ALPINE Air Jet Sieve® e200 LS
Easier to use, faster and more reliable: enter a new age with the world’s market leader.

Delivery scope:
Whether eControl Basic, Professional or Ultimate – select the software package that is tailored perfectly to your needs. The functions can be upgraded any time to a higher-level version. The software includes a comprehensive package of accessories.

Technical Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analysis range</td>
<td>(ø 200/203 mm)</td>
</tr>
<tr>
<td></td>
<td>20 µm to 4 mm</td>
</tr>
<tr>
<td></td>
<td>(ø 76 mm)</td>
</tr>
<tr>
<td></td>
<td>10 µm to 2.5 mm</td>
</tr>
<tr>
<td>Navigation</td>
<td>High-resolution, resistive 6.4” TFT touch screen</td>
</tr>
<tr>
<td>Power cable (m)</td>
<td>3.0</td>
</tr>
<tr>
<td>Mains connection (V/~/Hz/A)</td>
<td>100 - 250/1/50-60/15-10</td>
</tr>
<tr>
<td>Underpressure (Pa)</td>
<td>1500 - 5500</td>
</tr>
<tr>
<td>Air flow rate (m³/h)</td>
<td>30 - 115</td>
</tr>
<tr>
<td>Speed (rpm)</td>
<td>18</td>
</tr>
<tr>
<td>Weight incl. power pack (kg)</td>
<td>20</td>
</tr>
<tr>
<td>Protection class (IP)</td>
<td>54</td>
</tr>
<tr>
<td>Dimensions L x B x H (mm)</td>
<td>503 x 370 x 380</td>
</tr>
</tbody>
</table>
THE AIR JET SIEVE. An ALPINE invention. For more than 50 years now, our technology has counted as THE standard in the field of particle size analysis. And to make sure that this remains so in the future, we make continual improvements to our air jet sieve. The result: ALPINE's Air Jet Sieve e200 LS. What lies behind the ergonomic design is a combination of faster and simpler operating comfort with a much higher analysis reliability. The innovative accessories are complemented by the three software packages available: eControl Basic, Professional and Ultimate. They cover the entire range of modern particle analysis. And in doing so, fulfill your high requirements.

The basic functions
Alone the standard equipment of ALPINE’s Air Jet Sieve e200 LS sets standards:
• The software can be upgraded to a higher version at any time
• Innovative and high-resolution 6.4” TFT touch screen
• Intuitive operation thanks to the easily understandable menu structure
• Operating comfort with individual language selection
• Fully automatic identification of the test sieve mesh widths*
• Easily comprehensible information regarding system data and settings
• Direct connection of a laboratory balance via interface
• USB, Ethernet and RS-232C data interfaces are standard
• Integrated 1-GB analysis protocol memory
• Ergonomic industrial design

Exemplary: clearly laid-out TFT color display with touch screen

eControl Basic
eControl Basic is the first choice in production or for quick individual analyses.
No. 397475

eControl Professional
eControl Professional is indispensable for everyday routine tasks in the laboratory.
No. 397476

eControl Ultimate
eControl Ultimate offers maximum operating comfort and analysis reliability.
No. 397477

*Only in combination with original ø 203 mm ALPINE test sieves
ALPINE Air Jet Sieve® e200 LS

Three software packages, one aim: highest possible efficiency as a result of the demand-oriented range of functions.

Whether standardized analysis methods or individualized management and configuration of data, options and many other parameters — the three software packages for the ALPINE Air Jet Sieve e200 LS are tailored to cover all analysis demands perfectly.

Even if you decide on the basic software package: our special software upgrades allow you to extend the range of functions at any time.

