



Application	
Market segment:	Building Materials
Material:	Quartz
Feed size:	0-5 mm after pre-crushing
Feed quantity:	Laboratory sample 950 g
Material specification(s):	Hard, brittle
Customer requirment(s):	< 4 mm, < 100 μm for analytical process
Subsequent analysis:	Not defined
Solution	
Selected instrument(s):	LMC100D Jaw Crusher, LM PBM-1 Planetary Ball Mill
Configuration(s):	Grinding jar, 250 ml, Zirconia (YTZ) 5 grinding balls Ø 30 mm, Zirconia (YTZ)
Working settings:	Gap size LMC100D: 8 mm Revolution LM PBM-1: 500 rpm
Time:	15 min. (for fine grinding in LM PBM-1)
Achieved result(s):	98 % < 100 μm
Remark(s):	Pre-crushing of the total sample (950 g) in LMC100D Jaw Crusher. Fine grinding of a representative single sample of approx. 100 g in the LM PBM-1 Planetary Ball Mill
Recommendation(s):	For sample preparation of hard and brittle materials, the LMC100D Jaw Crusher is suitable for pre-crushing and the Planetary Ball Mill for fine grinding under the above



Quartz

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mentioned conditions.