

PT 1600 E

*Benchtop
Homogenizer -
Economic version*

*Homogenizing
and Mixing
Technology for
the laboratory*

- DISPERSING**
- HOMOGENIZING**
- EMULSIFYING**
- SUSPENDING**
- WET MILLING**
- MIXING**



KINEMATICA.CH
Dispensing and Mixing Technology

POLYTRON® PT 1600 E - Sturdy, powerful, efficient

KINEMATICA is the leading manufacturer of homogenizing, mixing and milling equipment based on our technology of rotor/stator dispersing principles.

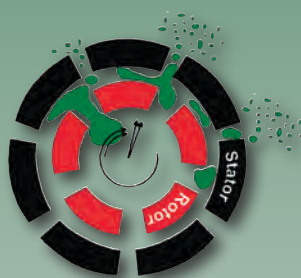
The POLYTRON® PT 1600 E „EcoLine“ belongs within the KINEMATICA homogenizer program to the benchtop models for small scale applications in the range of approx. 0.05 - 2000 ml.

This unit offers the user the same well known KINEMATICA high quality properties for a fast and 100% successful sample preparation for a very economic budget; a good way to enter the world of homogenizing with POLYTRON® the number one in dispersing and mixing based on the Rotor/Stator technology.

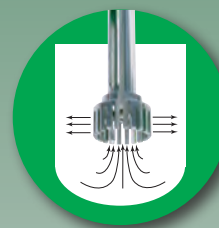
The dispersing system POLYTRON® PT 1600 E convinces with the following features:

- 300 Watt motor power (230V/110-120V)
- Rotor speed range from 5'000 up to 30'000 rpm
- Integrated electronic speed regulation/stabilisation with control knob and speed scale
- Soft-start
- Quick coupling for dispersing aggregates
- Interchangeable dispersing aggregates in EC design
- Universal plate stand
- Large collection of dispersing vessels and accessories
- CE label

Principal of process



Rotor / Stator principle



POLYTRON® batch principle



The Rotor/Stator principle for dispersing and homogenizing equipment, originally invented by KINEMATICA, has become the worldwide accepted standard for homogenizing and dispersing a solid or fluid or gaseous phase into a fluid phase.

The dispersing aggregates of the **POLYTRON®** and **BIOTRONA®** batch dispersing systems are directly immersed into the medium.

The product will be processed by the rotor/stator dispersing generator at the tip of the dispersing aggregate.

POLYTRON® Rotor/Stator homogenizers successfully process emulsions, suspensions and foams by reducing the size of solid particles, droplets and gas bubbles to a few microns or less. Small and large amounts of product are being dispersed in a more economical, faster and better way than with any other device.

Technical Data



Motor Power, Type	300 W (input) / 180 W (output), Universal motor
Speed control	Integrated electronic speed regulation with control knob and speed scale
Soft Start	Yes
Supply Voltage	230V / 100 - 120V, 50/60 Hz
Speed max.	30'000 rpm
Noise emission	85 dB (A) at 25'000 rpm
Ambient	0 - 50°C, 95% max. rel. humidity
Standards	CE label
Standards	EN / IEC 61010, 61326-1 for EMV & SAFETY
Dimensions (drive only)	227 x 58 x 68 mm (LxWxH)
Weight (drive only)	1100 g

Further Equipment & Order information

EasyClean Dispersing Aggregates



The modern EC aggregates are equipped with saw-teeth which increase the efficiency in the preliminary size reduction of the droplets/particles and considerably shortens the processing time. The tips of the teeth are secured by a safety ring which avoids the teeth from bending. The whole dispersing aggregate is made from superior grade stainless steel (1.4435/316L) and is electropolished. POLYTRON® EC dispersing aggregates are equipped with special slide bearings made from a Teflon compound, which have extraordinary mechanical characteristics and superior chemical resistance and FDA approval. The complete aggregate can be dismantled in two to three steps, easily cleaned and sterilised i.e. autoclaved.

Control Knob



Quick Coupling

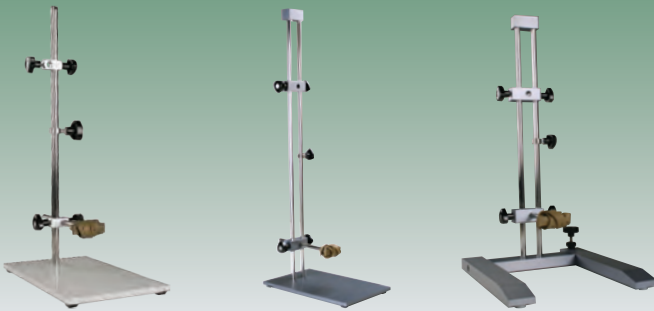


Drive Unit



Order No.	Description
11010040	PT 1600 E, 230V, EU-plug
11010041	PT 1600 E, 230V, CH-plug
11010043	PT 1600 E, 230V, UK-plug
11010042	PT 1600 E, 100-120V

Stands & Equipment



Order No.	Description
11040015	ST-P11/600 - Plate stand (one rod design)
11040051	ST-P20/600 - Plate stand (two rod design)
11040020	ST-F20/600 - H-shape feet stand
11045010	Vessel holder with boss head for ST-P11/600
11045011	Vessel holder with boss head for ST-F20/600
11045030	Safety positioning ring for ST-P11/600
11045031	Safety positioning ring for ST-F20/600

Dispersing Vessels



The suitable dispersing vessel

The following overview should help you to find the correct working vessel for your application. We will be pleased to provide you with further information on other vessels and about special designs as well.