ALPINE Air Jet Sieve® e200 LS eControl Basic
No. 397475

Your perfect start in the world of air jet sieving. The software and range of functions can be upgraded at any time to eControl Professional or eControl Ultimate (at an extra charge)

- Includes all basic functions
- Intuitive in operation
- Fast-track analysis evaluations (in table form)
- Manual underpressure preselection
- Laboratory balance interface with Sartorius TE series
- Results are evaluated against the setpoint value specifications (in table form)
ALPINE Air Jet Sieve e200 LS eControl Professional
No. 397476

This is the all-rounder for both simple and demanding sieving analyses. Extended application range with many additional functions. Can be upgraded to eControl Ultimate at any time (at an extra charge).

- Includes all basic functions
- Includes the full function range of eControl Basic
- Automatic underpressure control with allocation of underpressure and sieving time
- Sieve identification for each test sieve for underpressure and sieving time
- Laboratory balance communication via RS-232 interface
- Export and print function of analysis reports
- LIMS-capable software link
- Sieve set management SOPs

Graphical evaluation plotted in a cumulative curve

ALPINE Air Jet Sieve e200 LS eControl Ultimate
No. 397477

The last word in air jet sieving. Maximum operating reliability and highest operating comfort under observance of different regulations – especially those of the pharmaceuticals industry.

- Includes all basic functions
- Includes the full range of functions of eControl Basic and eControl Professional
- The results are evaluated against the setpoint value specifications (in table and graph form)
- Individual assignment of underpressure and sieving time parameters per test sieve using RFID technology
- Ethernet connection for printer, remote control and network
- Print-out of analysis protocols (PDF / hard copy) with individual company logo

Connection for printer, remote control and network
**e200 LS eControl Ultimate**

No. 397477

**e200 LS eControl Professional**

No. 397476

**e200 LS eControl Basic**

No. 397475

---

**1. ALPINE Air Jet Sieve e200 LS**

**BASIC FUNCTIONS**
- Sieving result: undersize or residue in %
- Individual language selection
- System data indication / unit settings
- Timer with pause function
- Change units of measurement (mesh width, underpressure)
- Sieving “Lite” for basic operation Start/Stop

**INTERFACES**
- Lab. balance interface for Sartorius Practum®
- Lab. balance communication with RS-232 interfaces
- Ethernet connection for printer, remote control and network

**SIEVE IDENTIFICATION**
- Automatic identification of test sieve mesh width
- Individual assignment of underpressure and sieving time parameters to every test sieve

**DATA EVALUATION**
- Open/save sieving analyses
- Tabular evaluation
- Graphical evaluation (cumulative curve)
- Choice of different graphics (cumulative curve, RRS8, histogram)
- LIMS-capable software link
- Data export of analysis protocol CSV / PDF
- Plotting of up to 5 sieving analyses in a graph
- Calculation of D10 / D50 / D90 values
- Calculation of 3 different D(x) values, with individually adjustable values
- Print-out of the analysis protocols (PDF / hard copy)
- Print-out of the analysis protocols (PDF / hard copy) with individual company logo

**ANALYSIS QUALITY**
- Manual underpressure preselection
- Automatic underpressure control
- Sieve set management (SDP)
- Analysis evaluation against setpoint specifications (tabular)
- Analysis evaluation against setpoint specifications (graph)

**DATA SECURITY - OPTIONAL**
- User administration with password management and event logging
- 21 CFR Part 11 conform, Electronic Records, Audit Trail

---

**STANDARD ACCESSORIES**
- Vacuum cleaner, dust class L - 120 V; 50/60 Hz
- Cover EL3 203 mm
- Suction filter EL5
- Adapter for ALPINE test sieves ø 203 mm
- Hammer
- Brush
- Multi-PSU power pack
- Power connections RS-485
- Power connection cable

---

**e200 LS eControl-Software Upgrades**

**UPGRADES**

<table>
<thead>
<tr>
<th>Upgrade from Basic to Professional</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>404317</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Upgrade from Professional to Ultimate</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>404318</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Upgrade from Basic to Ultimate</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>404319</td>
</tr>
</tbody>
</table>

