

Diamond Like Carbon (DLC) Analysis

Diamond like coatings are used for their properties of hardness and thermal resistance. They are used in special applications such as parts for Formula 1 engines.

The sputtering rate of the DLC is extremely slow compared to the one of metals so in order to analyze correctly a DLC on metal a high dynamic is required. This is one example where the HDD proves to be extremely useful.

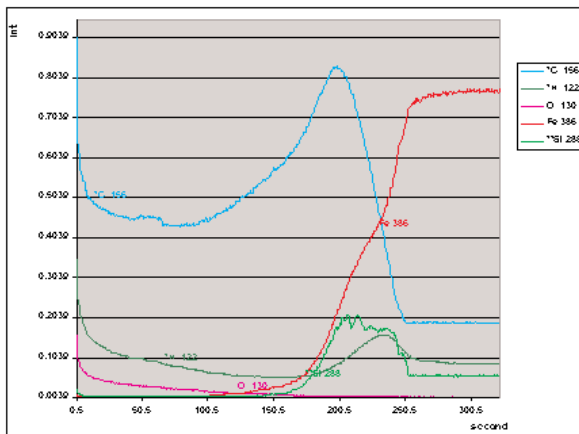
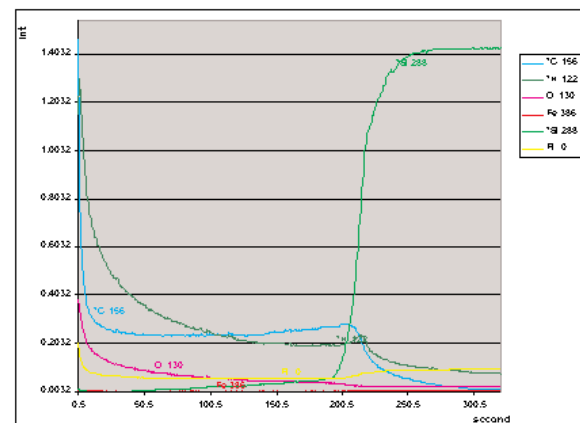


Figure 1 : DLC on steel. Note the Si peak at the interface which is coming from an adhesion layer deposited. Also of interest to control the deposition process and possible problems are the possibilities to follow the H and O signals.

Figure 2 : DLC on Si.



Key points : GD can analyze DLC coatings.