

Magnetic Separation From Coolant

INDUSTRIAL FILTRATION | MAGNETIC SEPARATORS FOR COOLANT | MAGNETIC SEPARATOR DESIGN

Asama Coldwater Manufacturing

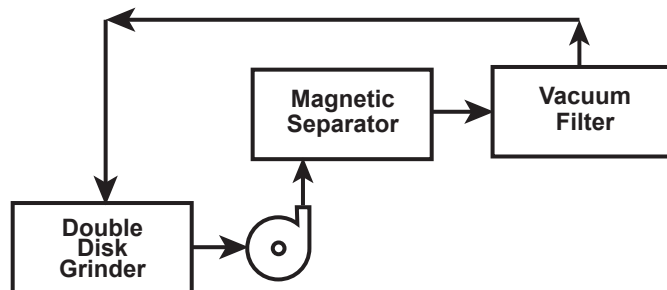
PRODUCT USED:

Magne-Tight Magnetic Separator



END USER:	Asama Coldwater Manufacturing (Brake
LOCATION:	Coldwater, Michigan, USA
UNITS:	(1) FSMB-4.5 Mini-Mag Magnetic Separation Filter
RATE:	80 gpm (240 gpm max flow)
PROCESS:	Filtering metal fines from brake rotor double disk grinder

MAGNETIC SEPARATION FOR COOLANT TREATMENT-PROCESS FLOW DIAGRAM



MORE INFO

The Asama Coldwater Manufacturing facility produces automotive parts.

Primarily front and rear brake rotors and drums in excess of 2400 parts per shift. The double disk grinder, using a water based synthetic coolant on the front brake rotors, produces 20 pounds of grinding sludge per hour.

Using CBN stones, the sludge is a mixture of ferrous metal and grinding stone. Initial lab testing, in our facility, indicated an 82% removal of all solids 5 micron and larger on a single pass.

Prior to the installation of the Mini-Mag separator, coolant filtration was accomplished using a vacuum paper media filter. The media filter was indexing 18" of paper every 10 minutes, consuming one roll of media each shift or 2,000 parts.

Single-use media costs per month were \$10,168.00, equating to \$.25 per part cost. In addition, biweekly cleaning of the filter and grinder was required due to excessive build

up of fines, consuming 24 man-hours. The coolant was recharged monthly, due to saturation with metal fines and tramp oil.

Installing the FSMB-4.5 Magnetic Separator for coolant drastically reduced the solids loading going to the vacuum filter because the majority of solids were removed in the magnetic separator.

As a result, vacuum filter indexing time was reduced to 18" every 45 minutes. Paper media costs per month were reduced (73%) to \$2,758.00. Thanks to our magnetic separator design, manufacturing costs were reduced (70%) to \$.075 per part. Currently the grinder and magnetic coolant filter are scheduled for a yearly cleaning and coolant life has been extended indefinitely.

The Mini-Mag return on investment was only 15 1/2 weeks.

So if you looking for the tested and proven way to remove oil and suspended solids from fresh water, call now 248-427-9090.