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Are you looking to reduce your oil consumption?

Are you looking to increase your productivity by improving the condition of your oils?

Are you interested in significant savings by purifying and extending the life of your oils?

Then we can offer a simple, highly efficient and proven oil filtration system for your general oil purification needs. The filtration unit, **Clean Tower**, would be a very efficient addition to your existing filtration systems and with its compact size and mobility can be shifted around the manufacturing plant with ease. Even though the unit is highly efficient in purifying down to 3 micron and very reliable, it is surprisingly inexpensive. In fact, the **Clean Tower** can compete, very successfully, against complex filtration systems, given its' overall performance and price.



Benefits of Clean Tower:

- Filtration down to 3-5 micron
- Small footprint
- Significantly lower capital cost
- Portable
- Relatively low energy consumption
- Simple design
- Ease of attaching to existing filter systems
- Dirty cartridges can be sold onto metal recyclers

Pre-coat filtration system:

- Similar filtration quality
- Large footprint
- Very high capital cost
- Static
- High energy consumption
- Complicated design
- Difficult to attach and install
- Difficult to dispose of carbide/filter media mixture





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case STUDIES

Productivity issues at Customer A

OBJECTIVE: Customer A is a well known manufacturer in the tool manufacturing industry, specifically manufacturing carbide end mills. The customer was having problems with productivity and sizing due to heavy levels of particulates inside the grinding oil. The customer was overcoming these problems by changing the oil on a regular basis. The customer contacted MCE with the request for assistance. After investigating the existing manufacturing processes, Master Chemical was able to determine that the issues were due to the oil not being adequately filtered by the existing filtration system. Thus, Master Chemical introduced its new portable filtration system, **Clean Tower**.

OPERATION: The customer installed two **Clean Tower F4** units in addition to its existing filtration systems on two separate grinding machines. The materials being ground were carbide and high speed steels.

OUTCOME: The customer found the filtration system both very efficient in filtering down to 3 micron and significantly lower in price than any competitive filtering system. The successful trials proved that the **Clean Tower** was extremely effective at keeping the grinding oil in great condition thus negating the need for disposal. The customer was able to save the significant cost of refilling with fresh oil plus the issues of sizing and finish were completely overcome by the consistent cleanliness of the grinding oil.

Maintenance costs at Customer B

OBJECTIVE: Customer B is an international manufacturer of carbide hobbing tools. The customer was having a major problem with the erosion of machine slideway components and excessive wear of high pressure pumps due to extremely heavy levels of abrasive carbide particulates inside the grinding oil. An added problem also

was operators complaining of skin irritation due to the abrasive nature of the particulates in the oil. Master Chemical introduced its new portable filtration system, **Clean Tower**.

OPERATION: The customer installed a single **Clean Tower F4** unit to work on two separate Walter grinders. The material being ground was carbide.

OUTCOME: Machine cleanliness improved within hours of running the **Clean Tower F4** on the Walter grinding machines. Oil went from a dark grey/black colour to water white. Customer had no further skin irritation complaints and wearing of both the high pressure pump and machine slideways ceased immediately saving the customer significant cost and machine downtime.

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