**Optional Accessories / Variants - additional charge**

<table>
<thead>
<tr>
<th>DUST EXTRACTION</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>High-performance industrial vacuum cleaner HEPA - 120 V; 50/60 Hz</td>
<td>417522*</td>
</tr>
</tbody>
</table>

**Accessories**

<table>
<thead>
<tr>
<th>DUST COLLECTION</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALPINE high-performance cyclone GAZ 120</td>
<td>408808</td>
</tr>
<tr>
<td>ALPINE small filter, dust class L, type 150/36</td>
<td>336197</td>
</tr>
<tr>
<td>ALPINE small filter, dust class M, type 150/36</td>
<td>360753</td>
</tr>
<tr>
<td>ALPINE small filter, dust class H, type 150/36</td>
<td>429592</td>
</tr>
</tbody>
</table>

---

**Spare parts & standard accessories**

<table>
<thead>
<tr>
<th>STANDARD ACCESSORIES</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plexiglas cover type 203</td>
<td>340463</td>
</tr>
<tr>
<td>Suction filter type 120</td>
<td>401477</td>
</tr>
<tr>
<td>Standard adapter for ø 203 mm test sieves</td>
<td>396530</td>
</tr>
</tbody>
</table>

**Other accessories**

<table>
<thead>
<tr>
<th>VACUUM CLEANERS</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 spare fleece filter bags, dust class L - VPE</td>
<td>380059</td>
</tr>
<tr>
<td>5 spare safety filter bags, dust class H - VPE</td>
<td>380058</td>
</tr>
</tbody>
</table>

---

**Spare parts & operating supplies**

<table>
<thead>
<tr>
<th>VACUUM CLEANERS</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cloth filter for vacuum cleaner L</td>
<td>328416</td>
</tr>
<tr>
<td>Spare filter element, dust class L</td>
<td>317304</td>
</tr>
<tr>
<td>Spare filter element, dust class M</td>
<td>380412</td>
</tr>
<tr>
<td>Spare hose for dust class LandH - incl. sleeve</td>
<td>311929</td>
</tr>
</tbody>
</table>

**Laboratory balances**

<table>
<thead>
<tr>
<th>LABORATORY BALANCES</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spare cable for Sartorius</td>
<td>239903</td>
</tr>
<tr>
<td>Spare cable for Mettler Toledo</td>
<td>291180</td>
</tr>
</tbody>
</table>

---

**MAINTENANCE CONTRACTS**

| Basic and full-service maintenance contracts | on request |
| DATA SECURITY | on request |
| Pharma-package eControl Plus | 424873 |
| Qualification documentation | 414639 |
| Qualification service | on request |
ALPINE Air Jet Sieve® e200 LS accessories

Individualization and maintaining quality with ALPINE’s huge range of accessories.

Tailor the possibilities of ALPINE’s Air Jet Sieve e200 LS exactly to your analysis requirements and local conditions. Make use of the practical accessories, operating supplies and spare parts as well as the unique range of services to guarantee ongoing analysis quality for many years to come.

2.1 Dust extraction: vacuum cleaners

High-performance industrial vacuum cleaner type L – 120 V
No. 397362

Sturdy and highly efficient vacuum cleaner for reliable generation and cleaning of the working air
- Dust class L (max. permeability 1% as defined in EN 60335-2-69)
- Washable PET fleece filters reduce maintenance costs
- Container volume 30 liters
- Holder for ALPINE Multi PSU power pack

<table>
<thead>
<tr>
<th>Technical specifications</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Output Pec (W)</td>
<td>1000</td>
</tr>
<tr>
<td>Mains connection (V/~/Hz/A)</td>
<td>120/1/60/15</td>
</tr>
<tr>
<td>Air flow rate (l/min.)</td>
<td>3700</td>
</tr>
<tr>
<td>Underpressure (mbar/kPa)</td>
<td>250/25</td>
</tr>
<tr>
<td>Noise level (dB(A))</td>
<td>59</td>
</tr>
<tr>
<td>Max. container volume (l)</td>
<td>30</td>
</tr>
<tr>
<td>Weight (kg)</td>
<td>10</td>
</tr>
<tr>
<td>Dimensions</td>
<td>450 x 380 x 595 mm (L x W x H)</td>
</tr>
</tbody>
</table>

