Sample Case: Aluminum Die-cast Machine)





This client produces an aluminum car transmission casing, and Miracle Boy was installed right in front of the die-cast machine.





Hydraulic oil became transparent and can be even checked through the oil level gauge.



Existing RRR filter is no longer used after installing MB





MB takes oil from a drainpipe and return from the top of the die-cast machine oil tank by using existing intake & outlet (without new piping work)

Current Situation

OUTLET Equipment

UBE Machinery 1600ton Aluminum Die-cast Machine

OIL Ester Fire resistant Hydraulic Oil 3000L

Existed Filter System | RRR Bypass Filter

Issue

Oil exchanging cost is very high.



Counter Measure

Install MB to the main oil tank of the die-cast machine.



Result

Even though ester synthetic oil is chemically stable, it even gets oxidized and mixed with humid. The only solution for improving such oil condition has been exchanging oil.

However, as MB's filter element can remove oxide and humid to maintain oil cleanliness and even oil viscosity, hydraulic servo valve performs 100% of its capability which made molding quality greatly improved without oil exchange.

<Cost Saved>

★Ester Oil 3000L = US\$ 90,000 is saved annually.

★Annual overhaul cost is not required anymore.

Voice of Customer

Defect on die-cast machine leads to production line stop thus we had been working on maintaining hydraulic oil.

Replacing water-glycol oil to Ester oil made maintaining oil easier, but the cost of exchanging ester oil become much higher.

However, after installing MB, exchanging filter elements is the only work required due to his capability of removing a large amount of contamination and maintaining oil viscosity.

The fact that no oil exchange is required / no worry of defection on electric valves & hydraulic pump is the great result of installing MB.