

# Guide to Selecting the Right Filter Media

**STEP 1:** Using the form below, circle the number in each category that best describes your hydraulic application.

**STEP 2:** Add the numbers from each category to get your TOTAL score.

**STEP 3:** Using the filter media table at bottom of page, find the suggested Donaldson media number for your application.

**1 APPLICATION QUESTIONS**

## Environment

OPTIMAL	Clean areas & labs.....0
↑	General machine shops, lifts.....1
↑	Mobile plants.....2
↓	Foundries, drilling, mining
↓	underground, die cast shops.....3
HOSTILE	

## Component Sensitivity

### Sensitivity of components to contamination

HIGH	Hi-performance servo valves.....8
↑	Industrial servo valves.....6
↑	Piston pumps, proportional
↑	valves.....4
↓	Vane pumps, spool valves.....3
↓	Gear pumps, manual &
↓	industrial valves.....2
LOW	

## Economic Liabilities (Components)

### The cost of component replacement

HIGH	Large piston pumps, high
↑	torque motors.....5
↑	Cylinders, servo valves,
↑	piston pumps.....3
↓	Valves, subplate industrial.....2
↓	Manual valves, gear pumps.....1
LOW	

## Economic Liabilities (Operational)

### The cost of downtime

HIGH	Steel mill, plastic injection.....5
↑	High volume production plant.....3
↑	Mobile installations.....2
↓	Equipment not critical to
↓	production.....1
LOW	

## Safety Liabilities

HIGH	Failure would cause severe
↑	damage to equipment, danger
↑	to personnel.....3
↓	Failure likely to cause hazards.....1
↓	Some hydraulic component
↓	test rigs.....0
LOW	

Find this form on our website  
at [www.donaldson.com](http://www.donaldson.com)

## Life Expectancy

### Service life required for components

HIGH	0-1000 hours.....0
↑	1000-5000 hours.....1
↑	5000-10000 hours.....2
↓	10000-20000 hours.....3
↓	20000+ hours.....5
LOW	

## Pressure

### Operating & Duty Cycle

LIGHT	Continuous operation at rated pressure
↑	or lower
↑	Medium pressure changes up to
↑	rated pressure
↓	Zero to full pressure, cyclic flow
↓	Zero to full pressure with transients
SEVERE	at high frequency

Pressure	LIGHT	MED	HEAVY	SEVERE
0-70 bar 1-1000 psi	1	3	3	4
70-150 bar 1000-2200 psi	1	3	4	5
150-250 bar 2200-3600 psi	2	3	4	6
250-350 bar 3600-5000 psi	3	5	6	7
350+ bar 5000+ psi	4	6	7	8

**2**

**TOTALS**

ENVIRONMENT.....	_____
COMPONENT SENSITIVITY.....	_____
COMPONENT LIABILITIES.....	_____
OPERATIONAL LIABILITIES.....	_____
SAFETY LIABILITIES.....	_____
PRESSURE.....	_____
LIFE EXPECTANCY.....	_____

**Your Total Score:**

**3**

**MEDIA**

**If Your Score is: Donaldson Advises:**

22+.....	#1 Media
17+.....	#2 Media
15+.....	#2½ Media
10+.....	#9 Media
9+.....	#20 Media