Task:

Application field: Building Materials

Material: Anthracite coal (dry), coke (dry) and limestone (4% of moisture)

Feed size: 20-30 mm

Feed quantity: 1000 ml (approx. per sample)

Material specification(s): medium-hard

Customer requirement(s): Disintegration in BB 51 to < 5 resp. 3 mm; Analysis acc. to DIN 51718

Subsequent analysis: X-ray Fluorescence Analysis

Solution:

Selected instrument(s): Jaw Crusher BB 51 As the BB 51 was discontinued we recommend to use the BB 50 now

Configuration(s): Breaking jaws and wearing plates of tungsten carbide

Parameter(s): Gap width:
Limestone: 3 mm; coke: 2 mm; anthracite: 5 / 1.5 mm

Time: 25 min. approx. for limestone;
16 min. approx. for coke resp. anthracite

Achieved result(s): Anthracite: 99 % < 3 mm
Coke: 94 % < 3 mm
Limestone: 95 % < 5 mm

Remark(s): Due to their smooth surfaces, the large anthracite pieces should be ground in two steps, first with a gap size of 5 mm and then with a gap size of 1.5 mm.

Recommendation: For the grinding of medium-hard minerals the Jaw Crusher BB 51 is suitable according to the above mentioned conditions.
Pictures of the sample

**Fig. 1:** Original anthracite sample (dry)

**Fig. 2:** Original coke sample (dry)

**Fig. 3:** Original limstone sample (4 % moisture)