

# Diesel Engine Inspection

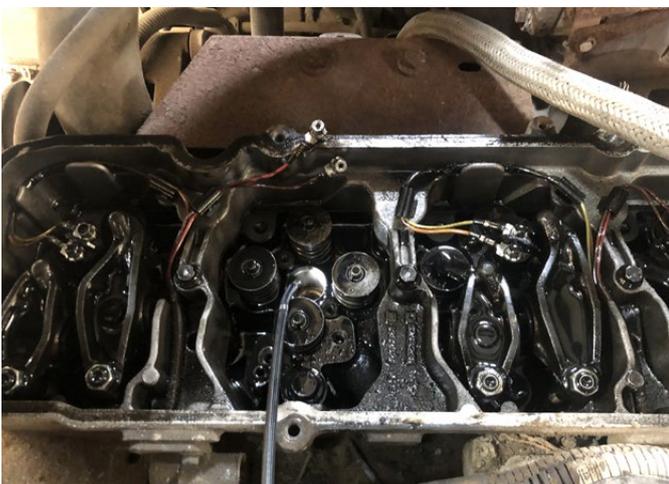
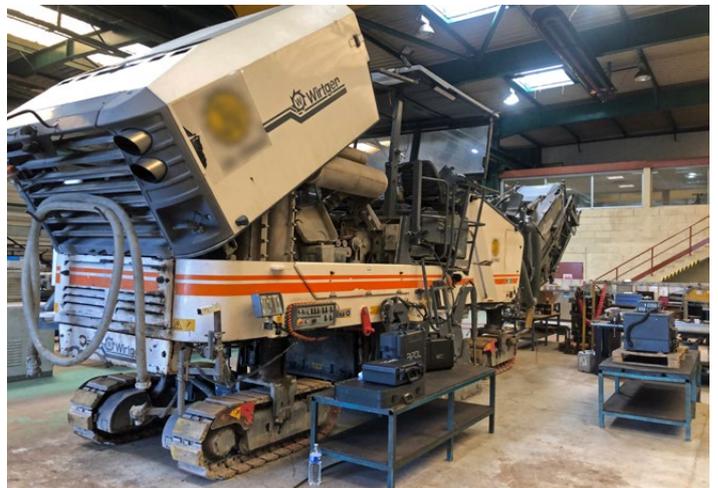


On Monday 31st of May we had the opportunity to carry out an inspection in a diesel engine of a Wirtgen Large Milling Machine model W210.

## What is a cold milling machine?

A cold milling machine, also known as a «Planer» or «Road Milling Machine», ensures cost-effective removal of asphalt and concrete pavements.

It is a machine used to repair pavements, industrial areas, or airport runways to improve the roughness of the runway, for example.



## Characteristics of the Cummins diesel engine.

The engine is a Cummins model type **QSL 8.9 + QSC 8.3** with a maximum power of 298 Kw. There are 6 cylinders Engine Cummins QSL 8.9 + 6 cylinders Engine Cummins QSC 8.3.

These engines are suitable for all types of construction equipment, including: excavators, cranes, logging loaders, compactors, air compressors, handling equipment such as forklift trucks and trucks handling containers, tractors, sprayers, shredders, and feller-bunchers.

## The inspection

The inspection was carried out using the PROC-ECO videoscope, selected for its high-resolution insertion probe (700.000 pixels), which can be moved on 4 axes at 210° which allows a complete and precise inspection of the cylinder. It is available in diameter 6mm x 1m.

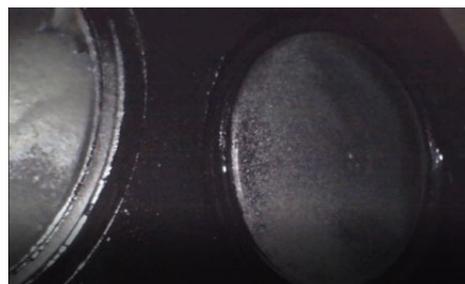
In general, the Pro C Eco is suitable for inspections of diesel engines and generators. It has been specially developed to inspect engine cylinders, valves & combustion chambers.

In this video (<https://www.youtube.com/watch?v=psxGHUPZbVg>) we have inspected cylinders in detail to observe any damage on pistons.

Here is the result:



Piston endommagé



Visualisation des pistons

## Features and benefits of the Pro C ECO for this inspection.

1 – The Pro C Eco is a **lightweight, handy, and easy-to-use** videoscope that allows an easy and quick inspection of the observed area.

2 – This videoscope makes it possible to **immediately diagnose the defective area** in order to determine whether or not engine disassembly is required. In the event that disassembly of the engine is not necessary, it saves a significant amount of time for the mechanic.

3 – **Photos and videos recording** is useful to the mechanic who wants to evaluate the damage and the work to be done. These documents saved on the videoscope's SD card are also an essential support for the establishment of a repair estimate. Then, the mechanic can use it to report back to the customer and justify his repair costs.

