

# CuZn Water & Air Filters

## Machine Coolant Filters Case Studies

Saturday, May 18, 2002

### Estimates of savings with the Biocon System

#### Case A

Based on feed back from John Simon on May 14,2002 the following savings are estimated by Delco Reamy in Dallas. Delco had one CoolCon3 (model#CC250) in operation for approximately 4 months. Based on the results from this one unit, Delco has plans to purchase an additional 15 CoolCon3 Machine Coolant Filtration Systems in sizes of CC250, CC500, and CC1000. These units will treat a total of approximately 5000 gallons of fluid. Prior to purchasing the CoolCon3 (model#CC250), Delco was changing fluid weekly. During the 4 months the CoolCon3 model#CC250 unit in place the fluid has not been changed since the machine was installed.

Delco is estimating that the savings for all 5000 gallons of coolant will be as follows by using the Biocon treatment system:

Disposal of coolant	\$3220/week
Addition of rust inhibitor	\$938/week
Addition of soaps for degreasing	\$2370/week
Filters	\$42/week
Maintenance labor	\$340/week
Addition of new coolant	<u>\$440/week</u>

<b>Total weekly savings</b>	<b>\$7,350</b>
<b>Total monthly savings</b>	<b>\$29,400</b>
<b>Total yearly savings</b>	<b>\$352,800</b>

#### Case B

In discussion with Walt Cifka from BP/Castrol on May 15 we received the following feed back. Mr. Cifka is very familiar with machine shop operations in Michigan Indiana, Ohio and Ontario. He estimates that the cost of coolant including, biocides, disposal, attrition, chemical maintenance etc. ranges from \$2- \$50 per circulating gallon of coolant per year. In smaller shops the savings are less and more difficult to calculate. In larger shops that have a coolant maintenance program, the costs easier to calculate. In the example above for a coolant volume of 5000 gallons using a average cost of \$25 per gallon the yearly savings with a CoolCon3 system would be **\$150,000 per year**.

Mr. Cifka also pointed out that many plants have now disallowed the use of biocides. Legionella bacteria are a topic that is under discussion and has been reported present in many plants. Tool life savings with a CoolCon3 type system would be difficult to calculate accurately since so many factors including tool quality; operator skill and raw material affect the tool life. Based off of our cases studies, the CoolCon3 extends tool life up to 6 times.