

POLYTRON[®]
DISPERSING AND MIXING TECHNOLOGY BY KINEMATICA

BIOTRONA[®]
DISPERSING AND MIXING TECHNOLOGY BY KINEMATICA

MEGATRON[®]
DISPERSING AND MIXING TECHNOLOGY BY KINEMATICA

REACTRON[®]
DISPERSING AND MIXING TECHNOLOGY BY KINEMATICA

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



KINEMATICA AG
Dispersing and Mixing Technology

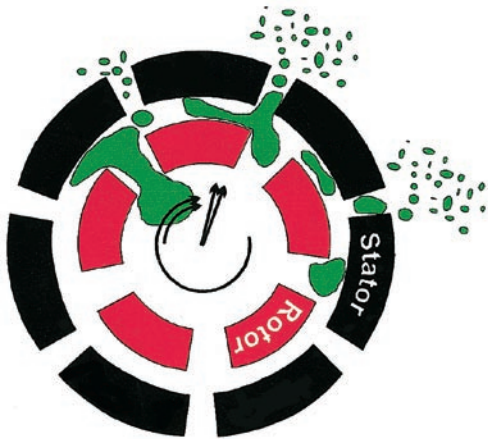
Rotor/Stator Dispersing Systems

Since Professor Willems - the founder of **KINEMATICA** - patented his pioneering invention of rotor/stator dispersing machines over 40 years ago, staff members of **KINEMATICA** work together with scientists from Switzerland, Austria, Germany, China, Japan and USA in order to make continuous improvements in the dispersing technology for specific applications.

Therefore **KINEMATICA** is in the position to offer excellent solutions in certified quality for dispersing applications in the chemical, biochemical, pharmaceutical, cosmetic and food industry.

Surplus customer value by professional advice and lead quality - ISO 9001 certified

POLYTRON® Batch and **MEGATRON®** Inline Dispersing devices from **KINEMATICA** are available with a wide choice of dispersing generators (rotor/stator) for the use in laboratories (volumes from 0.1 ml - 20 l), pilot plant (from approx. 20 l - 100 l) and production (up to approx. 130'000 l/h).



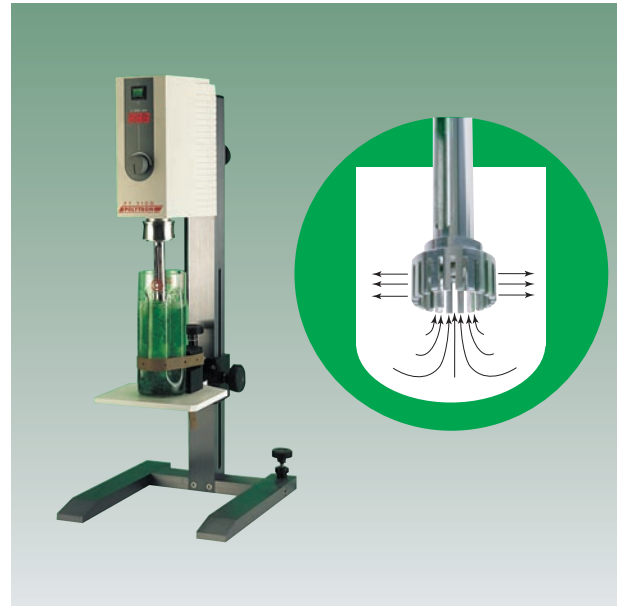
KINEMATICA offers also complete processing systems to meet customer and product specifications including premix vessels, piping, pumps, stirrers, processing tanks and electronic regulations.

The solution for your homogenizing, dispersing, emulsifying, suspending, size reduction and wet milling application is offered by **KINEMATICA**.

! To get further information, a quotation or a personal demonstration just fill-in the enclosed applications questionnaire and send it back to us.

Our staff will be glad to assist you.

Batch Processing



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



Inline Processing with recirculating system



MEGATRON® inline dispersing systems are in-line with the product stream. The product is forced through the working chamber where it will be treated by the dispersing generator(s).



