



AACC Method no. 26-50  
Special durum version

## Quadrumat® Junior

Precision laboratory mill  
for production-like flour samples



... where quality is measured.

# Quadrumat® Junior



The **Brabender® Quadrumat® Junior** is a universal precision laboratory roller mill for milling grain for subsequent analyses.

Special features are:

- High precision
- High capacity
- Fixed roll arrangement for extremely long life
- Easy operation
- Complete with aspirator system

For grinding of:

- Wheat
- Spelt
- Rye
- Rice
- Barley

For standard tests Amylograph, Farinograph®, Extensograph® and Falling Number.

## The Quadrumat® Junior semolina mill

A modified version of the **Quadrumat® Junior** with modified rolls and roll gaps and another sifter is available for grinding durum wheat to semolina.

## Material flow

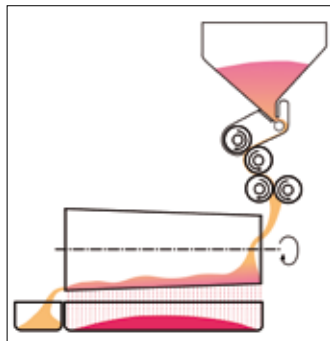
From the hopper, the prepared grain sample flows through an adjustable feed gate over the feed roll to the first pair of break rolls and from there, without intermediate sifting, to the second pair of break rolls. The second roll of the first break roll unit acts as first roll of the second break roll unit.

Subsequently, the material goes directly to the "middlings reduction section". Here, the second roll of the second break head operates against the fine corrugated roll of the middlings reduction section.

The closed grinding process with extremely small roll diameters and the resulting short grinding zone, together with the self-grinding effect of the grain particles among each other, ensure maximum separation of the endosperm from the exosperm. The short grinding process corresponding to the elasticity of the bran prevents splitting up of the bran.

After having passed the last pair of rolls, the material drops into the round sifter. Automatic control of the circumferential speed of the sifter provides for a good self-cleaning effect even in continuous operation. The sifted flour falls into a flour drawer, the bran is collected in a separate bran drawer below the sifter outlet.

Obtain flours which are almost equal to commercially produced flours in ash content, yield, and baking quality - the multi-step grinding process only needs a single passage.



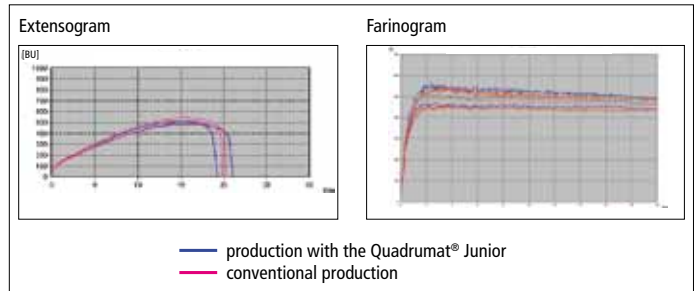
Quadrumat® Junior schematic



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## Comparison of two flours



Quadrumat® Junior	
Capacity	500 g in approx. 5 min
Max. moisture	15 - 17%
Yield	60 - 75%
Ash	0.5 - 0.7% on dry basis
Mains connection	3x 400 V; 50/60 Hz + N + PE; 1.3 A 3x 230 V; 50/60 Hz + PE; 2.2 A
Dimensions (W x H x D)	615 x 700 x 520 mm
Weight	approx. 70 kg net

## Bran Duster

If the ash content and yield of your grain sample do not meet the required specification, the bran duster carefully separates flour particles still adhering to the bran.

Increase the yield obtained on your **Quadrumat® Junior** by some 10% and approach even better the ash content of your samples to that of commercial flours.

Or use the bran duster to exactly adjust the flour produced to a certain type and obtain flours which are exactly the same as those produced in industrial mills for making reliable statements concerning the flour quality.

The advantages are:

- Higher yield
- Higher ash content



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