

MICROSOLVE 450M TECHNICAL DATA

Dimensions (mm)	
Overall - length (l-r)	2220
Overall - width (f-b)	850
Overall - height	1350
Tank (internal) - l	450
Tank (internal) - w	325
Tank (internal) - d	300
Basket (internal) - l	395
Basket (internal) - w	256
For effective cleaning depth refer to a Guyson sales engineer	
Vapour depth	300
Freeboard height	450
Initial fill (litres)	70
Ultrasonic stages	
Power	1000
Watts/litre	22
Electrics	
Electrical supply	415V 50 Hz 3 phase N&E
Loading per phase (A)	20
Handling System*	
Autotrans Mk 4	Option
Autotrans Mini	Option
Single Axis lift	Option
Materials	
Tank units	316L electropolished stainless steel
Pipework	Stainless steel
Framework, panels	Mild steel
Paint	Durable, semi-gloss, acrylic RAL 7035 grey
Control Panel	
Incorporates Operator Interface with 2 x 24 character backlit LCD display	
Function buttons	On/Off, Ultrasonics Control, Filtration Control, Temp Display, Set Variable Operating Parameters
Notes	
* Strongly recommended for maximum solvent retention and process control.	



MICROSOLVE MONO SOLVENT ULTRASONIC CLEANING SYSTEM

Guyson's Kerry Microsolve cleaning systems attain the highest cleaning standards yet keep running costs low.

Solvent retention features unique to the Microsolve range—triple coil reflux cooling, vapour break, 150% freeboard, optional auto top-up and solvent monitoring—ensure that systems are safe and comply fully with environmental and safety legislation.

These design features also mean that Microsolve systems are able to operate with low, predictable solvent usage and customers enjoy low, predictable running costs.

Options on mono-solvent systems include:

- Solvent monitoring with auto top-up
- Choice of robotic handling systems



MICROSOLVE 450M



Modifications and improvements to Guyson machines are introduced from time to time as a direct result of our policy of continuous development. Consequently all designs and specifications quoted must be regarded as subject to change. Please refer to quotation.

Ref: Microsolve 450M 11/09

OPTIONS

Autotrans robotic handling

Autotrans Mk4 and Autotrans Mini robotic handling systems ensure consistent, repeatable cleaning results and maximise throughput. Semi-automatic Single Axis lift is also an option.

Solvent monitoring and auto top-up

The device monitors fluid levels, automatically tops up solvent and logs quantities delivered—so that occasional increases in usage can be quickly spotted and rectified, keeping running costs low.



KEY TO SCHEMATIC (right)

- 1 Ultrasonic clean with filtration
- 2 Boiling solvent sump
- 3 Vapour rinse zone
- 4 Freeboard dry with refrigerated cooling coils
- 5 Water separator / sieve
- 6 Refrigerated cooling system
- 7 Plc based electrical controls
- 8 Sliding lid
- 9 Autotrans Mk 4 automation, Autotrans Mini, or semi-automatic Single Axis lift (option)

THE MONO-SOLVENT PROCESS

The Guyson Microsolve Mono-Solvent systems provide ultrasonic cleaning followed by vapour rinsing and freeboard dry.

Guyson's unique solvent retention features ensure economic as well as effective use of HFE (hydrofluoroether) or HFC (hydrofluorocarbon) solvents.

Ultrasonic cleaning is carried out in the Stage 1 tank, which is fitted with base mounted ultrasonic transducers with Pulsatron generator, solution heating and a pumping and filtration system.

The second tank is electrically heated, allowing the solvent to boil. The resulting vapour rinses the components, which are then dried in the freeboard zone.

Distilled solvent, condensed by the primary cooling coils, passes through a water separator with in-line heat exchanger and returns to the ultrasonic tank, displacing contaminated solvent into the boiling sump. Distillation, together with filtration of the solvent, ensures that the ultrasonic tank is maintained at a controlled level of cleanliness.



FM 38758

ISO 9001:2008

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