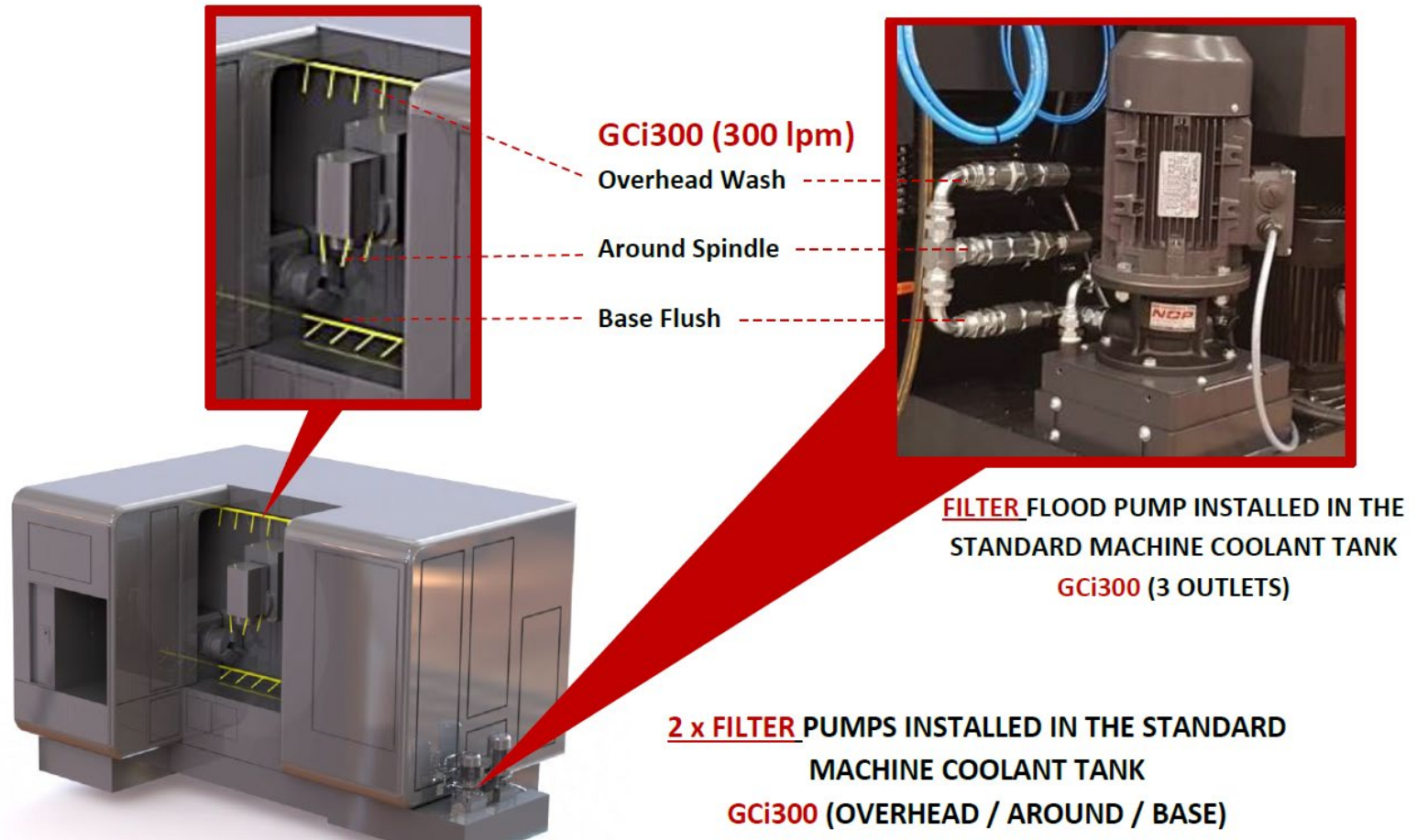
Impeller generates pressure rotating and driving fluid.
Developed for fluid transfer pump.



Performance: GCI-303 (50 Hz)



Suggested installation of GCI-303/302 on VMC



NOP Cyclone Filter Pump: Model GCI-75/73



Big Flow Coolant Pump with Built-in Cyclone Filter

- Total Pump Head : 50 m
- Maximum Discharge : 80 Litre/min (@ 10m)
- No Suction Filter
- No Clean Tank

*Aqueous solution with 2% or more water-soluble coolant fluid

Cyclone Filter

Cyclone Filter removes chips from coolant fluid



Impeller Pump(5 Impeller – 50 Hz / 3 Impeller – 60 Hz)

Impeller generates pressure rotating and driving fluid.
Developed for fluid transfer pump.



