

# Amsonic

Precision Cleaning



## *Amsonic 400R-Series*

*Solvent precision cleaning systems  
(Class A3 hydrocarbons or modified alcohol)*

# Amsonic 400R-Series

## The cleaning technology for metals, ceramics and plastics

The future belongs to the non-halogenated, without carcinogenic properties, such as A3 solvents. These solvents include hydrocarbons or modified alcohols. Amsonic is still the real pioneer regarding A3 fluids, in terms of cleaning processes, technology and cleanliness level. Their environmental performances and their very low costs of ownership are what makes A3 solvents a true alternative for most Industries.

The Amsonic 400R series is a compact single chamber cleaning system, with a high throughput. It uses a proven procedure that, at a high temperature, applies non-chlorinated solvents under a vacuum process. Amsonic 400R series cleaning equipments can combine different cleaning steps such as vapor phase, ultrasonic cleaning, jet spray cleaning, drying and distillation under vacuum (closed loop). The vacuum technology increases the cleaning efficiency and guarantees a safe operation of the machine. Options such as ultrasonic transducers, electro polished chamber walls, micro-filtration can meet highest requirements in terms of particle counting (particle size, number and weight).

The cleaning program is chosen considering the type of soiling, the geometry of the parts and cleanliness requirements. The throughput is from 6 up to 12 loads per hour. The Amsonic 400R series can be equipped with one or two storage tanks plus a third additional tank for regreasing, if required.



For medical applications or high cleanliness requirements, a double door execution is also available, in order to have the cleaning system directly connected to a cleanroom. The distillation capacity assures a continuous availability of clean solvent. The tank volume, the heating capacity and the distiller are optimally coordinated. Several solvents can be used, e.g. hydrocarbons or modified alcohols. Integration of an Amsonic 400R series in a fully automated manufacturing line is possible, on option, with loading and unloading conveyor, in addition with automatic basket closing system and barcodes reader for program identification.

## Technical specifications

Amsonic	400R	410R	415R	420R
<b>Basket dimensions (mm)</b>	370 x 220 x 200	520 x 320 x 200	600 x 400 x 300	670 x 480 x 300
<b>Max. weight per load</b>	35 kg	50 kg	80 kg	100 kg
<b>Throughput</b>	6 – 12 Load/H	6 – 12 Load/H	6 – 10 Load/H	6 – 10 Load/H
<b>Solvent capacity</b>	160 L	340 L	500 L	700 L
<b>Nombre de bac de stockage</b>	1 / 2 / 3	1 / 2 / 3	1 / 2 / 3	1 / 2 / 3
<b>Double door Execution</b>	Yes	Yes	No	No
<b>Cooling unit</b>	Yes	Yes	Yes	Yes
<b>Cleaning temperature</b>	60 – 80° C	60 – 80° C	60 – 80° C	60 – 80° C
<b>Vapour temperature</b>	95 – 110° C	95 – 110° C	95 – 110° C	95 – 110° C
<b>Power supply</b>	14 kW	17 kW	20 kW	24 kW
<b>Compressed air</b>	6 – 8 bar (100 l/h)	6 – 8 bar (100 l/h)	6 – 8 bar (200 l/h)	6 – 8 bar (200 l/h)
<b>Ext. dimensions (WxDxH)</b>	2,1 x 1,2 x 2 m	2,7 x 1,6 x 2,4 m	3 x 1,8 x 2,4 m	3,9 x 2 x 2,5 m
<b>Weight</b>	1300 kg	2000 kg	2500 kg	3200 kg
<b>Options</b>	Loading and unloading conveyors / Ultrasonic / Filtrations / barcodes reader / External distillation unit / Automatic basket closing system (except 400R) / etc.			

Technical modifications reserved

## PLC control with touch screen

The machine is controlled by PLC (Siemens) and a user-friendly HMI interface that includes more than 50 cleaning programs and maintenance programs such as the emptying of the distillation unit or the changing and drying of the micro filter. Access to process times and cleaning parameters are user dependent, and protected by passwords. The machine is operated by a user-friendly touch screen;

depending on the existing software options, it can be graphically visualized on the display and all relevant process data can be documented (cleaning report for track and traceability).

Via a remote support, with the appropriate standard remote maintenance software, the customer support can easily be connected to the system providing online servicing.

