

P-19 large

CUTTING MILL



TECHNICAL SPECIFICATIONS



EASY WORKING. GREAT RESULTS.



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TECHNICAL DATA

P-19 large & combination P-19 large / P-19 – Cutting Mill

| | P-19 large | P-19 large / P-19 |
|--|--|--|
| Working principle | Cutting | Cutting |
| Material-type | Medium-hard, soft, brittle, tough, fibrous | Soft, medium-hard, brittle, tough, fibrous |
| Field of application | Plastics Textiles Agriculture Forestry Environment RohS Analytic Construction materials chemistry Food stuffs | Plastics Textiles Agriculture Forestry Environment RohS Analytic Construction materials chemistry Food stuffs |
| Cutting tools | With V-cutting edges and fixed knives <hr/> With straight cutting edges and fixed knives <hr/> Disk milling cutter rotor with indexable inserts and fixed knives <hr/> With notched edges | With V-cutting edges and fixed knives <hr/> With straight cutting edges and fixed knives <hr/> Disk milling cutter rotor with indexable inserts and fixed knives <hr/> With notched edges |
| Materials grinding tools | Hardened stainless steel, hardmetal tungsten carbide, chromium-free tool steel, stainless steel 316L | Hardened stainless steel, stainless steel 316L, hardmetal tungsten carbide, chromium-free tool steel, chromium-free steel DC01 |
| Max. feeding size <i>(depending on material+funnel)</i> | 120 x 85 mm | 120 x 85 mm |
| Max. throughput <i>(depends on material + sieve size)</i> | Up to 85 l/h | Up to 85 l/h |



| | P-19 large | P-19 large / P-19 |
|--|--|--|
| Final fineness <i>(depends on sieve insert – additional sieve sizes available)</i> | 0.25 - 20 mm | 0.1 - 20 mm |
| Feeding | Batch-wise/continuous | Batch-wise/continuous |
| Rotor speed | Low speed: 50 - 700 rpm Fast speed: 300 - 3000 rpm | Low speed: 50 - 700 rpm Fast speed: 300 - 3000 rpm |
| Rotor peripheral speed | Low speed: 0.26 - 3.66 m/s Fast speed: 1.57 - 15.7 m/s | Low speed: 0.26 - 3.66 m/s Fast speed: 1.57 - 15.7 m/s |
| Rotor dimension | Ø 100 mm x L 140 mm | Ø 100 mm x L 140 mm / Ø 100 mm x L 85 mm |
| Types of funnels | Funnel for bulk solids with sample pusher Funnel for bulk solids 10 litres Protected funnel with sample pusher | Protected funnel with sample pusher <i>Other funnels (depending on application) on request.</i> |
| Drive | 50 - 700 rpm: up to 2.8 kW three-phase motor with frequency converter and flywheel mass for stabilising the drive torque 300 - 3000 rpm: up to 5 kW three-phase motor with frequency converter and flywheel mass for stabilising the drive torque | Up to 9.4 kW three-phase motor with frequency converter + flywheel mass for stabilising the drive torque |
| Electrical details/ torque | 50 - 700 rpm: 380 - 460 V/3~, 50 - 60 Hz, 2800 watt, 67 Nm 300 - 3000 rpm: 380 - 460 V/3~, 50 - 60 Hz, 5000 watt, 30 Nm <i>For further voltages see accessories table p.6.</i> | 380 - 460 V/3~, 50 - 60 Hz, 9400 watt <i>Other voltages on request.</i> |



| | P-19 large | P-19 large / P-19 |
|--|---|--|
| Collector systems/ capacities | <p>Vessel stainless steel 316L capacity 3 litres or 10 litres</p> <hr/> <p>Sample glasses from 1 to 5 litres in combination with cyclone</p> <hr/> <p>Stainless steel 316L collecting vessels 20 litres + 60 litres in combination with cyclone</p> | Food grade collecting vessel 60 litres |
| Standards | CE | CE |
| Emission sound pressure level at the workplace acc. to DIN ESO 3746 (workplace related) | 71 dB | 78 dB |
| Weight | 88 kg | 251 kg |
| Safety class | IP21 | IP21 |
| Dimensions (W x D x H) | 45 x 65 x 63 cm table mounted on frame or table-top stand | 100 x 65 x 145 cm on included underframe |



ACCESSORIES

P-19 large – Cutting Mill

Order no.