System PT 1200 B System PT 1200 C/CL System PT 1200 E System PT 1300 D

POLYTRON® Handheld Homogenizers

KINEMATICA offers for the laboratory scale a whole range of laboratory dispersing equipment:

POLYTRON® Handheld Homogenizers (0.1 ml - 250 ml)

- PT 1200 C - safe, economic
- PT 1200 CL - low budget
- PT 1200 B - independent
- PT 1200 E - ergonomic design, EcoLine
- PT 1300 D - high end, unique, μ -regulated, display, RS232-Port, free of wear, 30'000 min⁻¹

POLYTRON® Stand Homogenizers (small, 0.1 - 2000 ml)

- PT 1600 E - handy, powerful, low budget
- PT 2100 - standard, powerful, economic
- PT 4000 - high end, unique, μ -regulated, display, RS232-Port, free of wear, 40'000 rpm

POLYTRON® Stand Homogenizers (medium, 0.1 - 3000 ml)

- PT-K - standard, powerful, PCU-controlled
- PT 3100 - high end, regulated, display, noise protection, RS232-Port, 28'000 rpm

POLYTRON® Stand Homogenizers (large, 0.1 - 10'000 ml)

- PT-G - standard, powerful, PCU-controlled
- PT 6100 - high end, regulated, display, noise protection, RS232-Port, 24'000 rpm

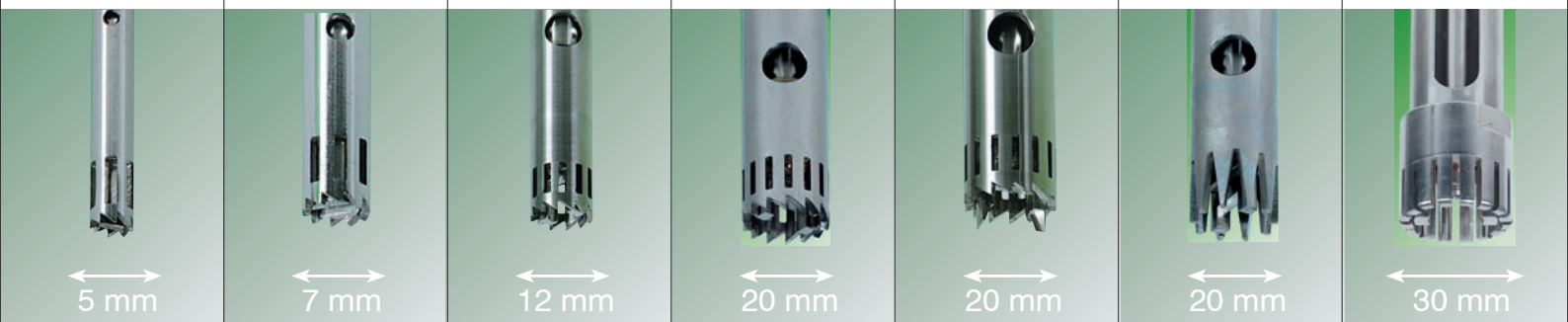
Over 40 different POLYTRON® dispersing aggregates (size, geometry, model) are available for smallest amounts from 0.1 ml in e.g. Eppendorf tubes as well as for large working volumes up to approx. 20'000 ml.

A POLYTRON® dispersing system, consisting of a drive system, dispersing aggregate and accessories, can be assembled individually and in accordance to the application.

No matter choosing an high end, standard or low budget unit, all KINEMATICA laboratory systems have the following features:

- excellent workmanship
- powerful and safe drive systems
- extreme high tip speeds
- quick coupling for a large choice of POLYTRON® dispersing aggregates
- intelligent regulations or controllers
- digital displays or readable scales
- user friendly and a wide variety of accessories
- long working life

| POLYTRON® Generator (PTG) | PTG 5/2 | PTG 7/2 | PTG 12/2 | PTG 20/2 | PTG 20/2M | PTG 20/2W | PTG 30/2Z |
|--|--|--|--|---|--|---|--|
| | standard generator rotor/stator with one teeth row each | standard generator rotor/stator with one teeth row each | standard generator rotor/stator with one teeth row each | standard generator rotor/stator with one teeth row each | special M-Generator Rotor with knives rotor/stator with one teeth row each | special W-Generator rotor/stator with one teeth row each | special Z-Generator rotor/stator with one teeth row each |
| Maximum Tip Speed 6 m/s | | 8 m/s | 14 m/s | 21 m/s | 21 m/s | 21 m/s | 34 m/s |
| Working volume 0.1 - 5 ml | | 0.3 - 10 ml | 3 - 250 ml | 20 - 2000 ml | 20 - 2000 ml | 20 - 2000 ml | 100 - 4000 ml |
| Applications • dispersing of smallest plant, human or animal pieces • dissolving of solids • extractions | • dispersing of cells and tissues in a small amount of liquid • dissolving of solids • extractions | • dispersing of plant, human or animal tissues, resins and pigments • dissolving of solids • extractions • producing of suspensions and emulsions | • dispersing of plant, human or animal tissues, resins and pigments • dissolving of solids • extractions • producing of suspensions and emulsions | • dispersing and mixing of particles up to 10 mm in size • sample preparation for extraction and solution of organic material • intensives mixing • rotor with knives facilitate the processing of larger cell tissue samples or particles | • dispersing of fibrous, stringy and brittle samples (e.g. flesh) | • breaking open and dispersing of pills, capsules and hard large grains | |





