

FlavourSpec®: Your impartial Analyser for Coffee Quality

Coffee flavour is a very complex mixture of individual compounds produced during the roasting process. The blending of coffees therefore is a very demanding task, especially when it comes to ensuring a constant aroma while processing the varying natural commodities.

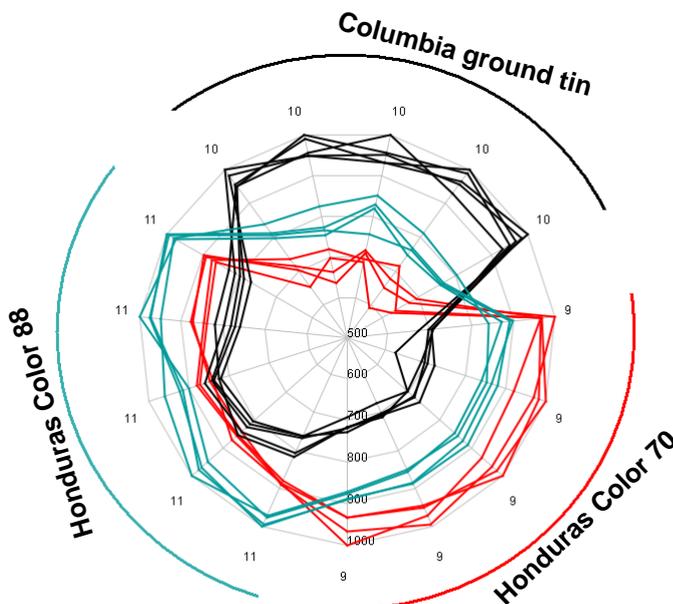
The FlavourSpec® is a fast and easy in use tool to control the coffee roasting and blending process and secures a maximum quality, characterizing its flavour by headspace analysis. Measurement results reveal the presence and the concentration of individual headspace compounds. The separation is accomplished by a gas chromatographic separation and a second separation and compound detection by Ion Mobility Spectrometry (IMS).

G.A.S.' evaluation software FlavourMatch allows a full qualitative and quantitative analytical analysis as well as a completely automatic similarity analysis, which does not require any special operator skills. The similarity analysis can be adapted to customer demand by selection of reference samples and measurements, respectively. The output is a similarity value of the sample under testing compared to the selected references (figure below).



FlavourSpec®

The similarity value indicates the matching of the headspace composition with respect to presence and concentration of the headspace compounds. High similarities correspond to identical flavours. In the example given on the left each of the three coffee samples exhibiting different roasting grades can automatically be assigned to its respective reference samples.



Similarity analysis of differently roasted coffee beans