Delivery scope of high-performance industrial vacuum cleaner L
- incl. antistatic suction hose DN 32 x 2000 mm (ø x L)
- incl. connection cable 2.5 m with special plug
- incl. 1x dust bag
- incl. 1x filter element

Note: This vacuum cleaner is included in the delivery scope of ALPINE’s Air Jet Sieve e200 LS! Upgrade possible at any time for an additional charge. The vacuum cleaner is not suitable for continuous operation. We recommend ordering our side channel compressor. Available on request.
High-performance industrial vacuum cleaner
type HEPA
No. 417522

Protective filter system for toxic dusts
- Dust class H (HEPA H14)
- Container volume 30 liters
- Holder for ALPINE Multi PSU power pack

Technical specifications

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output Pmax (W)</td>
<td>1500</td>
</tr>
<tr>
<td>Output Piec (W)</td>
<td>1200</td>
</tr>
<tr>
<td>Mains connection (V~/~/Hz/A)</td>
<td>120/1/60/15</td>
</tr>
<tr>
<td>Air flow rate (l/min.)</td>
<td>3700</td>
</tr>
<tr>
<td>Underpressure (mbar/kPa)</td>
<td>250/25</td>
</tr>
<tr>
<td>Noise level (dB(A))</td>
<td>59</td>
</tr>
<tr>
<td>Max. container volume (l)</td>
<td>30</td>
</tr>
<tr>
<td>Weight (kg)</td>
<td>10</td>
</tr>
<tr>
<td>Dimensions</td>
<td>450 x 380 x 595 mm (L x W x H)</td>
</tr>
</tbody>
</table>

Delivery scope of type H high-performance industrial vacuum cleaner

- incl. antistatic suction hose DN 32 x 2000 mm (ø x L)
- incl. connection cable 2.5 m with special plug
- incl. 1x dust bag
- incl. 1x HEPA filter element
2.2 Dust collection: small filter & high-performance cyclone

**ALPINE small filter, dust class L, type 150/36**
No. 336197

For active dedusting of the process air
• Star filter with 1.3 m² filter surface
• Mechanical filter cleaning
• Capacity approx. 25 liters

Dimensions 360 x 630 mm (Ø x H)
Delivery scope ALPINE small filter, dust class L, type 150/36
• incl. antistatic suction hose DN 32 x 2000 mm (Ø x L)

**ALPINE high-performance cyclone GAZ 120**
No. 408808

Permits reliable and clean recovery of the fines
• Almost complete recovery of the fines
• No contamination caused, e.g. by filter lint
• Suitable for material quantities up to 1 liter
• Stainless steel design, can be dismantled and washed

Dimensions 275 x 155 x 770 mm (L x B x H)
Delivery scope ALPINE high-performance cyclone GAZ 120
• incl. stand
• incl. 1-liter screw-cap jar
• incl. electrically conductive wire spiral hose, abrasion-proof, largely smooth on inside, DN 32 x 2000 mm (Ø x L)

**Barrel 20 l for cyclone GAZ 120**
No. 294396

Specifications as for part no. 336197
• PTFE star filter with 0.7 m² filter surface for sticky, ultrafine powder

**ALPINE small filter, dust class M, type 150/36**
No. 360753

Specifications as for part no. 336197
• PTFE star filter with 0.7 m² filter surface for sticky, ultrafine powder

**ALPINE small filter, dust class H, type 150/36**
No. 429592

Specifications as for part no. 336197
• PTFE star filter with 0.7 m² filter surface for sticky, ultrafine powder
• HEPA H14 filter element
• Without automatic filter cleaning
2.3 Peripheral units: laboratory balances