System PT 1600 E



System PT 2100



System PT 4000



System PT-K

Do you have applications with larger working volumes, do you need more power or do you run scale-up tests for future production plants? Our POLYTRON® pilot plants offer as a first step unit a lot of variability with a good price/performance ratio and a small required floor space. The system **PT 7000** with high frequency 3-phase drive unit for up to approx. 20'000 rpm, integrated frequency inverter, LCD display and telescopic stand can be equipped with most of the POLYTRON® dispersing generators. To enable scale-up procedures also in the laboratory, the PT 7000 can be simply connected to a standard 230/115 V wall socket, but thanks to the 3-phase motor it can also be used for continuous work with volumes up to 60 liter.

If the application becomes higher viscous or if the application should be run in an ex-proof area, the **PT-D 36-60 (ex)** is the right solution. Drive units with up to 4.0 kW and belt transmission reach rotor shaft speeds up to 15000 rpm. So this heavy duty pilot plant POLYTRON® batch system is a standard model for a wide range of applications offering a reasonable handling comfort. The PT-D 36-60 (ex) has been designed with telescopic stand and vessel holder and can be equipped with most of the POLYTRON® dispersing generators, to be regulated by a frequency inverter, if necessary with flameproof local control panel.



System POLYTRON® PT 3100

POLYTRON® Stand Homogenizers

➔ For more information about the individual systems, please contact our sales department or your preferred dealer.

| PTG 30/4TIN | PTG 36/2 | PTG 36/2W | PTG 36/4 | PTG 36/4G | BAG 36 | PTG 40/2 |
|--|---|---|---|--|--|---|
| special generator titan-nitrated rotor/stator with two teeth rows each | standard generator rotor/stator with one teeth row each | special W-Generator rotor/stator with one teeth row each | standard generator rotor/stator with two teeth rows each | special G-Generator with mechanical seal rotor/stator with three teeth rows each | BIOTRONA® Generator blade rotor and stator with inclined slots | standard generator rotor/stator with one teeth row each |
| 34 m/s | 34 m/s | 34 m/s | 34 m/s | 34 m/s | 34 m/s | 36 m/s |
| 200 - 4000 ml | 200 - 4000 ml | 200 - 4000 ml | 100 - 2500 ml | 100 - 2500 ml | 500 - 8000 ml | 200 - 5000 ml |
| <ul style="list-style-type: none"> making fine emulsions and suspensions mixes and reduces highly intensive solids into fluids gasses solutions separates fibres and cellular material into very small particles extraktions applications with abrasive components | <ul style="list-style-type: none"> dispersing and mixing of particles up to 15 mm in size sample preparation for extraction and solution of organic material intensives mixing | <ul style="list-style-type: none"> dispersing of fibrous, stringy and brittle samples (e.g. flesh) | <ul style="list-style-type: none"> making fine emulsions and suspensions mixes and reduces highly intensive solids into fluids gasses solutions separates fibres and cellular material into very small particles extraktions | <ul style="list-style-type: none"> working under pressure / vacuum making finest emulsions and suspensions mixes and reduces highly intensive solids into fluids separates fibres and cellular material into very small particles extraktions prevents foam built-up | <ul style="list-style-type: none"> high turbulent mixing with low shear forces fast dissolving and suspending of solids also at higher viscosity | <ul style="list-style-type: none"> dispersing and mixing of particles up to 20 mm in size sample preparation for extraction and solution of organic material intensives mixing |





