

Task:**Application field:** Mineralogy / Metallurgy**Material:** Metal Powder (TiC + Steel)**Feed size:** 0-100 µm**Feed quantity:** 30 g**Material specification(s):** hard**Customer requirement(s):** Wet sieving, cut off the fraction < 20 µm**Subsequent analysis:** not defined**Solution:****Selected instrument(s):** Sieve Shaker AS 200 control**Configuration(s):** Collecting pan with outlet stainless steel, 200 mm ø, height 50 mm; Collecting pan with outlet stainless steel, 200 mm ø, height 50 mm; Test sieves Ø 200 mm x 50 mm height according to ISO 3310-1, aperture size 63 / 40 / 20 µm, cap with spray nozzle; venting ring between sieves**Parameter(s):** Amplitude 1.20 mm, interval 10 sec**Time:** 3 min.**Achieved result(s):**
40.6 % < 20 µm
41.5 % < 40 µm
13.6 % < 63 µm**Remark(s):** Prior to the wet sieving the solid sample is dispersed in water by agitation. 2-3 drops of detergent are added to decrease the surface tension. After charging the sample to the top sieve the sieving is started with a water flow of about 800 ml/min. After sieving the single sieve fractions are filtrated, dried and reweighed.

Recommendation: The Sieve Shaker AS 200 control is suitable to cut off the fraction < 20 µm from the sample material under the above mentioned conditions.