

Tool breakage and wear monitoring system – Automotive application

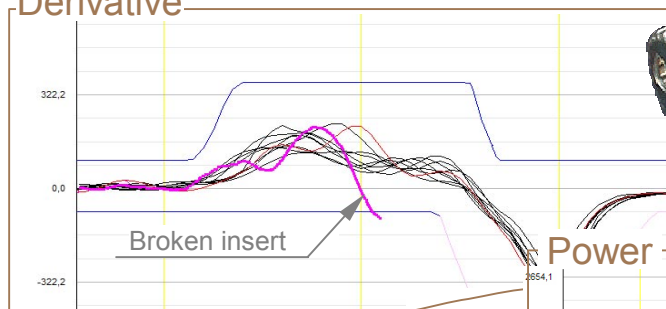
Machining of valve seatings

Realisation on a machining centre URANE / COMAU cylinder head valve seating.

- ▶ quality assurance
- ▶ suppression of waste
- ▶ optimisation of service life

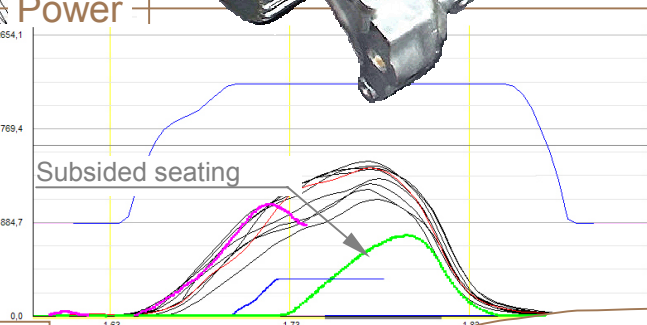
The machining of valve seatings is an important step of the fabrication of a cylinder head: The slightest mark on the valve seating causes a decrease in pressure in the cylinder and consequently a reduction of the engine power.

Derivative



By derivative monitoring, the WattPilote detects even slightest insert damages with high reliability and guaranties the closeness of all cylinder heads as well : **WattPilote is your operation quality assurance.**

Power



To eliminate detected waste before assembling the motor, WattPilote examines every power curve in order to detect the slightest irregularity on the cylinder head (for example a too large recess on the valve seating) and therefore avoids defective parts : **WattPilote is the abolition of waste.**

Tool wear



Changing tools at a given service life inevitably leads to irregularities and, even worse, to insert breakage. Approaching the given tool change, the tool temperature increases significantly and the cutting tips warp. Tool managing by wear monitoring allows an optimal insert performance and a considerable reduction of waste at the same time : **WattPilote is the optimisation of service life time and the guarantee for a low cost exploitation.**

WattPilote