System POLYTRON® PT-G



System POLYTRON® PT 6100



System POLYTRON® PT 7000

POLYTRON® Stand Homogenizers

The choice of the right dispersing aggregate and the right drive system depends on the application: treated medium, viscosity, processing time, volume, etc. KINEMATICA don't leave you alone with these difficult questions. Our applications team would like to discuss with you the right system components for succesful working in accordance to a filled-in questionnaire or a test run in our laboratory. A short overview about available dispersing aggregates and systems shall give you a first information.

| Aggregate Systeme | Ø 5 mm | Ø 7 mm | Ø 12 mm | Ø 20 mm | Ø 25 mm | Ø 30 mm | Ø 36 mm | Ø 40 mm | Ø 45 mm | Ø 50 mm | Ø 60 mm |
|-------------------|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| PT 1200 E | +++ | +++ | ++ | | | | | | | | |
| PT 1300 D | +++ | +++ | ++ | | | | | | | | |
| PT 1600 E | ++ | +++ | +++ | | | | | | | | |
| PT 2100 | ++ | ++ | +++ | +++ | | | | | | | |
| PT 4000 | ++ | ++ | +++ | +++ | +++ | | | | | | |
| PT-K | + | ++ | +++ | +++ | +++ | +++ | ++ | | | | |
| PT 3100 | + | ++ | +++ | +++ | +++ | +++ | ++ | | | | |
| PT-G | + | + | + | ++ | +++ | +++ | +++ | +++ | ++ | ++ | + |
| PT 6100 | + | + | + | ++ | +++ | +++ | +++ | +++ | ++ | ++ | + |
| PT 7000 | + | + | + | + | + | ++ | +++ | +++ | +++ | +++ | ++ |
| PT-D 36-60 (ex) | + | + | + | + | + | ++ | +++ | +++ | +++ | +++ | +++ |

+ limiited adapted ++ well adapted +++ very well adapted

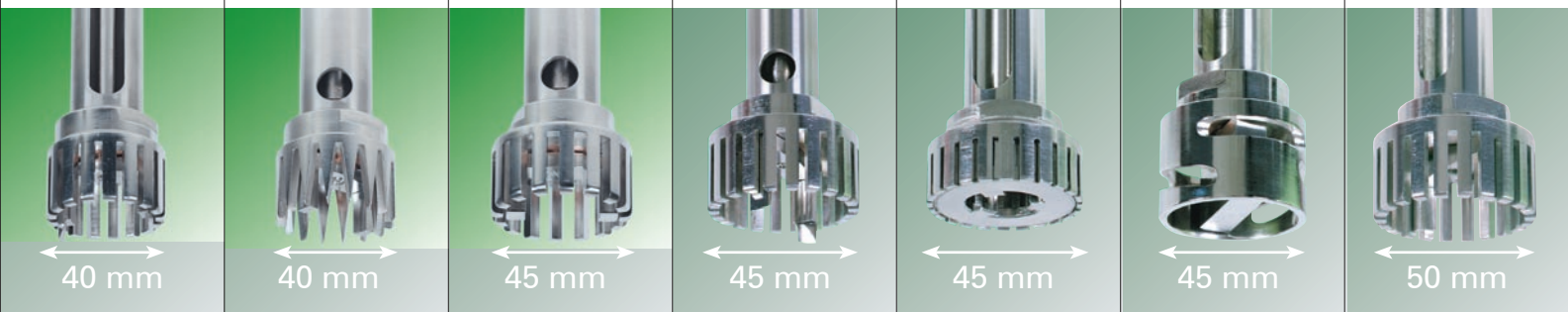
Which aggregates are available for my drive system?



Which designs are available for my dispersing aggregate?

