Often the elemental distribution of large samples is requested. This can be interesting for the analysis of the distribution of pigments in paintings, for the investigation of element distributions in large fossils or statues as well as for large industrial samples that cannot be damaged for the analysis by a special sample preparation. For these samples μ-XRF offer also a solution. But in this case special requires for the measurement of large mapping areas has to be considered. For example the movement of these samples is often not possible because they are too heavy or too valuable. Then the movement of the measurement head with excitation source and X-ray detector is necessary. If these samples also need to be analyzed in a reasonable time the speed of the measurement and the measurement conditions needs to be adapted to these circumstances - for example by a fast movement of the measurement head. But also the adaptation of the spot size to the sample size is a possibility to cover a larger area with a reduced number of scans in case of larger structures in the sample. Another request can be the measurement different sample positions - vertical and horizontal. This requires an flexible positioning of the measurement head.

These requirements are fulfilled by the new M6 JetStream from Bruker which based on the already introduced M4 Tornado. The paper discuss the technical parameters of this instrument as well as a few of the initial applications in cultural heritage but also in geological sciences. These applications will show the potential of the instrument both for the data acquisition and also for an effective data evaluation.