



CASE STUDY

CUSTOMER

ARISTON

LOCATION

CERRETO, D'ESI ANCONA, ITALY / AUG 2009

EQUIPMENT

PARTS WASHER

APPLICATION

PARTS WASHER FLUID

PROVEN RESULTS



PARTS WASHER FLUID PASSES QUALITY CONTROL AND LASTS 3 TIME LONGER

“Since installing the OEI magnetic Filter our cleanliness levels have increased and the cleaning fluids are lasting 3 times longer”

- Mauro Bernardini, the Maintenance Engineer

CHALLENGE

Reduce contamination in the parts washing fluid to meet quality control cleanliness levels for painting.

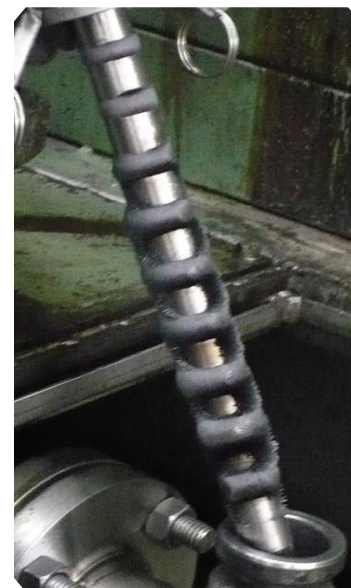
SOLUTION

Renox, OEI's distributor for Italy, recommended the installation of an OEI magnetic filter scrubber in place of conventional bag filtration.

RESULTS

Photos show the contamination collected after only one week of operation.

Removal of these contaminants has extended the life of the cleaning fluid, and reduced material waste and production costs.




PRODUCT RECOMMENDATION
MAGNETIC FILTER SCRUBBER



RESULTS

An analysis showed that the OEI magnetic filter element captured both ferrous and non-ferrous contamination from the parts washer fluid. . The report shows a large amount of chromium on the magnetic filter: This means that particles of AISI 304 (which should be CR 18 %, NI 10 % C 0.05 %) were captured.

Spectrometric Analysis was done by dirtying a disc shaped electrode with a sample of the sludge. This electrode was then compared to standard oil at 0 ppm. The concentrations found are a semi-quantitative indication of the elementary composition of the sludge.



MECOIL

DIAGNOSI MECCANICHE


SPECTROINC
Industrial Tribology Systems
Agenzia per l'Italia

Laboratorio con Sistema Qualità
certificato ISO 9001:2000
Cert. RINA N°656/97

RENOX Srl

ID Macchina: **PRODUZIONE MARMITTE -
MORCHIA DA MAGNETE SU
FLUIDO DA LAVORAZIONE
METALLI**

Modello:
Tipo di macchina: **Campione singolo**




NPSSEI OIL ENOIO

Analisi spettrometrica eseguita mediante sporco con il campione di morchia di un elettrodo a disco. Tale elettrodo è stato successivamente analizzato con olio standard "0 ppm". Le concentrazioni rilevate sono una indicazione semi-quantitativa della composizione elementare della morchia.

Presenza di metalli a valori elevati, prevalentemente riconducibili ad acciaio fortemente legato (Ferro, Cromo, Nichel). La presenza di Calcio e Zinco è probabilmente da attribuire all'olio emulsionabile.

Dott. Alessandro Paccagnini, 07/07/2009

Olio NON SPECIFICATO -		ID Campione	2DDDD5 (G2670)
Note:		Campionato il	n.p.
		Ricevuto il	06/07/09
		h totali	
		h olio	
		Rabbocco (L.)	
			
		<i>Valori di soglia</i>	
ASTM D6595-00 ELEMENTI METALLICI DA USURA	Ferro	ppm	>1000
	Cromo	ppm	>1000
	Nichel	ppm	410
	Molibdeno	ppm	6
	Alluminio	ppm	60
	Piombo	ppm	22
	Rame	ppm	244
	Stagno	ppm	<1
	Argento	ppm	178
	Titanio	ppm	25
ASTM D6595-00 ELEMENTI CONTAMINANTI	Silicio	ppm	266
	Sodio	ppm	29
	Vanadio	ppm	7
ASTM D6595-00 ELEMENTI ADDITIVI	Calcio	ppm	1091
	Magnesio	ppm	142
	Fosforo	ppm	29
	Zinco	ppm	1670
	Bario	ppm	<5
	Boro	ppm	35

Element		PPM
Iron	Fe	> 1000
Chrome	Cr	> 1000
Nickel	Ni	410
Molybdenum	Mo	6
Aluminum	Al	60
Lead	Pb	22
Copper	Cu	244
Tin	Tn	< 1
Silver	Ag	178
Titanium	Ti	25
Silica	Si	266
Sodium	Na	29
Vanadium	V	7
Calcium	Ca	1091
Magnesium	Mg	142
Phosphorus	P	29
Zinc	Zn	1670
Barium	Ba	< 5
Boron	B	35