

POLYTRON®

DISPERSING AND MIXING TECHNOLOGY BY KINEMATICA

Dispersing Technology in the Laboratory

System POLYTRON® PT 2100 - economical and technically superior



KINEMATICA AG
Dispersing and Mixing Technology

POLYTRON® PT 2100 - sturdy, powerful and versatile

Standard for small applications

The rotor/stator principle for dispersing equipment, originally invented by KINEMATICA, has become the accepted standard for homogenizing, dispersing and emulsifying worldwide.

The PT 2100 counts within the POLYTRON® stand dispersing systems for the laboratory range „small“ (0.1 ml - 2000 ml) as the standard equipment of high quality.

Powerful and efficient

The dispersing system POLYTRON® PT 2100 convinces with the following features:

- 500 Watt motor power (230V/115V)
- rotor speed range from 11 000 up to 30 000 rpm
- integrated electronic speed regulation/stabilisation with control knob and speed scale
- soft-start and thermal overload fuse
- non corrosive quick coupling
- 7 interchangeable dispersing aggregates in EC design
- two different stands
- large collection of dispersing vessels and accessories
- CE label, SEV approved

Easy changing of dispersing aggregates

A unique non corrosive quick coupling allows aggregate changes even with one hand.

EasyClean dispersing aggregates

From a choice of 7 different dispersing aggregates the optimal can be selected for your specific application and processing volume between approx. 0.1 ml and 2000 ml.

The modern **EC** aggregates are equipped with saw-teeth, that increase their 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 ring which avoids the teeth from bending. The whole dispersing aggregate is made from superior grade stainless steel (1.4435/316L).

All these POLYTRON® EC dispersing aggregates are equipped with special slide bearings, which have extraordinary mechanical characteristics and superior chemical resistance. They can be dismantled simply, easily cleaned and sterilised or autoclaved.

Know-how in the accessories

Two different stands are available for the system PT 2100. One elegant, stable and handy H-stand PT-ST 2101 made from anodised aluminium with stainless steel columns and one economic plate stand PT-ST 2103 from lacquered mild steel. Both stands can be equipped with a vessel holder and safety positioning ring.

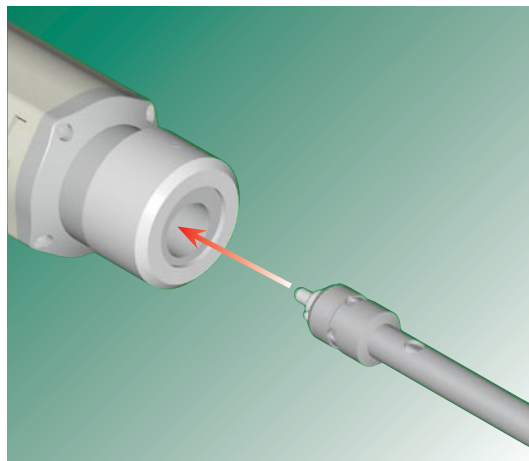
Most effective are the specially designed cloverleaf shaped dispersing vessels. Thanks to the concentrated turbulences by built in baffles the working time is reduced considerably. Available from borosilicate glass or stainless steel, with/without lids in different sizes from 25 ml up to 2 ltrs.



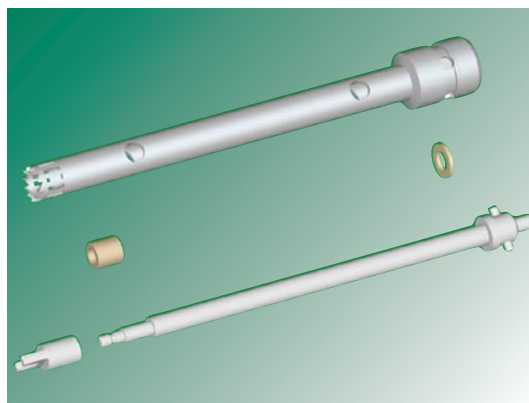
POLYTRON® PT 2100 with stand PT-ST 2101, dispersing aggregate and dispersing vessel



Control Knob and Speed Indication



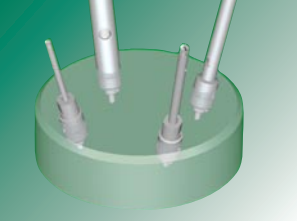
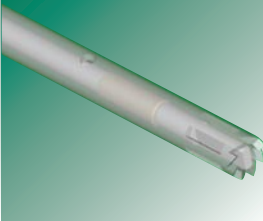
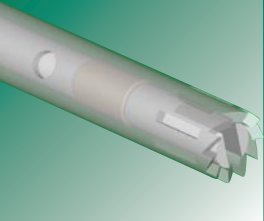
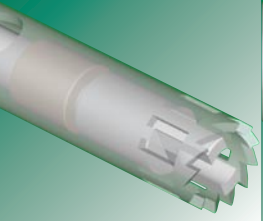
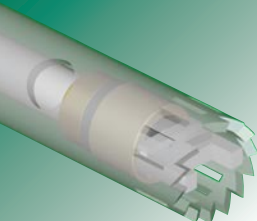
Quick Coupling