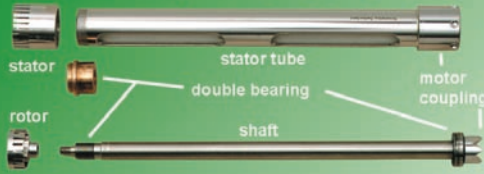


| POLYTRON® Generator PTG | PTG 40/2M | PTG 40/2W | PTG 45/2 | PTG 45/2M | PTG 45/6 | BAG 45 | PTG 50/2 |
|--|---|---|---|---|---|--|---|
| | special M-Generator Rotor with knives rotor/stator with one teeth row each | special W-Generator rotor/stator with one teeth row each | standard generator rotor/stator with one teeth row each | special M-Generator Rotor with knives rotor/stator with one teeth row each | standard generator rotor/stator with three teeth rows each | BIOTRONA® Generator blade rotor and stator with inclined slots | standard generator rotor/stator with one teeth row each |
| Maximum Tip Speed 36 m/s | 36 m/s | 40 m/s | 40 m/s | 40 m/s | 40 m/s | 40 m/s | 44 m/s |
| Working volume 200 - 4000 ml | 200 - 5000 ml | 200 - 6000 ml | 200 - 6000 ml | 200 - 6000 ml | 200 - 4000 ml | 1000 - 15 000 ml | 300 - 10 000 ml |
| Applications | <ul style="list-style-type: none"> dispersing and mixing of particles up to 20 mm in size sample preparation for extraction and solution of organic material intensives mixing rotor with knives facilitate the processing of larger cell tissue samples or particles | <ul style="list-style-type: none"> dispersing of fibrous, stringy and brittle samples (e.g. flesh) | <ul style="list-style-type: none"> dispersing and mixing of particles up to 22 mm in size sample preparation for extraction and solution of organic material intensives mixing | <ul style="list-style-type: none"> dispersing and mixing of particles up to 22 mm in size sample preparation for extraction and solution of organic material intensives mixing rotor with knives facilitate the processing of larger cell tissue samples or particles | <ul style="list-style-type: none"> making finest emulsions and suspensions mixes and reduces highly intensive solids into fluids gasses solutions separates fibres and cellular material into very small particles extraktions | <ul style="list-style-type: none"> high turbulent mixing with low shear forces fast dissolving and suspending of solids also at higher viscosity | <ul style="list-style-type: none"> dispersing and mixing of particles up to 25 mm in size sample preparation for extraction and solution of organic material intensives mixing |

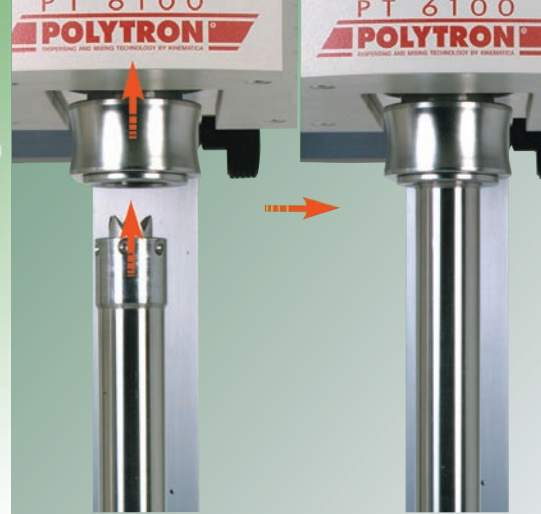
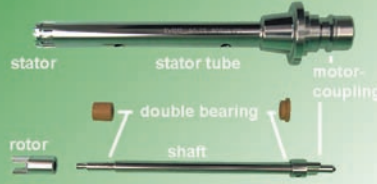




Standard Dispersing Aggregate



EasyClean Dispersing Aggregate



System POLYTRON® PT-D 36-60 POLYTRON® dispersing aggregates

safe and fast couplings

| Aggregates | Ø 5 mm | Ø 7 mm | Ø 12 mm | Ø 20 mm | Ø 25 mm | Ø 30 mm | Ø 36 mm | Ø 40 mm | Ø 45 mm | Ø 50 mm | Ø 60 mm |
|-------------------------|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Design „Stator tube“ | | | | | | | | | | | |
| Standard (slotted) | | | + | + | + | + | + | + | + | + | + |
| EC | + | + | + | + | + | + | + | + | + | + | + |
| G | | | | + | + | + | + | + | + | + | + |
| T | | | + | + | + | + | + | + | + | + | + |
| Aggregates | Ø 5 mm | Ø 7 mm | Ø 12 mm | Ø 20 mm | Ø 25 mm | Ø 30 mm | Ø 36 mm | Ø 40 mm | Ø 45 mm | Ø 50 mm | Ø 60 mm |
| Design „R/S-Head“ | | | | | | | | | | | |
| ..2 (R/S with 1TR each) | + | + | + | + | + | + | + | + | + | + | + |
| ..4 (R/S with 2TR each) | | | | | | + | + | + | + | + | + |
| ..6 (R/S with 3TR each) | | | | | | | | | + | + | + |
| M Rotor | | | + | + | + | + | + | + | + | + | + |
| W Stator | | | + | + | + | + | + | + | + | + | + |
| Z Stator | | | | | | + | | | | | |
| BIOTRONA® | | | | | | | + | | + | | |

