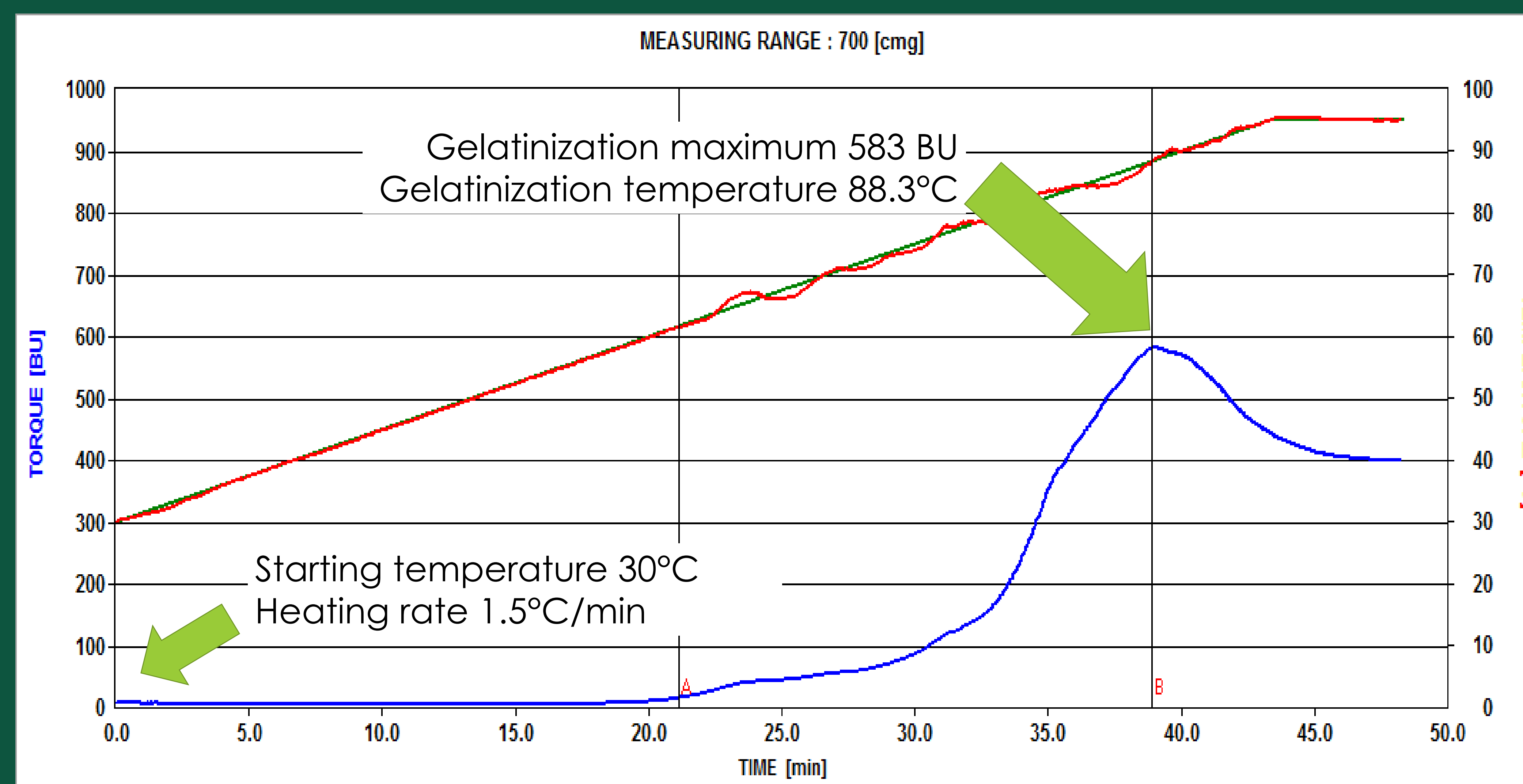


- The amylograph test measures flour starch properties and enzyme activity which results from sprout damage. The test analyzes viscosity by measuring the resistance of a flour and water slurry to the stirring action of the pins/paddles.
- In this procedure, flour and a buffer solution are stirred in a rotating bowl that is heated by an air bath. The sample is heated from room temperature to 95°C (203°F) at a rate of 1.5°C/minute.
- If the flour contains no α -amylase activity the viscosity of the sample will continue to increase as the temperature rises to 95°C.
- A thicker slurry has more resistance to the pins and has a higher peak viscosity and indicates less enzyme activity which is more desirable.
- Optimally treated bread flours are in the range of 400-600 BU. If there is increased enzyme activity, the curve will peak at a lower viscosity (consistency) and at a lower temperature.
- The amylograph procedure is relatively slow and requires a relatively large sample. The procedure is reproducible and still widely used to control the level of malt addition.



Pins

Official method
100 grams of flour
46 mL buffer and add water to 460 mL

Paddles

Preferred method for noodles
65 grams of flour
450 mL distilled water

