KMU LOFT Case Study

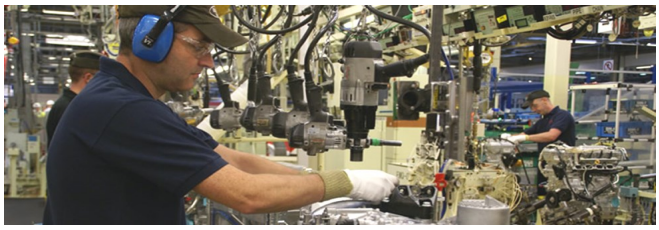
Metalworking

Toyota Motor Manufacturing UK
Deeside, United Kingdom

TOYOTA Toyota Engine Plant is located at Deeside, North Wales and employs over 500 members on a site covering 115 acres. In 2016, a total of approx. 240,000 fully assembled engines were produced for the Burnaston Auris & Auris Hybrid vehicles and exported to other Toyota plants. Engines are produced through a process of Aluminium casting, machining and assembly before final inspection and despatch to vehicle plants. Deeside currently exports engines and machine components to South Africa, Turkey, Brazil and Japan and were the first overseas plant to produce Toyota's class leading hybrid engines.

Situation

Industry:	Automotive
Application:	Metalworking
Problem:	Liquid waste reduction
Fluid:	Waste Emulsion, Coolants, Oils
Solution:	Waste water treatment with evaporator technology since 2012



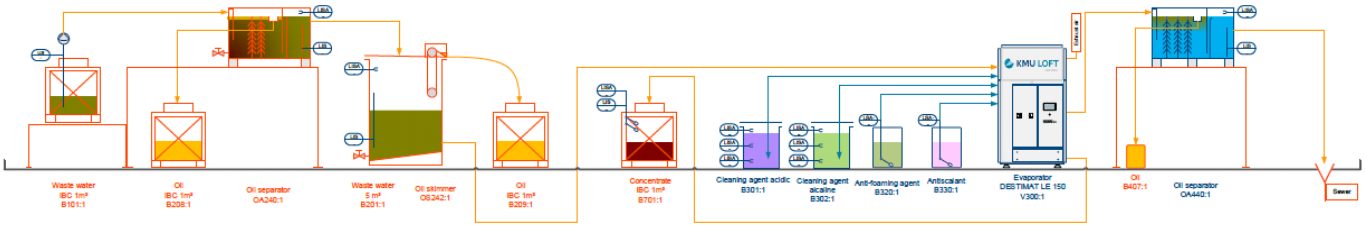
Solution

Unit:	KLC evaporator DESTIMAT® LE 150
Capacity:	990 m³/a
Features:	Automatic CIP, Remote Access, vacuum pump, coalescence separator
Target:	Disposal costs reduction

DESTIMAT® LE 150

Peripheral tanks

Diagram



Benefits

Cost savings:	~ EUR 90 k/a
Return on Investment:	~ 1,5 years
Compact Footprint:	~ 15 m²
Tap water savings:	~ 930 m³/a

Achievements

COD reduction in the distillate:	~ 18 times
Conductivity reduction in the distillate:	~ 17 times
Waste water reduction:	~ 94 %

The values and results presented in this case study refer exclusively to the specific project. Demonstrated values illustrate the results, which can be achieved with our systems. There is no guarantee or commitment, that comparable results will be achieved in other projects, as it always depend on the wastewater quality to be processed and implemented additional technology beside vacuum evaporator.