+ equipable, TR = teeth row(s), R/S = rotor/stator (= dispersing generator)

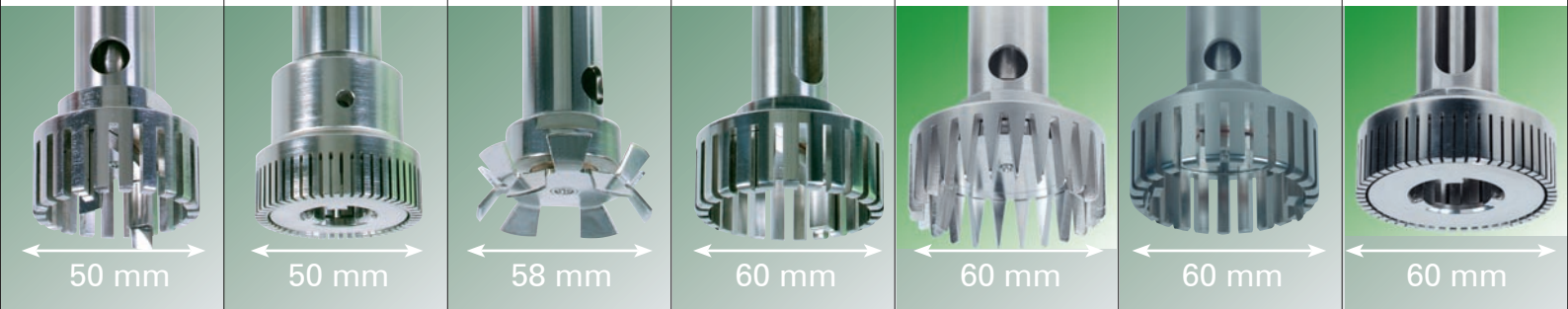


the right dispersing vessel

- **EC-Design** Easy-Clean, easy disassembled, easy cleaned or sterilized
- **T-Design** prevents additional air introduction
- **G-Design** pressure, vacuum, anti-foam, with mechanical seal

- **M-Generator** rotor with knives for precutting for fibrous and stringy material
- **W-Generator** for hard and brittle material
- **Z-Generator** high turbulences, low shear forces
- **BIOTRONA®**

| PTG 50/2M | PTG 50/6G | PTG 58 DI | PTG 60/2 | PTG 60/2W | PTG 60/2M | PTG 60/6 |
|---|--|--|---|---|---|---|
| special M-Generator Rotor with knives rotor/stator with one teeth row each | special G-Generator with mechanical seal rotor/stator with three teeth rows each | special dissolver disk | standard generator rotor/stator with one teeth row each | special W-Generator rotor/stator with one teeth row each | special M-Generator Rotor with knives rotor/stator with one teeth row each | standard generator rotor/stator with three teeth rows each |
| 44 m/s | 44 m/s | 47 m/s | 50 m/s | 50 m/s | 50 m/s | 50 m/s |
| 300 - 10 000 ml | 300 - 4000 ml | 1000 - 40 000 ml | 200 - 4000 ml | 1000 - 30 000 ml | 1000 - 30 000 ml | 1000 - 20 000 ml |
| <ul style="list-style-type: none"> • dispersing and mixing of particles up to 25 mm in size • sample preparation for extraction and solution of organic material • intensives mixing • rotor with knives facilitate the processing of larger cell tissue samples or particles | <ul style="list-style-type: none"> • working under pressure / vacuum • making finest emulsions and suspensions • mixes and reduces highly intensive solids into fluids • gasses solutions • separates fibres and cellular material into very small particles • extraktions • prevents foam built-up | <ul style="list-style-type: none"> • fast mixing and homogenizing of solid material into fluid by means of a dissolving disk • Preparing highly viscous products | <ul style="list-style-type: none"> • dispersing and mixing of particles up to 30 mm in size • sample preparation for extraction and solution of organic material • intensives mixing | <ul style="list-style-type: none"> • dispersing of fibrous, stringy and brittle samples (e.g. flesh) | <ul style="list-style-type: none"> • dispersing and mixing of particles up to 30 mm in size • sample preparation for extraction and solution of organic material • intensives mixing • rotor with knives facilitate the processing of larger cell tissue samples or particles | <ul style="list-style-type: none"> • making finest emulsions and suspensions • mixes and reduces highly intensive solids into fluids • gasses solutions • separates fibres and cellular material into very small particles • extraktions |





System MEGATRON® MT 3000 System MEGATRON® MT 5000 System MEGATRON® MT-D 36-48

Pilot plants are used already in many places as scale-up units for big processing plants.