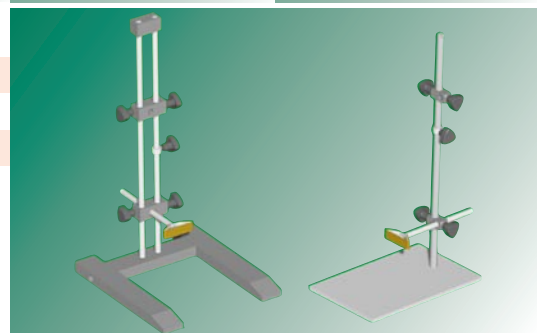
EasyClean Dispersing Aggregates

System POLYMIX® PT 2100 - Specifications

| Dispersing Aggregates | PT-DA 2105/2EC | PT-DA 2107/2EC | PT-DA 2112/2EC | PT-DA 2120/2EC |
|---|--|--|--|--|
| Working volume | for smallest samples approx. 0.1 - 5 ml | for small samples approx. 0.3 - 10 ml | for volumes approx. 2 - 250 ml | for larger volumes approx. 100 - 2000 ml |
| Solid/Liquid ratio | 1 : 5 | 1 : 5 | 1 : 10 | 1 : 10 |
| Shaft length | 61 mm | 86 mm | 138 mm | 178 mm |
| Stator-Ø | 5.5 mm | 7.5 mm | 12 mm | 20 mm |
| Rotor-Ø | 3 mm | 5 mm | 9 mm | 15 mm |
| Tip speed up to | 4 m/s | 6.5 m/s | 12 m/s | 20 m/s |
| Recommended vessels and containers | <ul style="list-style-type: none"> • Test tubes • Eppendorf tubes • min. internal diameter 5.5 mm | <ul style="list-style-type: none"> • Test tubes • min. internal diameter 6.5 mm | <ul style="list-style-type: none"> • KINEMATICA dispersing vessels GS 15 • Test tubes • round beakers • min. internal diameter 14 mm | <ul style="list-style-type: none"> • KINEMATICA dispersing vessels GS 40 • Test tubes • round beakers • min. internal diameter 22 mm |
| Applications | <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"> • Dispersing of tissues, resins and pigments • Extractions • Producing of suspensions and emulsions | <ul style="list-style-type: none"> • Dispersing of tissues, resins and pigments • Extractions • Producing of suspensions and emulsions |

| Order code | 11030008 | 11030023 | 11030043 | 11030070 |
|--|---|---|--|---|
|  |  |  |  |  |

| Drive unit with electronic control | PT-MR 2100 |
|------------------------------------|-------------------|
| Power (input) | 500 Watt |
| Rotor speed (w/o load) | 11000 - 30000 rpm |
| Coupling | Quick coupling |
| Order code | |
| 230 V, 50/60 Hz | 11010050 |
| 110 V, 50/60 Hz | 11010051 |



PT-ST 2101

PT-ST 2103

| Accessories | |
|---|----------|
| PT-ST 2101 - H-stand with height adjustment | 11040020 |
| PT-ST 2103 - Plate stand with boss head | 11040021 |
| Vessel holder with guide for PT-ST 2101 | 11045011 |
| Vessel holder with boss head for PT-ST 2103 | 11045010 |
| Safety positioning ring for PT-ST 2101 | 11045031 |
| Safety positioning ring for PT-ST 2103 | 11045030 |
| Dispersing vessel GS 15, 35 ml | 11050010 |
| Dispersing vessel GS 25, 150 ml | 11050011 |
| Dispersing vessel GS 40, 500 ml | 11050012 |
| Dispersing vessel GS 50, 1000 ml | 11050013 |



KINEMATICA Dispersing Vessels from borosilicate glass or stainless steel with baffles with/without lids

More dispersing vessels, dispersing aggregates and accessories on request

Finest Solutions ... worldwide!

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 proved 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 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 for a personal demonstration of our POLYTRON® and MEGATRON® systems.

POLYTRON®
DISPERSING AND MIXING TECHNOLOGY BY KINEMATICA

Dispersing Technology for the Laboratory
POLYTRON® Systems PT 1200 B/C/CL - Handheld Dispersers

KINEMATICA AG
Dispersing and Mixing Technology

POLYTRON®
DISPERSING AND MIXING TECHNOLOGY BY KINEMATICA

Dispersing Technology for the Laboratory
System POLYTRON® PT 3100

KINEMATICA AG
Dispersing and Mixing Technology

POLYTRON®
BIOTRON®
MEGATRON®
REACTRON®
POLYMIX®

Dispersing Technology for Laboratory and Pilot Plant
Batch and Inline Dispersing Equipment

KINEMATICA AG
Dispersing and Mixing Technology

POLYTRON®
BIOTRON®
MEGATRON®
REACTRON®
POLYMIX®

Homogenizing and Dispersing Technology
Inline and Batch Processing for Pilot Plant and Production

KINEMATICA AG
Dispersing and Mixing Technology

Represented by :



KINEMATICA AG
Dispersing and Mixing Technology

Luzernerstrasse 147a
CH-6014 Littau/Lucerne
Switzerland

Tel.
Fax
E-mail
www



+41-41-259 65 65
+41-41-259 65 75
laboratory@kinematica.ch
www.kinematica.ch