Sartorius laboratory balance Practum® 1102-1S
No. 424347

Compatible high-precision laboratory balance to 1,100 g with weighing pan that is ideally suited to all test sieves up to ø 220 mm
- Max. capacity: 1,100 g
- Reading resolution: 0.01 g
- Touch screen with Sartorius human interface

<table>
<thead>
<tr>
<th>Connection</th>
<th>100-240 V, 50/60 Hz</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimensions</td>
<td>360 x 216 x 95 mm (L x B x H)</td>
</tr>
<tr>
<td>Delivery scope</td>
<td>Sartorius Practum® 1102-1S</td>
</tr>
<tr>
<td></td>
<td>incl. 1 data cable</td>
</tr>
<tr>
<td></td>
<td>incl. sample pan ø 130 mm</td>
</tr>
</tbody>
</table>

Mettler Toledo ME 802 laboratory balance
Nr. 441797

Compatible high-precision laboratory balance to 820 g in a high quality aluminium cast housing
- Max. capacity 820 g
- Reading resolution: 0.01 g
- Force compensation measuring cell
- Internal adjustment at a keystroke

<table>
<thead>
<tr>
<th>Connection</th>
<th>120 V, 50/60 Hz</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimensions</td>
<td>319 x 200 x 100 mm (L x B x H)</td>
</tr>
<tr>
<td>Delivery scope</td>
<td>Mettler Toledo ME 802</td>
</tr>
<tr>
<td></td>
<td>incl. 1 special serial data cable</td>
</tr>
<tr>
<td></td>
<td>incl. sample pan ø 130 mm</td>
</tr>
</tbody>
</table>
2.4 Sieving: Test sieves with frame made of stainless steel

ALPINE test sieves
No.: see table

Stainless steel sieves from 20 µm to 4000 µm with RFID eliminate mix-ups
- Fully automatic sieve identification by means of RFID chip
- Incl. transponder in plastic clip
- High-quality, stainless steel design
- Incl. certificate of conformity 2.1 as defined in DIN EN 10204

Sieve deck: stainless steel
Sieve frame: stainless steel
Standards: DIN ISO 3310, BS 410, ASTM E11
Dimensions: ø 203 mm

Special feature: RFID technology saves having to manually input the sieve mesh width and prevents sieve insert errors!
Inspection certificate 3.1 on request.

Inspection certificate 3.1 for ALPINE test sieves
No.: see table

Delivery scope: individual test certificate 3.1 as per DIN EN 10204
- incl. computer screen analysis
- incl. record of results (tabular and graphical form)
2.5 ALPINE special sieves

**ALPINE special sieves**

No. see table

- High-quality stainless steel design
- Incl. certificate of conformity 2.1 as per DIN EN 10204

<table>
<thead>
<tr>
<th>Sieve frame</th>
<th>Stainless steel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard</td>
<td>DIN ISO 3310-1, -3</td>
</tr>
<tr>
<td>Dimensions</td>
<td>ø 76 mm (3”)</td>
</tr>
<tr>
<td>Effective height</td>
<td>25 mm</td>
</tr>
</tbody>
</table>

Note: No sieve identification possible!
Inspection certificate 3.1 on request

**Micro-sieving unit for e200 LS**

No. 424370

The micro-sieving unit is suitable for use with special sieves of 76 mm in diameter. Every e200 LS air jet sieve can be converted for operation with micro-precision sieves by means of this micro-sieving unit.

<table>
<thead>
<tr>
<th>Adapter material</th>
<th>Stainless steel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nozzle material</td>
<td>Stainless steel</td>
</tr>
<tr>
<td>Lid material</td>
<td>PMMA</td>
</tr>
</tbody>
</table>

Delivery scope micro-sieving unit 76 mm
- incl. short slotted nozzle
- incl. adapter to accommodate ALPINE ø 76 mm special sieves
- incl. Plexiglas lid ø 76 mm

Note: Suitable for mini batches of feed material.
### Universal sieve

Whether Alpine's previous model of test sieve or another make entirely: with the different sieve adapters, all test sieves currently on the market can be used in ALPINE's air jet sieve e200 LS. Handling is simple, fast and cost-effective.

