



## Application

<b>Market segment:</b>	Building Materials
<b>Material:</b>	Calcium Phosphate
<b>Feed size:</b>	0-3 mm after pre crushing in Jaw Crusher LMC100D
<b>Feed quantity:</b>	Max 90mm and than 3mm
<b>Material specification(s):</b>	Hard brittle, dry
<b>Customer requirement(s):</b>	< 10 µm
<b>Subsequent analysis:</b>	AAS Atomic Absorption-Spectroscopy

## Solution

<b>Selected instrument(s):</b>	LMC100D Jaw Crusher, Planetary Ball Mill
<b>Configuration(s):</b>	LMC100D breaking jaws and wearing sheets of Zirconium grinding jar 2 x 250 ml Zirconium 1. Jar 12 grinding balls 20mm 2. Jar 5 grinding balls 30mm
<b>Working settings:</b>	LMC100D gap size: 2mm Planetary ball mill rotation: 300 - 350 rpm
<b>Time:</b>	30 min. (for fine grinding in planetary ball mill)
<b>Achieved result(s):</b>	20µm
<b>Remark(s):</b>	Pre crushing of the total quantity in the jaw crusher. Two single samples of 100 g each for fine grinding in Planetary Ball Mill. To avoid sticking effects of the material during grinding, 8 - 10 drops of methanol have been added into the jars.
<b>Recommendation(s):</b>	For sample preparation of hard and brittle material, the LMC100D Jaw Crusher and the Planetary Ball Mill are suited for grinding under the above mentioned conditions.



Calcium

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