

SmartSkim® Wins Awards at Chrysler

Heat Treat Team Wins Environmental Leadership Award

KOKOMO, IN — In November of 2001, Jason Stockberger presented an idea to the Heat Treat Core Team from department 8800. Jason had witnessed first hand the problems with post heat treat washers attached to the furnaces at KTP. Oil accumulates on the top of the soap and water solution. The washers had either an overflow system or skimmer belt to remove the oil. Both systems resulted in loss of water, soap, and operating temperature. Maintaining optimum temperature was impossible due to the lost water which was constantly replaced by cold water. The parts left the washers and entered the tempering furnaces, a secondary heat treat process, still oily. This resulted in excess smoke from the temper furnaces, and parts covered in a sticky “tar.” This tar held small amounts of shot from the next operation, shot blasting or shot peening in the 8800 Annex.

Jason had seen a unit called SmartSkim®. **This unit uses an air pump to skim only the oils and a minute amount of water from the surface of the wash solution.** The oil was then separated in the unit and sent to process waste. Any water or soap was returned to the washer. The Department purchased an initial SmartSkim®, and the benefits were soon realized.

After the installation, the parts exiting the washer were extremely clean. the smoke that had previously belched from the temper furnaces each time the doors were opened vanished. The soap usage was cut drastically, which enabled the washer to maintain optimum operating temperature. Now the only problem was to find a way to save all the expensive quench oil that was sent down the drain. The problem resulted in a new team forming, the 8800 Quench Oil Reclamation Team. After the team decided on a direction, the Puritech Company was brought in. Puritech is a company that offers on site recycling of oils and coolants.

The team had the SmartSkim® repiped to allow the oil to be captured in drums. Within 3 months over 800 gallons of oil had been captured. After processing by Puritech, 560 gallons were returned to the department. The cost of new quench oil averages \$3.60 per gallon, plus it also costs the plant over \$1.00 per gallon for oil to be processed in the waste treatment plant. the cost to recycle the quench oil is only \$1.35 per gallon. The savings started to add up and the team pressed for additional units.



DaimlerChrysler CEO Dr. Dieter Zetsche, left, inspects the award winning SmartSkim® Systems at the Kokomo Transmission Plant (KTP).

A project was written and submitted to DCTC for funds to purchase nine additional SmartSkim® units for the plant. The project was approved with an annual cost savings of \$206,520 per year.

During a plant visit in 2002, Tom LaSorda, Executive Vice President for Manufacturing was shown the SmartSkim® unit attached to Number 1 Carb furnace. He stated that he was very impressed with the unit's impact on ergonomics, environmental and safety. The team was elated with his praise, but had no idea what was in store.

The team's efforts were documented and submitted to the DC Environmental Leadership Award Committee. The team received the designation of “Significant Contributors” to environmental excellence. A presentation was held on Feb. 12th, 2003 to present the awards. ■

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Universal Separators would like to thank Bob McCulley, head of the Heat Treat Department at Daimler Chrysler's Kokomo Transmission Plant.

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