#### Adapter for test sieves Ø 200 mm "ALPINE A200 LS" and "Haver & Boecker"

No. 396531

Permits the use of existing Alpine sieves and sieves of a different make
- Significant cost savings as opposed to buying new sieves
- Available for sieves of all ALPINE air jet sieve forerunner models (A200 LS)
- For Ø 200 mm sieves made by Haver & Boecker

#### Adapter for test sieves Ø 200 mm "Retsch"

No. 396532

#### Adapter for test sieves Ø 203 mm / 8" "W.S. Tyler"

No. 398251

#### Adapter for test sieves Ø 203 mm / 8" "Haver & Boecker"

No. 398292

#### Adapter for test sieves Ø 203 mm / 8" "Retsch"

No. 398375

#### Plexiglas cover, type 200 for "A200 LS test sieves"

No. 009883

Suitable for test sieves of the A200 LS generation

#### Plexiglas cover, type 200 for Haver & Boecker test sieves

No. 439683

Suitable for test sieves Haver & Boecker
Diameter: 200 mm / effective height 50mm

### ALPINE sieve holder, type 203 SH

No. 354369

Secure and space-saving storage of your valuable test sieves
- for up to 5 test sieves
- optimum storage
- space-saving design
- clear arrangement of sieve sizes
- simple assembly

Dimensions: 300 x 253 x 167 mm (LxWxH)

Note: Suitable for old and new sieve generations up to Ø 203 mm x 45 mm in width!
Ultrasonic cleaning unit, type S 50 R
No. 441522

Professional test sieve cleaning
- Tried-and-tested ultrasonic system
- Reliable cleaning
- Simple handling

Technical specifications
- Ultrasound frequency (kHz): 37
- Power consumption (W): 150
- HF peak power (W): 600
- Mains connection (V/Hz): 120 / 50/60
- Tank inside dimensions D / H (mm): 240 / 130
- Max. capacity (liters): 5.3
- Weight (kg): 5.0
- Material (tank): stainless steel
- Material (housing): stainless steel
- Dimensions: 260 x 350 (Ø x H)
- Delivery scope: ultrasound cleaning unit, type S 50 R
  - incl. operating manual

Note: Designed for the intensive cleaning of analysis and micro-precision sieves.

Sieve holder for type S 50 R
No. 437258

Stainless steel basket for S 50 R
No. 429177

Inside dimensions: 215 mm
Material: stainless steel
Note: Special accessory to permit cleaning small components such as the e200 LS nozzle.

Cover for S 50 R
No. 429178

Ultrasonic cleaning unit, type S 300 H
No. 253345

Professional cleaning of up to 5 test sieves
- Tried-and-tested ultrasonic system
- Simple handling
- LED indication of set time and remaining time
- Temperature-controlled cleaning process of up to 5 test sieves

Technical specifications
- Ultrasound frequency (kHz): 37
- Total power consumption (W): 1500
- Effective ultrasound output (W): 300
- Max. ultrasound peak power (W): 1200
- Heating power (W): 1200
- Mains connection (V/Hz): 120 / 50/60
- Tank inside dimensions L x B x H (mm): 300 x 505 x 200
- Max. capacity (liters): 28
- Weight (kg): 11.0
- Material (tank): stainless steel
- Material (housing): stainless steel
- Liquid run-off: 3/8"
- Protection class: IP 20
- Dimensions: 340 x 568 x 321 mm (L x W x H)
- Delivery scope: ultrasound cleaning unit type S 300 H
  - incl. “EU” connection cable
  - incl. operating manual

Stainless steel basket for S 300 H
No. 395226

Inside dimensions: 455 x 250 mm
Material: stainless steel
Note: Special accessory to permit cleaning small components such as the e200 LS nozzle.