Article



Instrument without funnel, cutting tool set, sieve cassette, collecting vessel and stand

300 - 3,000 rpm – variable rotational speed adjustment

19.4060.00 for 380 - 460 V/3~, 50 - 60 Hz, 5,000 watts

19.4070.00 for 200 - 240 V/3~, 50 - 60 Hz, 2,350 watts

19.4020.00 for 200 - 240 V/1~, 50 - 60 Hz, 2,350 watts

50 - 700 rpm – variable rotational speed adjustment

19.4040.00 for 380 - 460 V/3~, 50 - 60 Hz, 2,800 watts

19.4000.00 for 200 - 240 V/1~, 50 - 60 Hz, 2,350 watts



Order no.

Article



Accessories for Cutting Mill P-19 large

Funnel

| | |
|------------|---|
| 19.4240.00 | Funnel for long and bulk solids |
| 19.4225.00 | Funnel for bulk solids with sample pusher |
| 19.4230.00 | Funnel for bulk solids, 10 litres |
| 25.2850.00 | Protected funnel with sample pusher |

Collecting vessels

| | |
|------------|---|
| 45.5730.00 | Collecting vessel, 3 litres |
| 45.5700.00 | Collecting vessel for large quantities, 10 litres |

Cutting tool sets

| | |
|------------|---|
| 45.7000.00 | Standard rotor with V-cutting edges and fixed knives made of hardened stainless steel |
| 45.7370.00 | Rotor with V-cutting edges and fixed knives made of hardmetal tungsten carbide |
| 45.7362.00 | Rotor with notched edges and fixed knives made of hardened stainless steel |
| 45.7352.00 | Rotor with straight cutting edges and fixed knives made of hardened stainless steel |
| 45.7200.00 | Disk milling cutter rotor with indexable inserts and fixed knives made of hardmetal tungsten carbide |
| 45.7201.00 | Disk milling cutter rotor with large chip chambers, indexable inserts and fixed knives made of hardmetal tungsten carbide |

Sieve cassettes made of stainless steel 316L

| | |
|------------|---------------------------------|
| 45.7410.10 | 0,25 mm trapezoidal perforation |
| 45.7420.10 | 0.5 mm trapezoidal perforation |
| 45.7430.10 | 0.75 mm trapezoidal perforation |
| 45.7440.10 | 1 mm trapezoidal perforation |



| Order no. | Article |
|---|---|
| 45.7460.10 | 2 mm trapezoidal perforation |
| 45.7475.10 | 2 mm square perforation |
| 45.7500.10 | 4 mm square perforation |
| 45.7510.10 | 6 mm square perforation |
| 45.7520.10 | 8 mm square perforation |
| 45.7530.10 | 10 mm square perforation |
| Accessories for chromium-free comminution | |
| Cutting tool set made of chromium-free tool steel | |
| 45.7112.00 | Rotor with V-cutting edges and fixed knives |
| Sieve cassettes made of chromium-free steel DC01 | |
| 45.7440.09 | 1 mm trapezoidal perforation |
| 45.7460.09 | 2 mm trapezoidal perforation |
| 45.7500.09 | 4 mm square perforation |
| 45.7510.09 | 6 mm square perforation |
| 45.7520.09 | 8 mm square perforation |
| 45.7530.09 | 10 mm square perforation |
| Sample exhaustion with cyclone separators | |
| High-performance cyclone separators | |
| 19.4907.00 | High-performance cyclone separator made of stainless steel 316L with flexible tube connection, incl. sample glass 1 litre |
| 19.4947.00 | High-performance cyclone separator with solid piping made of stainless steel 316L, incl. sample glass 1 litre |
| Collecting vessels for high-performance cyclone separators | |
| 83.3250.00 | Sample glass 1 litre |
| 83.3260.00 | Sample glass 2 litres |
| 83.3270.00 | Sample glass 5 litres |