KINEMATICA offers for both - batch and inline - complete dispersing pilot plants. Results figured out with KINEMATICA pilot plants are easily scaled up to processing conditions.

Therefore these pilot plants can be equipped with everything what is normally used only for processing equipment, e.g.:

- 3-phase-, ex-proof-, high frequency motors
- mechanical seals, with quench fluid or counter-pressure systems
- working chambers with cooling/heating jacket
- telescopic stands, pumps, piping
- processing tanks

From less than a liter (batch) up to approx. 4000 l/h (inline) - KINEMATICA offers the most suitable solution.

! The advantage of a KINEMATICA Pilot Plant is to have a suitable, individual, extensible and product specific test equipment for an excellent price/performance ratio.

It is no more necessary to use big, unhandy processing plants in an experimental stage. With KINEMATICA pilot plants it's easy to figure out data like

- processing time
- geometry of the dispersing generator(s)
- possible final result of particle/droplet sizes
- processing conditions (temperature, vacuum, pressure, viscosity, ...)
- kind of processing (batch or inline)
- kind of processing tank (single or multi-walled, pressure/vacuum design)

KINEMATICA takes a close look at quality; therefore KINEMATICA dispersing equipment is manufactured according to all mechanical and electric/electronic regulations and quality certifications like ISO, CE, EMC, GMP, VDE, 3A, FDA, or other specific prescriptions.

| MEGATRON® Generator MTG | | | |
|---|---|---|---|
| Type MTG 20/2 generator | Type MTG 30/2 generator | Type MTG 30/4 generator | Type MTG 36/2 generator |
| <ul style="list-style-type: none"> • standard modell, available for system MT 3000 • rotor/stator with one teeth row each | <ul style="list-style-type: none"> • standard modell, available for system MT 3000 • rotor/stator with one teeth row each | <ul style="list-style-type: none"> • standard modell, available for system MT 3000 • rotor/stator with two teeth rows each | <ul style="list-style-type: none"> • standard modell, available for systems MT 36-48, MT 5000, MT-D 36-48 • rotor/stator with one teeth row each |
| Maximum Tip Speed 25.0 m/s | 35.0 m/s | 34.0 m/s | 29.0 m/s |
| Throughput up to 20 l/min (depends on the medium) | up to 40 l/min (depends on the medium) | up to 30 l/min (depends on the medium) | up to 50 l/min (depends on the medium) |
| Applications <ul style="list-style-type: none"> • dispersing and mixing of particles in liquid • suspending, crushing, wet milling, extracting • preparing of samples for extraction and decomposition of organic material • intensives mixing | <ul style="list-style-type: none"> • dispersing and mixing of particles in liquid • suspending, crushing, wet milling, extracting • preparing of samples for extraction and decomposition of organic material • intensives mixing | <ul style="list-style-type: none"> • making fine suspensions and emulsions • dissolving of solids • gasses solutions • separates fibres and cellular material into very small particles • extractions • wet milling of solids | <ul style="list-style-type: none"> • dispersing and mixing of particles in liquid • suspending, crushing, wet milling, extracting • preparing of samples for extraction and decomposition of organic material • intensives mixing |





System REACTRON® RT 1



System REACTRON® RT 5



System REACTRON® RT 10

REACTRON® systems are complete processing plants including all necessary processing tanks, stirrers, pumps, piping, connections and electronic regulations (manual, half automatic, automatic control) for applications in laboratory, pilot plant and production with volumes between a few liters and several thousand liters.

The heart of a REACTRON® system is either a MEGATRON® inline or a POLYTRON® batch homogenizer - a combination with both systems is also possible and can increase the results in some special applications. They can be equipped of course with all the above described dispersing generators.