Cover for S 300 H
No. 395228

Cleaning concentrate Tec Clean A4
No. 441521

Universal alkaline cleaner
- Suitable for the treatment of metals, glass, rubber, ceramics and alkaline-resistant plastics
- It thoroughly removes oil, grease, carbon black and dust

Contents: 2.5 liters
Air Jet Sieve® e200 LS spare parts & supplies

The ALPINE Air Jet Sieve is irreplaceable.
BUT NOT ITS SPARE PARTS AND SUPPLIES.

Order any especially stressed components and disposables at the same time you order your air jet sieve! Whether filter elements, cables, hoses or test sieves — we offer you a wide range of products to ensure the long-term reliability and cost-effective application of your ALPINE air jet sieve.

**Plexiglas cover type 203**
No. 340463
Specially coated for quick cleaning after analysis

**Suction filter type 120**
No. 394193
Effective noise reduction and process air cleaning

**Adapter for ø 203 mm test sieve series**
No. 396530
Easy and quick accommodation of all test sieves

**Hammer**
No. 009932
For tapping off any deposits from the Plexiglas cover

**Brush**
No. 328110
Natural bristle brush for cleaning test sieve and cover

**Multi-PSU power pack**
No. 397421
Wide-voltage-range power pack from 100 – 250 V 50/60 Hz

**Power connection RS-485**
No. 402615
Connects the Multi-PSU power pack with the e200 LS
### 3.2 Vacuum cleaners

<table>
<thead>
<tr>
<th>Product Description</th>
<th>Model Number</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spare fleece filter bag, dust class L</td>
<td>380059</td>
<td>5 to a package, standard design</td>
</tr>
<tr>
<td>Spare safety filter bag, dust class H</td>
<td>387015</td>
<td>5 to a package, multi-layer design</td>
</tr>
<tr>
<td>Cloth filter for vacuum cleaner L</td>
<td>324816</td>
<td>For the reliable filtering of difficult dust</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• For extremely fine, hygroscopic or adhesive dust</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Especially suitable for cement powder</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Polymer-coated needle felt</td>
</tr>
<tr>
<td>Note: Substitute for fleece filter bag, dust class L No. 380059</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spare filter element, dust class L</td>
<td>317304</td>
<td>PET fleece, washable</td>
</tr>
<tr>
<td>Spare filter element, dust class H</td>
<td>380412</td>
<td>HEPA H14</td>
</tr>
<tr>
<td>Spare hose for dust classes L and H</td>
<td>311929</td>
<td>incl. sleeve, antistatic, DN 32 x 2000 mm (ø x L)</td>
</tr>
</tbody>
</table>

### 3.3 Dust collection

<table>
<thead>
<tr>
<th>Product Description</th>
<th>Model Number</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spare star filter 1.3 m² dust class L for small filter 150/36</td>
<td>345988</td>
<td></td>
</tr>
<tr>
<td>Spare star filter 0.7 m² PTFE dust class M for small filter 150/36</td>
<td>443555</td>
<td></td>
</tr>
<tr>
<td>Spare hose for small filter 150/36 dust classes L and M</td>
<td>345747</td>
<td>incl. sleeve, antistatic, DN 32 x 2000 mm (ø x L)</td>
</tr>
<tr>
<td>Screw-cap jar for high-performance cyclone GAZ 120</td>
<td>009968</td>
<td>incl. screw cap</td>
</tr>
<tr>
<td>Spare wire spiral hose for high-performance cyclone GAZ 120</td>
<td>007087</td>
<td>electrically conductive, abrasion-proof, largely smooth on inside DN 32 x 2000 mm (ø x L)</td>
</tr>
</tbody>
</table>

### 3.4 Laboratory balances

<table>
<thead>
<tr>
<th>Product Description</th>
<th>Model Number</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spare cable for Sartorius</td>
<td>226033</td>
<td></td>
</tr>
<tr>
<td>Spare cable for Mettler Toledo</td>
<td>251850</td>
<td></td>
</tr>
<tr>
<td>Spare sample pan ø 130 mm</td>
<td>279119</td>
<td></td>
</tr>
</tbody>
</table>
ALPINE Air Jet Sieve® e200 LS – Service

Fast service instead of worry lines:
with ALPINE’s spare parts and maintenance options.

