



AutogizersTM Product Brief



The Tomtec Autogizer and Autogizer2 are fully automated tissue homogenization systems. With their variable speed cutters, or Ultrasonic Probes, the Autogizers can process up to 19 unique tissue groups per run for a total of 95 samples. The Tomtec manufacturing team can also design and deliver a sample containment rack to your unique specifications.

The Autogizer and Autogizer2 features

Durable and powerful, the Autogizer is programmed with a simple touch interface for any multi-step tissue Homogenization process. The Autogizer can accommodate five small Pro Scientific Model 200 homogenizers, or four large and robust 3/4 horsepower, 576 Watt Model 250 homogenizers, capable of blending the most sturdy of samples. The Ultrasonic Autogizer comes equipped with five Sonic made Probes. If you have a need for both ultrasonic and mechanical homogenization, Tomtec can modify your device to incorporate two ultrasonic probes, and three variable speed cutters in one platform.

The Autogizer2 is equipped with a powerful Windows graphical user interface. The GUI supports a multi-step tissue homogenization process, controlling five Omni International brushless cutter motors which can accommodate 7 mm (standard) or 10 mm cutters. The Autogizer2 can be programmed to walk a line of samples and deliver a unique homogenization protocol per line (five vials per line).

Cutter functions

- 1) RPM delivered over time, this can be variable with pauses,
- 2) The number of total cycles delivered into the tissue,
- 3) Total time on station and...
- 4) Up/down travel limits and rate of oscillation.

For work-flows where sample temperature is a concern or when cryogenic homogenization is required, the sample rack can be fitted with a load & go ice-bath.

As your Homogenization program progresses (between each lines of vials processed), the cutters can be programmed to pass through a (1) bulk wash, (2) organic rinse and/or (3) ultrasonic wash station. An optional wash & waste collection cart is available for waste containment.

Example Applications

The Tomtec Autogizers can accommodate a wide range of lab applications such as tissue homogenization, emulsions and suspensions, cell disruption, protein extraction and various classes of medical laboratory research. Our cutting tips are designed to smoothly shear samples with minimal cavitation, minimizing unwanted heating and tissue disruption.

At-a-Glance

Walk-away operation – Programmable button operation or Graphical User Interface

Fast and Efficient – Homogenize 4 or 5 samples at a time

Integrated cutter cleaning – Three aqueous, organic, aqueous (ultrasonic) cleaning tanks

Production ready – Custom-built sample-racks

Reliable – Results are absolutely consistent and repeatable. Ideal for PK studies

Tissue Dissociation

Cell isolation is easily achieved by programming the Autogizers to run at very slow speeds which maximizes blending and cutting action. This will break apart the tissue on a macro-level and lyses the cells as well. This ability to specify the number of cycles adds a level of control that no other homogenizer can deliver.

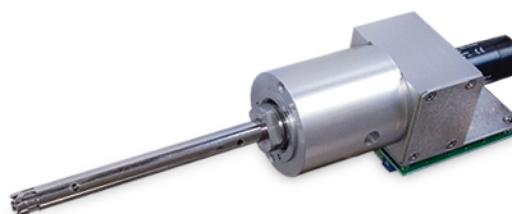
Small mammal PK studies

Obtaining data from animal PK studies is one of the most important steps in drug development. The Tomtec Autogizer and Autogizer2 have been a mainstay in analyzing PK up-take on a disaggregated species such as mouse, rat or larger mammal.



250 Motor Specifications

Power Rating: 576 Watts
 RPM Range: 10,000 - 30,000
 Noise rating: 72 dB



Maxon EC motor 22mm, brushless

Power Rating: 20 Watts
 no load RPM: 35,500



200 Motor Specifications

Power Rating: 144 Watts
 RPM Range: 5,000 - 35,000 (115V) / 5,000 - 33,000 (220V)
 Noise rating: 68 dB



Sonics Probes

Sonics & Materials Inc.
 Intensity: Medium - Ultra high