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Christmas Question 2020

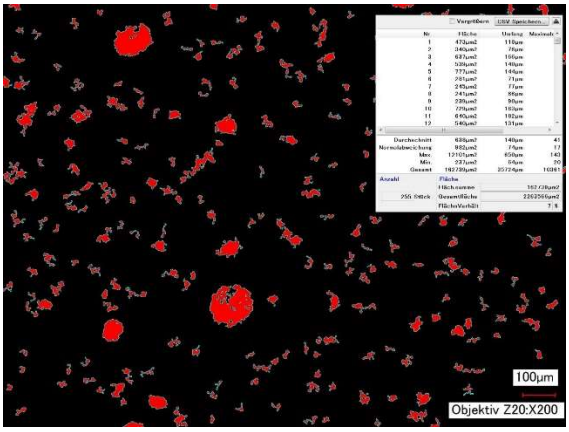
What do many red spots do against a black background?

They look interesting, these bright red spots, which arise more or less regularly in bizzar forms against the black background. And if you look closely, you will see that they are bordered by a fine, light blue line.

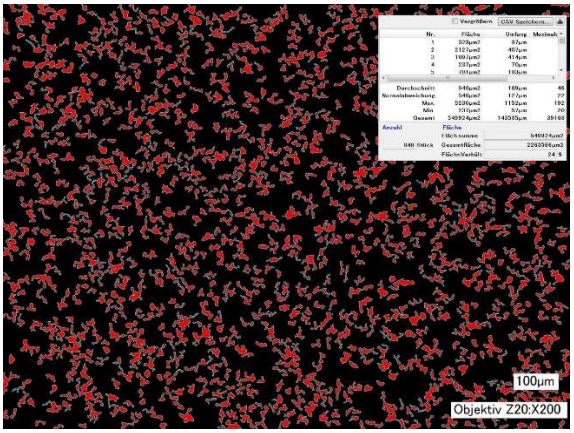
Of course, our question is not entirely serious, and it is up to your imagination what you want to see in the patterns. For us, the pictures have a rather pragmatic background.

The images are taken from microscopic images of prepared grease samples, which allow the statistical counting of particles and areas after being converted into a false color representation. With this method, we can, for example, check the homogeneity of greases thickened with solid lubricants and assess how large the agglomerates are and how evenly distributed the particles are in the matrix.

In the first example, homogenization is not yet as desired. Significantly larger agglomerates can be detected >100 microns. Here, further processing must be initiated in production:



In the second example, the solid lubricant particles are evenly and homogeneously distributed in the grease matrix. The size and distribution of the agglomerates corresponds to the defined limits of the QM.



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