



CLEAN OIL
BRIGHT IDEAS

Application Study
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CJC™ Application Study

CUSTOMER

UTISA Tableros del Mediterráneo from the FINSA Group is specialized in the manufacturing of chip-board and melamine coverings.

THE SYSTEM

UTISA has 4 lines of melamine presses. The hydraulic presses are equipped with proportional valves and servo valves because UTISA want to have full control of precision and pressure in order to have a suitable control of process, pressure increase and temperature distribution. The oil tanks are situated above the press and the oil working temperature is more than 50 °C.

The Siempelkamp Press No 3

Oil: Cepsa HV 46

Volume: 2,000 L

THE PROBLEM

The presses work in a dusty environment, where oil contamination is inevitable. The oil presented a very high content of different kinds of particles. The particles may be generated and multiplied as a result of the abrasion caused by already existing contamination of the oil.

The high oil temperature had produced high concentration of oxidation residues in the oil system, which not only accelerate the oil ageing process, but also, when combined with the particle contamination, will increase the possibility of production breakdowns.

THE SOLUTION

The hydraulic oil ensures component function and reliability of the hydraulic press. 4 x CJC™ Fine Filter HDU 27/27 P with a flow of 400 L/h and with CJC™ Filter Inserts B 27/27 were installed in the 4 presses. The risk of production breakdowns due to the bad condition of the oil was minimized because of the 3 micron filtration efficiency and the high dirt holding capacity of the CJC™ Fine Filters.

THE RESULT

The number of particles > 4 micron was reduced to 1/14 of the original number, together with a reduction of the oxidation residues. Both are factors that will contribute to the extension of the hydraulic component lifetime of 3 times.

Hydraulic Oil Maderera Melamine Press

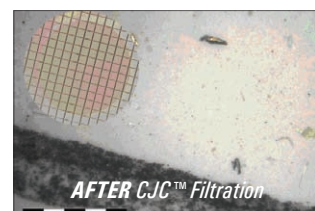


The Melamine Press at UTISA Tableros del Mediterráneo

OIL SAMPLE



BEFORE CJC™ Filtration



AFTER CJC™ Filtration

THE RESULT

	Before	After
ISO Classification	23/21/18	19/17/14
Particles > 4 microns	4,093,200	286,480
NAS	12	9
Acidity, N.A.T. Mg. KOH/g	0.48	0.15

COMMENTS

Mr. Luis Garrido Moya, Maintenance Manager of UTISA:
"Until now, we are very satisfied with the obtained results, because they are close to the recommended values. As a result we have obtained a higher output in the whole hydraulic system, especially in the proportional valves"