

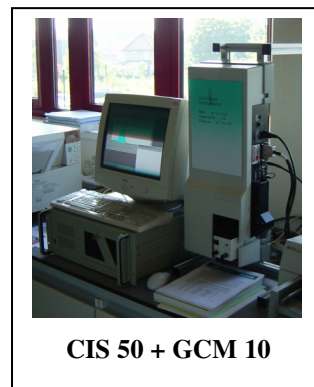
NEW CIS 50 INSTALLATION at ChevronTexaco Research facility Ghent Belgium.



The ChevronTexaco research facility in Ghent (Belgium) develops lubricants and coolants as well as gasoline and diesel fuel additives. The laboratory also provides a testing service and quality monitoring programs for the company's worldwide customers of marine automotive and industrial products.

After a period of rigorous testing they use now the CIS-50 analyser with the thin layer cell (GCM-10) and the micro flow cell (GCM-8) to monitor the concentration and size distribution of particles present in heavy fuel and oil.

Most of the samples are too dark and too viscous for the micro cell. For those kind of samples Texaco is spreading a thin film of the sample over a microscope slide and they use the thin layer cell



CIS 50 + GCM 10



circular filmograph

to scan the microscope slide. In order to get a spread out of constant thickness they use a “circular filmograph” (see picture)

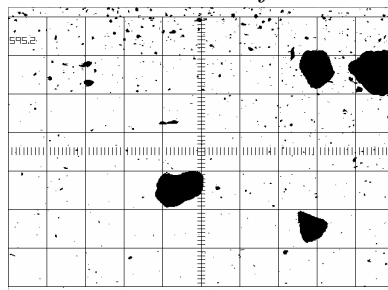
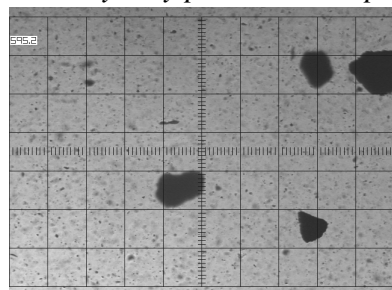
A circular filmograph consists of a tubular tube with an opening of 17mm. The oil sample is placed into the tube and then a piston glides in the tube. The user pushes on to the piston and moves at the same time the filmograph over the microscope slide, giving a uniform film of 50µm thickness on the microscope slide.

Companies who deliver ASTM measurement devices to the petrochemical industry can provide this filmograph. and it costs about 150 EURO.

Ankersmid can also deliver this item.

- Because the results of the particle size distribution and particle concentration is send to customers together with the images, Texaco preferred **pictures without any background**

The way they produce such pictures with the CIS software is as follows:



The way to get format #2 is:
Acquire image (If necessary do pre-processing like: contrast enhancement or image filters)>
Pre-processing> **Threshold** or press the Threshold icon> Set threshold level> Press on **Binary**> Press on **Original**> **Exit**

Make sure the image is the

activated window> **File**> **Print** or save the image and print it later.

- **This application will be of interest for companies:**
 - producing lubricants
 - producing additives for lubricants
 - who need preventive maintenance on wear oils of heavy automotive engines