

# 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	
HOSTILE	underground, die cast shops .....	3

## 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 &	
LOW	industrial valves .....	2

## 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
LOW	Manual valves, gear pumps .....	1

## 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	
LOW	production .....	1

## Safety Liabilities

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

**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
LOW	20000+ hours .....	5

## 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
SEVERE	Zero to full pressure with transients 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