



NATBIO
PUTTING NATURE FIRST

High Gravity Brewing

NATURE BIOCHEM has specific solutions to these issues which can help the brewer restore the balance of quality while still benefiting from the efficiencies of the high gravity brewing process.

Typical problems	Our solutions
Thick/set mashes and poor extract yields	Nzyme HTAA (BAA), Nzyme Trimalt (Enzyme Complex)
Poor lautering /mash filtration	Nzyglucanase (Glucanase), Nzyme BG (Glucanase Complex)
Reduced FAN	Nzyprotease (Protease), N-Yfood (Beer Yeast Food)
Poor trub compaction and wort clarity	N-Floc (Carrageenan)
Poor/incomplete fermentation	NzyFerm (To increase Attenuation), N-Yfood
Excess foaming in copper or fermenter	Anti-Foam
High yeast cell counts and poor filtration performance	N-Fine (Isinglass)
Poor foam stability	N-Foam (PGA)

The advantages or reasons for switching to high gravity brewing are many, varied and well documented:

- Insufficient brewhouse/fermentation or storage capacity to cope with rising production demands
- Brewhouse design and capacity
- Raw material type and availability
- Energy, labour and cleaning savings due to handling of less volume (wort/beer) in process
- Increasing gravity by use of adjuncts
- Process flexibility, i.e. a number of products being produced from a 'standard' high gravity wort or beer.

In principle the process involves the production of a high gravity extract (12-20°P) by mashing in at a high grist to liquor ratio or addition of suitable solid or liquid adjuncts to the initial extract. This high gravity extract can be diluted with (properly treated/calibrated) process water either at the beginning or end of fermentation to an original gravity of 7-11°P.

The production of beer by high gravity brewing can be sometimes perceived as a compromise between efficiency and quality when viewed in the light of the advantages and disadvantages as outlined above.

Nature Biochem