

Description

The **THINKY ARE-250 mixing and degassing machine** is an industrial non-contact "planetary" mixer for all engineering compounds. It mixes, disperses and degases your materials in seconds to minutes, in sealed or lid-less containers such as a jar, beaker, syringe tube or cartridge. The non-contact mixing principle makes it possible to formulate compounds from very small amounts such as 0.5ml to large production scales.

"The Thinky was really impressive; we are now able to mix smaller batches of adhesive using a very simple pre-programmed cycle." – Flynn Barrett, Gooch & Housego

The **THINKY ARE-250 Mixer** makes it possible for the processes of mixing and bubble removal to be carried out simultaneously. It is a conditioning mixer. It can be used for the mixing and/or bubble removal of not only epoxy but also silicones, conductive pastes, medicines, chemical materials, etc.

"...for the past 12 months have used the Thinky a great deal. It has allowed us to quickly produce homogeneous silicone in large quantities that is free of air, transforming a time consuming, physical task into an automated effortless one." – Jim Dimond, University Hospital Coventry



The **THINKY ARE-250 Mixer** is a lightweight benchtop model, which can hold up to 310g of material. The Multi-Step Mixing feature allows you to program 5 different sets of mixing and degassing conditions (time and speed per mode) in a single batch cycle. Precise control of the process makes it possible not only to improve formulation quality, but also to eliminate human errors or operator skills throughout the process. It is also effective in controlling shear, so as not to damage your materials.

Cooled materials or heated materials can be processed with special adapters. The ARE-250 can accept syringes up to 55ml or up to 75ml (2.5 oz) cartridges with optional adapters. THINKY mixers with vacuum capability and larger mixers are also available.

An Argon gas glovebox compatiable version of the mixer is made possible by modifying its control, power supply and noise suppression boards. Suitable for battery manufactuers and researchers, the **THINKY ARE-250-AR** allows the processing of electrode slurries.

The THINKY ARE-250 is functionally identical to the THINKY ARE-310. The ARE-310 is not available for sale in the UK because it does not have a CE mark or a UKCA mark.

Features & Benefits

For low, medium and high viscosity materials with various densities as well as powders





- Simultaneous homogeneous dispersion and degassing in one batch
- Process in seconds to minutes
- Mix in your containers such as jars, barrels, cartridges, syringes or tubes
- Remove voids and re-disperse filled materials packed in syringes
- Non-invasive, bladeless processing ends the risk of cross contamination between batches
- Process from 0.5ml save valuable material and reduce wastage
- Re-mixing of separated materials to prolong shelf life
- Vacuum-less processing, degassing and de-aeration
- No damage to material unlike with the use of rollers, mixing blades or propellers
- No unit cleaning between batches eliminates non-productive work
- Cooling unit available for temperature control in high-usage or heat-sensitive applications



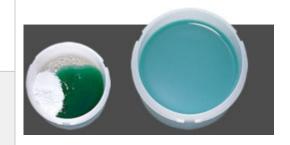
Applications

The **THINKY ARE-250** can be used to formulate and mix adhesives, sealants, moulding compounds, lubricants, slurries, coatings, inks, paints, abrasives, bio chemicals, cements, medical compounds, cosmetics/personal care materials, detergents, conductive pastes, dental materials, foods, construction materials or any other materials which are hard to mix, hard to degas, or hard to wet.

Here are some examples of applications for the THINKY ARE-250:

Epoxy resin

Epoxy resin, hardener and aluminium powder are mixed in 6.5 minutes. Ingredients are dispersed evenly.





Solder Paste

Creamy solder paste with no air bubbles is made from solder powder and flux. Processed with ARE-250 in 45 seconds.



Cosmetics

Ingredients for face cake, wax and coloured iron oxide, are mixed completely with the ARE-250 in 5 minutes.



Ointment





Mixing yellow pigment into zinc oxide without solvent. It dispersed homogeneously with the ARE-250 in 20 seconds.

Specifications

Specification	
Dimensions (mm)	H390 X W300 X D300mm
Weight	22kg
Safety features	Lid sensor, vibration sensor, rotation speed sensor, CE marked
Power requirements	230V +/- 10% 50Hz
Minimum material capacity	0.5g
Maximum mixing volume	300ml container: 250ml / 250g (310g gross)



Specification	
Timer	Set up to 30 minutes, 1 second increments
Programming	Mixing and/or degassing mode, multi-step mixing, speed changer
Memory	5 memory slots are available for different 5 batch cycles. Programmed mixing procedure can be recalled in a second.

Other Information

See how the **THINKY ARE-250** works as part of a real application in these metering and mixing Case Studies:





THINKY ARE-250 mixes 3D printing materials homogeneously

A team of material scientists at ETH Zurich University have been developing new materials for 3D printing which deliver additional functionality. To ensure that the source material mixes homogeneously with the fillers, they use the THINKY ARE-250 mixer.



Mixing silicones for facial and other prosthetics

University Hospital Coventry chose a THINKY mixer to save time and improve the quality of their silicone mixing process to produce prosthetics.





Effective mixing of specialist glass powders with a high viscosity acrylic resin

Consistent high quality mixing and improved degassing of powders into resins advanced the process capabilities of a ceramic materials company.



Getting to know THINKY Mixers

Download a presentation which describes how THINKY Mixers work, and what benefits they can deliver to you.

Check out our YouTube Channel for more about the THINKY ARE-250:



Ordering Information

Part number	Description	
THIARE-250	Thinky Mixer 240V CE Includes 3 x THI300ML 300ml jars, 1 x THI150ML 150ml jar and 1 x THI250AD-201 adapter	
THIARE-250-AR	Thinky Mixer - AR-Glovebox compatible Includes 3 x THI300ML 300ml jars, 1 x THI150ML 150ml jar and 1 x THI250AD-201 adapter	
THIENS-10CE	THINKY mixer cooling system attachment	
Containers		Adapter
THI300ML	300ml HDPE thick wall jar with inner lid & cap – re-usable	None
THI150ML	150ml HDPE thick wall jar with inner lid & cap – re-usable	THI250AD-201



Part number	Descr	iption		
THI240ML	240ml Polypropylene jar and screw cap	THI250AD-80Z		
Container adapters				
THI250AD-3S	Adapter for EFD-type 3ml syringe			
THI250AD-5S	Adapter for EFD-type 5ml syringe			
THI250AD-10S	Adapter for EFD-type 10ml syringe			
THI250AD-30S	Adapter for EFD-type 30ml syringe			
THI250AD-50S	Adapter for EFD-type 55ml syringe			
THI250AD-201	Adapter for THI150ML HDPE container			
THI250AD-8OZ	Adapter for THI240ML Polypropylene container			
THI250AD-2.5S	Adapter for 2.5oz (~75ml) cartridge			

Other containers are available on request such as adapters for cool or hot mixing. Adapters can also be manufactured for your own containers.



Let's start by talking about your application



- Name*
- Company*
- Phone*
- Email*
- Post code*

If you're in the UK, knowing your postcode would help us get in touch even more quickly. If you're outside the UK, please indicate your country.



Tell us about your application	_

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intertronics

INTERTRONICS

12a Station Field Industrial Estate, Banbury Road, Kidlington Oxfordshire England OX5 1JD t 01865 842842 e info@intertronics.co.uk

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