| Order no. | Article |
|--|---|
| 45.8040.00 | Collecting vessel, 20 litres made of stainless steel 316L |
| 45.8050.00 | Collecting vessel, 60 litres made of stainless steel 316L (not suitable for 19.4947.00) |
| Exhaust system for high-performance cyclone separators | |
| 19.3073.00 | Switch box for controlling the exhaust system directly via the Cutting Mills P-19 / P-19 large for 100–240 V/1~, 50–60 Hz, up to 3,600 Watt |
| 43.9070.00 | Exhaust system, dust category "M" according to DIN EN 60335-2-69 for 230 V/1~, 50/60 Hz, 1,600 watts |
| 43.9055.00 | Fleece filter bag for exhaust system (pack = 5 pieces) ¹⁾ |
| 43.9052.00 | Plastic bag for exhaust system (pack = 5 pieces) ¹⁾ |
| ¹⁾ Remark: One pack/one piece is included in the scope of delivery of the exhaust system. | |
| Stands | |
| 45.5820.00 | Universal support stand |
| 45.5829.00 | Stand cpl. welded, electrochemically polished made of stainless steel 316L |
| 45.5800.00 | Stand with wheels |
| 45.5805.00 | Table-top stand 330 mm high |
| Certification | |
| 96.0250.00 | IQ/OQ documentation (questionnaire format – implementation not included) |
| <p><i>Collecting vessels are also available in further sizes. Cutting tools sets are also available in further materials. Sieve cassettes are also available in further perforations.</i></p> <p><i>PLC module for Cutting Mills P-19 large available on request. Simply ask us.</i></p> | |



P-19 large on a stand with wheels with high-performance cyclone and collecting vessel



Order no.

Article

Cutting Mill Combination P-19 / P-19 large

19.5030.00

for 380 - 460 V/3~, 50 - 60 Hz, 9,400 watts
consisting of: Cutting Mill P-19 large with variable rotational speed 50 to 700 rpm, Cutting Mill P-19 with variable rotational speed 300 to 3,000 rpm, interposed sample divider, protected funnel with sample pusher, underframe, sample exhaustion with high-performance cyclone separator made of stainless steel 316L with flexible tube connection, collecting vessel 60 litres as well as exhaust system

Other configurations and voltages on request!



Cutting tool set and sieve cassette for P-19 large and P-19 are additionally necessary!





APPLICATION EXAMPLES

P-19 large – Cutting Mill

Sample 1: Feed pellets

Accessories:

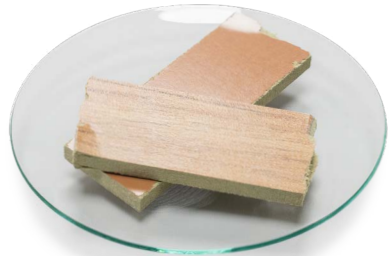
- Standard rotor with V-cutting edges
- 0,5 mm trapezoidal perforation sieve cassettes



Sample 2: Laminate flooring

Accessories:

- Standard rotor with V-cutting edges
- 1 mm trapezoidal perforation sieve cassettes

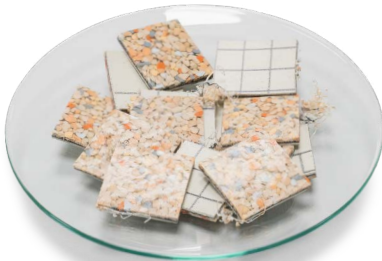




Sample 3: PVC flooring tiles

Accessories:

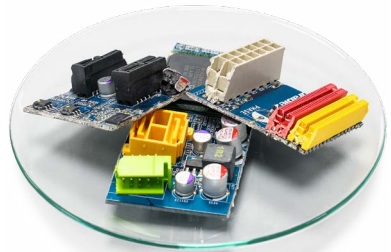
- Standard rotor with V-cutting edges
- 1 mm trapezoidal perforation sieve cassettes



Sample 4: Circuit boards

Accessories:

- Disk milling cutter rotor with large chip chambers
- 1 mm trapezoidal perforation sieve cassettes





Sample 5: HDPE caps

Accessories:

- Standard rotor with V-cutting edges
- 1 mm trapezoidal perforation sieve cassettes





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configuration and optimal grinding parameters.



