Task:

Application field: Construction Materials

Material: Gypsum, clinker, calcit

Feed size: 0-5 mm

Feed quantity: 100 g (per batch)

Material specification(s): medium-hard, hygroscopic

Customer requirement(s): 90 % < 45 µm

Subsequent analysis: X-ray Fluorescence Analysis

Solution:

Selected instrument(s): Planetary Ball Mill PM 400

Configuration(s): 2 grinding jars 250 ml stainless steel; per jar 14 grinding balls Ø 20 mm stainless steel

Parameter(s): Revolution speed 320 rpm

Time: 10 min.

Achieved result(s): 92 % < 45 µm

Remark(s): The feed quantity is a composition of:

80 % clinker - 15 % calcit - 5 % gypsum

To avoid agglomeration effects during grinding, 8 - 10 drops of methanol have been added.

Recommendation: For fine grinding of different building materials the Planetary ball Mill PM 400 is suitable under the above mentioned conditions.