Description	Order No.	Dim. (mm) Ø / H	Working Vol.	Model	
GS 15	11050010	30 / 150	35 ml	Clover leaf shaped Borosilicate glass	top open with cover
GS 25	11050011	55 / 150	150 ml		
GS 40	11050012	80 / 200	500 ml		
GS 50	11050013	90 / 250	1000 ml		
GS 60	11050014	100 / 300	1300 ml		
GS 15 K	11050020	30 / 150	35 ml		with screw cap glas inlet: GS 15K Ø 9 mm GS 25K Ø 25 mm GS 40/50/60K Ø 40 mm
GS 25 K	11050021	55 / 150	150 ml		
GS 40 K	11050022	80 / 200	500 ml		
GS 50 K	11050023	90 / 250	1000 ml		
GS 60 K	11050024	100 / 300	1300 ml		
GS 15 KL 7.5	11050030	30 / 150	35 ml	with screw cap tapered fitting 7.5, 12, 20 or 25 mm glas inlet (as above)	
GS 25 KL 12	11050031	55 / 150	150 ml		
GS 25 KL 20	11050032	55 / 150	150 ml		
GS 40 KL 25	11050034	80 / 200	500 ml		
GS 50 KL 25	11050036	90 / 250	1000 ml		
GS 60 KL 25	11050038	100 / 300	1300 ml		
GS 100 Z	11050060	100 / 150	900 ml	Cylindrical	top open without cover
GS 130 Z	11050061	125 / 170	2000 ml		

Dispersing Aggregates (choice)

Model	PT-DA 03/2 EC-E050	PT-DA 05/2 EC-E085	PT-DA 07/2 EC-E107	PT-DA 07/2 SYN-E082	PT-DA 12/2 EC-E157	PT-DA 12/2 WEC-E157
Ident-No.	11030004	11030009	11030024	11030030	11030042	11030060
Volume	0.05 - 5 ml	0.1 - 0.5 ml	0.3 - 10 ml	0.3 - 10 ml	100 -2000 ml	100 -2000 ml
Application	<ul style="list-style-type: none"> Dispersing of small quantities of plant, animal or human tissues Dissolving of solids 	<ul style="list-style-type: none"> Dispersing of cell tissues in a small amount of liquid Dissolving of solids 	<ul style="list-style-type: none"> Extraction Producing of suspensions and emulsions 	<ul style="list-style-type: none"> Dispersing of cells and tissues in a small amount of liquid Dissolving of solids Extractions "Single-use" - Applications 	<ul style="list-style-type: none"> Dispersing of cells and tissues in a small amount of liquid Dissolving of solids 	<ul style="list-style-type: none"> Dispersing of fibrous, stringy and brittle samples (e.g. flash)

HOMOGENIZING AND MIXING TECHNOLOGY

POLYTRON®
DISPERSING AND MIXING TECHNOLOGY BY KINEMATICA

BIOTRONA®
DISPERSING AND MIXING TECHNOLOGY BY KINEMATICA

POLYMIX®
DISPERSING AND MIXING TECHNOLOGY BY KINEMATICA

MEGATRON®
DISPERSING AND MIXING TECHNOLOGY BY KINEMATICA

REACTRON®
DISPERSING AND MIXING TECHNOLOGY BY KINEMATICA

A wide range of products with the finest solution for every application, matched by the superior quality of all components make KINEMATICA a world leader for Dispersing and Mixing technology.

With Keen Eyes ...

Development knows no rest at KINEMATICA. Our systems are constantly upgraded to reflect the state-of-the-art technology and the needs of the market. KINEMATICA has always had a keen eye for major advances, as proven by various patents.

The rotor/stator principle for dispersing technology was conceived and developed at KINEMATICA and has become the world standard.

... For Your Needs

Applications for Dispersing/Homogenizing Technology are always on the increase. KINEMATICA continually creates new areas of processing applications based on innovations. We do not neglect the human factor as it is exemplified by the safe and comfortable operation and noise reduction of our high-speed systems.

Please, get in touch with us, our local appointed agent or your preferred dealer. We will be pleased to supply more details or arrange a personal demonstration of our POLYTRON® and MEGATRON® systems.

POLYTRON® Finest Swiss Made Solutions... worldwide! +

PT 1200 E

Ergonomic hand-held homogenizer

Homogenizing and Mixing Technology for the laboratory

DISPERSING
HOMOGENIZING
EMULSIFYING
SUSPENDING
WET MILLING
MIXING

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PT 4000

Benchtop Homogenizer, HighEnd Line

Homogenizing and Mixing Technology for the laboratory

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Homogenizing and Dispersing Technology

for

Laboratory & Pilot Plant

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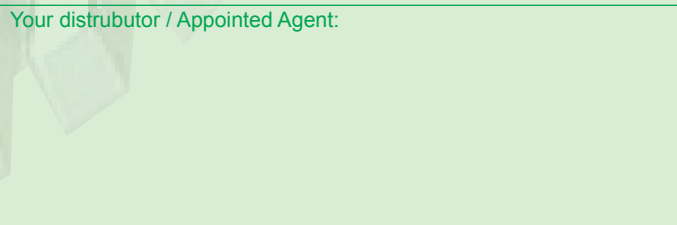
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