

# Waterless Egg Boiler

## Technical summary

Programmable cooking times, 4.5–7.5 minutes  
 Small – Very Large egg capability  
 Single egg cooking unit  
 Egg shell cut to 4cm diameter  
 All relevant components are dishwasher safe

4 standard, replaceable 500W Halogen tubes are positioned at 90 degrees to one another about a 9cm diameter  
 BEM is currently powered by mains voltage  
 12 low voltage blue LED's indicate remaining cooking time and programming options

## Current development

Multiple egg cooking units  
 Additional food types  
 Rechargeable power supply

Portable unit for use outside of the kitchen environment.  
 Remote control function



SIMON RHYMES BSc  
 Product Designer

Simon Rhymes

BEM Estar

[www.bemestar.co.uk](http://www.bemestar.co.uk)

T. 07736 042638  
 E. [s.rhymes@bemestar.co.uk](mailto:s.rhymes@bemestar.co.uk)

Patent applied for  
 © Simon Rhymes and BU Innovations Ltd

An egg boiler designed to be as reliable and functional, as it is stylish and enjoyable. BEM was not designed to become simply another kitchen appliance, used out of necessity alone. It's form and interaction with the user, has been carefully crafted.

The elimination of water, enables the user to accurately and consistently produce the perfect egg in 6 minutes. Once the egg has been cooked, the shell is cut faultlessly at a diameter of 4cm, making it almost impossible to resist.

BEM uses only a third of the power required to boil an egg traditionally, making it the preferred method for the environmentally conscious.

## Who's it for?

Studies into other household devices have highlighted a demand for more expensive, gadget based, domestic products. Such appliances are predominantly aimed at a professional male market.

BEM aims to satisfy this need, whilst appealing to all who appreciate considered and innovative design.

## Why's it needed?

Boiling water in a saucepan is tedious and requires constant attention. Currently available egg boilers are dull in appearance and offer the user little interest or stimulation. They display an undeniable lack of innovation and novelty, to the age old process of boiling an egg.

BEM not only offers a new improved cooking method but cuts the top of the shell perfectly, time and time again.

## Who designed BEM?

Design and development has been completed by Simon Rhymes a BSc (Hons) Product Design graduate from Bournemouth University.

The design was demonstrated to the public in June 2006, at the University's annual Festival of Design and Innovation.

Subsequently, BEM was featured on BBC Radio Solent, successfully cooking an egg live on air.



Egg is visible throughout cooking



Shell is cut perfectly at a diameter of 4cm



Mass is raised and dropped onto bell



Consistency and accuracy, using a third of the power

## How it works!

Using BEM, it is possible to cook an egg with only two user operations.

Firstly, the top section is lifted clear using the ergonomically designed handle and an egg is loaded into place. Once the top section has been replaced, standard cooking is initiated using the 'Start' button.

If required, the user may adjust cooking time from a standard 6 minutes by increments of 15 seconds, using either the 'plus' or 'minus' buttons.

An infra-red signal is then sent to the base section and the 4 Halogen bulbs reach their optimum temperature in 3 seconds.

Remaining cooking time and timing adjustments are clearly indicated on a clock face of 12 LED's.

Once the programmed cooking time has elapsed, the Halogen bulbs are automatically shut off, meaning the entire process can be left unattended.

Should an egg split, the top section will contain all spillage and is dishwasher proof.

A mass of 0.125Kg is manually raised 0.05m and the subsequent force is transferred to an enclosed cutting ring. A stainless steel bell ensures the force of 0.687N is evenly distributed about the egg's diameter.

The action perfectly cuts the shell at a constant diameter of 0.04m allowing the egg to be enjoyed unspilt by small fragments of stray shell.

BEM can cook repeated eggs with no loss of performance.