## Applications

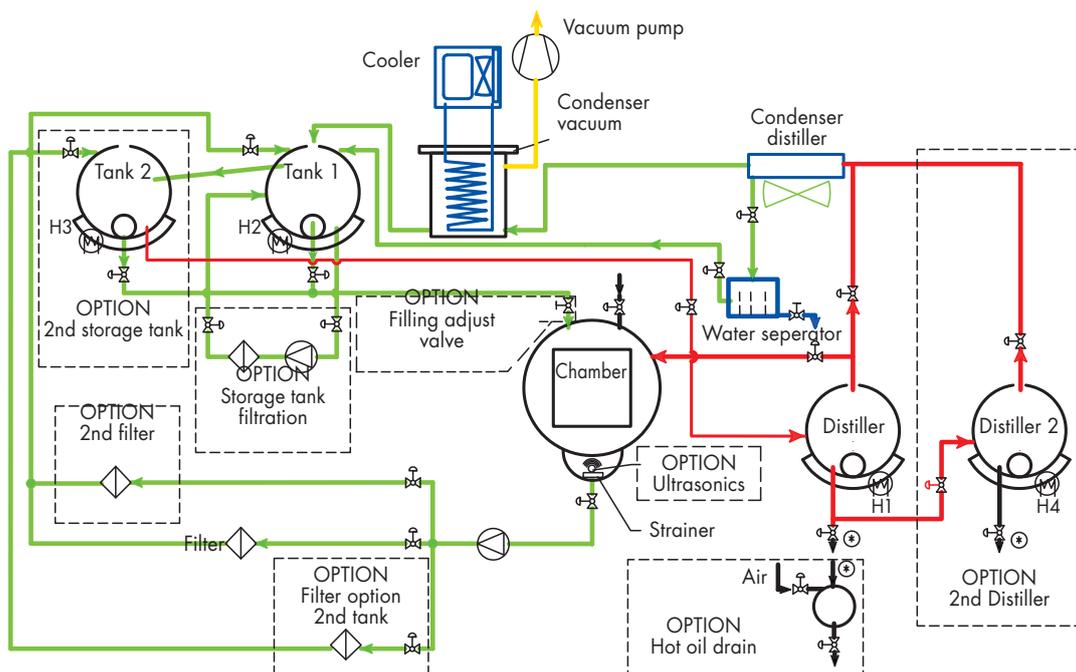
Automotive, aircraft industry, precision mechanics, turned parts, watch industry, orthopedic and dental implants, all those industrial sectors require cleanliness results at different stages, intermediate or final cleaning, prior to PVD or CVD coating, prior to plating or laser welding. All those industrial branches are using cleaning systems with Amsonic Technology.

Non chlorinated A3 solvents protect cleaned parts from corrosion. They are therefore more suitable than water base detergents in some applications. Solvents (Hydrocarbons or modified alcohols) are almost indefinitely distillable. The yearly consumption, depending on the application, is approx. 50 to 200 liters.

No matter if your customers request a guarantee for surface tension or particle free parts or if you need to clean a high volume – Amsonic has long time experience with A3 solvent cleaning and will recommend the best equipment suitable for you.



## Solvent circuit



## Your center of competence for precision cleaning



Amsonic 410R

Amsonic / Hamo provide a wide range of water-based and solvent A3 cleaning systems to meet the cleanliness requirements of Industry.

### Solvent-based precision cleaning equipments

#### Amsonic 400R / 410R / 415R / 420R

Solvent-based ultrasonic cleaning systems (class A3)  
Operating under vacuum, above the flashpoint



Amsonic ModuLine

### Water-based precision cleaning systems (Ultrasonic)

#### Amsonic AquaLine / ModuLine

High performance ultrasonic precision cleaning systems

#### Amsonic FlexLine

Modular compact cleaning system

#### Amsonic TTC / BC

Table top cleaner



Hamo 210

### Water-based spray cleaning equipments

#### Hamo 200

Compact jet spray cleaning equipment, for various applications

#### Hamo 210 / 420

Spray cleaning equipment dedicated to medical



Hamo PG 800

### Pharma-conform cleaning systems (cGMP)

#### Hamo PG 800 / 1300

Pharma-conform (cGMP) cleaning equipment  
Single or double door execution (Bio seal)

#### Amsonic Hamo HPM

High pressure cleaning systems (>80 bar)  
for pharmaceutical application

### Detergents / Additives

#### Amsonic PreciClean / Hamo liquid

Water-based cleaning detergents



03/16/MW

**Switzerland: Amsonic AG (Headquarters)** Phone: +41 (0)32 344 35 00  
CH-2504 Biel/Bienne amsonic.ch@amsonic.com

**Germany: Amsonic GmbH** Phone: +49 (0)7531 122 180  
D-78467 Konstanz amsonic.de@amsonic.com

**France: Amsonic SAS** Phone: +33 (0)437 28 18 00  
F-69970 Chaponnay/Lyon amsonic.fr@amsonic.com