Quality and reliability for users and analysis results take priority. Which is why the ALPINE air jet sieve e200 LS has been the last word in particle size analysis for more than 50 years. If in spite of this, you experience problems: our spare parts and maintenance options are there to assist you - quickly and without hassle.

4.1 Maintenance contracts

The ALPINE air jet sieve e200 LS is a particle size analyser that is used in many cases for quality assurance applications. The DIN ISO 9000 ff. standard mandates that these types of analysers be tested at regular intervals.

Basic maintenance contract

Price on request

Performance scope
- Annual inspection of the analyser in your factory
- General check for function and damage
- Pressure test
- Test run
- Preparation of a system log
- A basic maintenance contract excludes inspection of the sieves, free exchange of defective parts and the provision of a complimentary analyser during repairs.

Full-service maintenance contract

Price on request

Performance scope
- Annual inspection of the analyser in our Augsburg factory
- General check for function and damage
- Pressure test
- Test run
- Preparation of a calibration report
- Loan of an air jet sieve during maintenance
- Shipping/return of the units within the EU
- Replacement of defective parts. If we determine during annual maintenance that any parts are defective, we will exchange them free of charge
- Problems in between maintenance procedures
- Quickest possible reaction - either spare parts are shipped to you or an air jet sieve is placed at your disposal free of chargeduring any necessary repairs.
- Inspection of analysis sieves

Included in the annual maintenance of the unit is also the inspection of 4 commonly used sieves. More sieves can be inspected at a surcharge. Alpine’s full-service maintenance package guarantees a high availability of the e200 LS and moreover gives you the assurance that the analyses carried out on your products are of maximum precision.
4.2 Data security

**Pharma package eControl Plus**

No. 424873

The e200 LS is especially suited to the needs of the pharmaceuticals industry. The analyser is on the one hand protected against unauthorized use, and on the other hand, all operating actions are documented.

Requirements for software validation broken down into

- **ISPE GAMP 5**
- **FDA 21 CFR Part 11**
- **EC GMP Annex 11 conform**

- User administration for different users with different authorization levels
- Password management for log-on authorization
- Audit trail – monitoring of user activities and event logging
- Data management & access authorization for the customer’s network

This system was validated by the Albstadt-Sigmaringen University and is approved for use in GMP-regulated environments.

Note: Network connection mandatory.

**Qualification documentation for e200 LS**

No. 414639

The qualification is the “documented proof that the equipment, systems and units in the installed or modified design correspond to the approved design and to the manufacturer’s recommendations.” (ZLG – Aide Memoire 2010.)

- Qualification master plan
- Risk analysis/evaluation
  
  The critical factors of the device or system and process were determined by the risk analysis and the requisite activities were based on this. The selected methods were recorded in the document:
  
  “Failure mode and effect analysis FMEA.”

- Qualification templates for:
  
  - Design qualification (DQ)
  - Installation qualification (IQ)
  - Operation qualification (OQ)
  - Performance qualification (PQ)

- Software validation as per GAMP 5 and 21 CFR Part 11 (only optional for eControl Ultimate)
- Document set: complete package without test execution.

**Training and qualification on site**

Price on request

We can offer various comprehensive services for the e200 LS: training of operators, test run and inspection. Qualification documentation (IQ, OQ) execution on site.
Hosokawa Alpine is a member of the Hosokawa Micron Group, a high-performance manufacturer of systems for powder and particle processing, systems for the confectionery industry as well as plastics processing machines and systems. The group is known and reputed the world over for its power of innovation, constant product care and market-oriented R&D. The most important group resources are R&D, engineering and manufacturing as well as customer service in all global markets.

© Hosokawa Alpine 2014. Printed in Germany.