

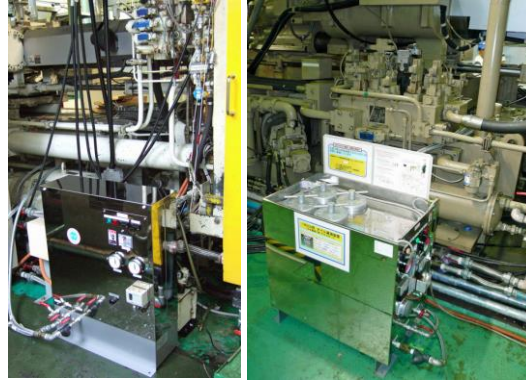
MB Information

Reduce CO₂ !

Contribute to controlling greenhouse gas by eliminating to exchange oils



Manufacturer of car interior parts such as seat and door trim.



↑Miracle Boy SRC-812-6V & SRC-814-15V installed to injection molding machines manufactured by Toshiba-Machine



← Panels for visiting customers →
Contribute to reducing greenhouse gas (CO₂)



←MB can be installed very easily



↓Company "R" Bypass filter & ↓Toshiba Off-line filter are unused(No exchange of line filters)



←Hydraulic parts have different colours (replaced pumps due to failure)

Before	Equipment Oil Filtration unit Problem	Toshiba-Machine Plastic injection molding machine 450~1600t Showa Shell Sekiyu Hydraulic oils 1600~4000 liters Toshiba genuine Off-line filter & Company "R" Bypass filter Failure of hydraulic components cannot be reduced though a large maintenance cost has been spent for oil systems.
Solution	Action MB model#	Installed MB to the hydraulic tank of injection molding machine. SRC-812-6V ~ SRC-814-15V (Element : GE-21-SHG)
Result	Oxidation level is 0.1~0.2mgKOH/g and no viscosity change for a long time. Degree of contamination is 1.0mg/100ml, same level as new oil. Evaluation from a lubricant oil maker : Still available. Machines operate normally without indications of abnormal wear etc.	
Feedback from customer	Oil maker has not recommended us to exchange oils for 10 years since 2007 when MB was installed. Saved 200,000 liters of hydraulic oil, which is equivalent to 7 molding machines. Reduced CO ₂ about 500t so far. No hydraulic system troubles for 10 years. Hydraulic pumps and solenoid valves, one of these costs about \$5,000-15,000, have not been broken.	

Cost of exchanging hydraulic oil for 1 Molding machine 1600t(4000ℓ)		
① Disposal for waste oil	4000ℓ × ￥20	￥80000
② Flushing oil	4000ℓ × ￥50	￥200000
③ Flush flushing oil by lubricant	2,000ℓ × ￥25	￥500,000
④ Disposal for waste oil	2,000ℓ × ￥20	￥40,000
⑤ Pour new oil	4,000ℓ × ￥250	￥1,000,000
⑥ Wage	@￥35,000 × 2.5 workers	￥87,500
		Total: about ￥190,000,000