! The advantage is to get a complete production unit ready-to-

plug-in out of one hand and KINEMATICA offers for all KINEMATICA systems an overall after-sales service.

REACTRON® plants are completely manufactured and designed on customer and product specifications, so the REACTRON® system is the most suitable system configuration for your application.

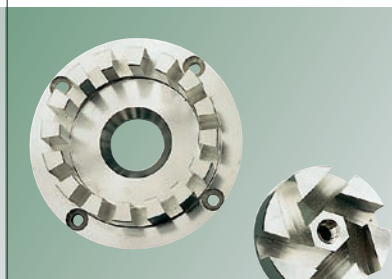
Don't take just a solution, **get the solution** from KINEMATICA for your dispersing, homogenizing, emulsifying, suspending, size reduction and wet milling application.



System REACTRON® RT 150

REACTRON® Processing Systems

| Type MTG 36/4 generator | Type MTG 48/2- generator | Typ MTG 47/6 generator | Type K generator |
|---|---|--|--|
| <ul style="list-style-type: none"> standard modell, available for systems MT 36-48, MT 5000, MT-D 36-48 rotor/stator with two teeth rows each | <ul style="list-style-type: none"> standard modell, available for systems MT 5000, MT-D 36-48 rotor/stator with one teeth row each | <ul style="list-style-type: none"> standard modell, available for systems MT 5000, MT-D 36-48 rotor/stator with three teeth rows each | <ul style="list-style-type: none"> designed for optimal and smooth energy input special model, available for systems MT 36-48, MT 5000, MT-D 36-48, MT 61, MT 90 rotor/stator with one teeth row each |
| 26.0 m/s | 32.0 m/s | 36.0 m/s | see above |
| up to 35 l/min (depends on the medium) | up to 70 l/min (depends on the medium) | up to 60 l/min (depends on the medium) | 30 - 10 000 l/h |
| <p>Anwendungen</p> <ul style="list-style-type: none"> making fine suspensions and emulsions dissolving of solids gasses solutions separates fibres and cellular material into very small particles extractions wet milling of solids | <ul style="list-style-type: none"> dispersing and mixing of particles in liquid suspending, crushing, wet milling, extracting preparing of samples for extraction and decomposition of organic material intensives mixing | <ul style="list-style-type: none"> making finest suspensions and emulsions mixes and reduces highly intensive solids into fluids gasses solutions separates fibres and cellular material into very small particles extractions wet milling of solids | <ul style="list-style-type: none"> producing of sauces, dressings, mayonnaises, ... |



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.

Feinste Lösungen ... weltweit!

Eine breite Produktpalette mit der optimalen Lösung für jede Applikation, sowie der hohe Qualitätsstandard aller Systemteile machen KINEMATICA zum weltweit führenden Unternehmen im Bereich der Rotor/Stator-Dispergier- und Mischtechnik.

Mit offenen Ohren...

KINEMATICA entwickelt die Systeme laufend weiter und bringt sie konzeptionell und konstruktiv auf den neuesten Stand der Technik. Denn KINEMATICA hat die Ohren noch nie vor dem verschlossen, was unerhörte Fortschritte bringt - davon zeugen auch verschiedene Patente.

So hat sich das von KINEMATICA entwickelte Rotor/Stator-Dispergierprinzip weltweit durchgesetzt und bewährt.

... für Ihre Bedürfnisse

Die Einsatzbereiche der Rotor/Stator-Dispergiertechnik erweitern sich ständig. Das nicht zuletzt deshalb, weil KINEMATICA durch Innovationen, wie erhöhte Umfangsgeschwindigkeiten, neue Arbeitsgebiete und neue Applikationen erschliesst - ohne dabei menschliche Aspekte zu vernachlässigen. Erinnert sei an das Bemühen um die Geräuschkürzung am Arbeitsplatz.

Wenden Sie sich an uns. Gerne senden wir Ihnen weitere Unterlagen oder führen Ihnen unsere POLYTRON®- und MEGATRON®-Systeme vor.

Dispersing Technology for Laboratory and Pilot Plant
Batch- and In-line-Dispersing equipment

KINEMATICA AG
Dispergier- und Mischtechnik

Homogenizing- and Dispersing Technology
In-line- und Batch-Processors for Pilot Plant- and Production

KINEMATICA AG
Dispergier- und Mischtechnik

Represented by / Vertreten durch:



KINEMATICA AG

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