

# NEXOPART AIR JET SIEVE MACHINE e200 LS

Particle analysis – simple and flexible.



simplicity for your lab



# NEXOPART AIR JET SIEVE MACHINE e200 LS

Our quiet, fast and efficient Air Jet Sieve Machine e200 LS delivers accurate measurement results and high reproducibility. Curious? Learn more.

With these features, you are always in full control:

- >> HIGH REPRODUCIBILITY AND COMPARABILITY
- **>>** FUNCTIONAL AMPLIFICATION THROUGH SOFTWARE-UPGRADES
- >> AUTOMATED AND INNOVATIVE USER GUIDANCE
- >> 100 % MADE IN GERMANY

# INNOVATIVE HARDWARE AND SMART SOFTWARE

The NEXOPART Air Jet Sieve Machine e200 LS is a test sieve machine with an integrated software. In addition to reliable analytical results, it impresses with its modular operating principle, the innovative diagnostic tool and the very minor operation noise.

#### > DIAGNOSTIC TOOL

All electronic components are now monitored automatically by status LEDs – throughout the entire service life.

#### **> QUIETER OPERATION**

50% quieter than its predecessor! The intake duct with optimised air flow geometry and the suction silencer make it possible!

#### **> CONNECTION CONCEPT**

A neat connection concept on the rear of the device – cables and connections are now integrated into the device and are therefore less susceptible to electronic interference.

# FEATURES!

#### **> MODULAR FUNCTIONALITY**

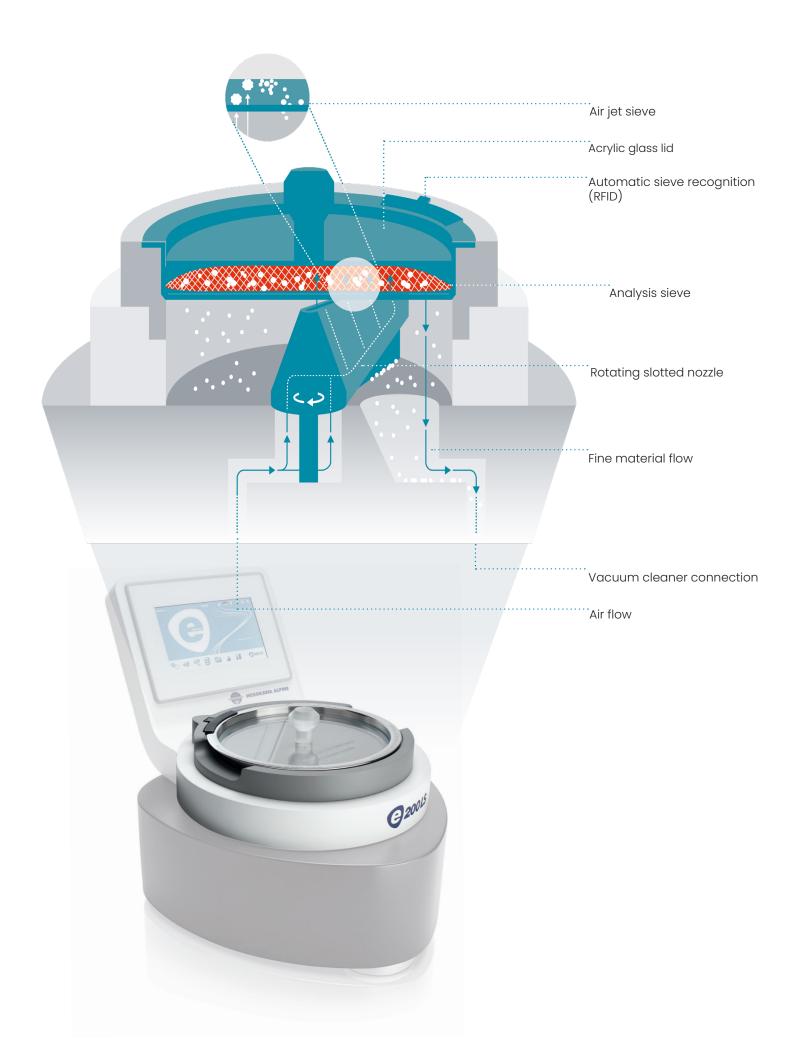
The suction opening enables a wide range of different possibilities – dehumidification/cooling as well as the remote intake and feeding of additives is now no trouble at all.

#### > VACUUM CLEANER

The powerful vacuum cleaner from Kärcher® with filter cleaning is the professional solution for the production line and laboratory. ()200LS

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# **OPTIMAL RESULTS THROUGH** MAXIMUM EFFECTIVENESS

## Controlled forces take effect within the shortest space of time

Because extremely fine powders tend to agglomerate and therefore clog up the sieve, the air jet sieve machine e200 LS is the device of choice for sieving fine powders. This is where the e200 develops maximum effectiveness. Not just one, but two components work together here: a sieving chamber and an industrial vacuum cleaner connected up to the sieving chamber.

Once the vacuum cleaner is switched on, it creates a vacuum inside the sieving chamber. The extremely narrow

slot of the slotted nozzle ensures that the incoming air is accelerated and flows through the sieve cloth at high speed from below. The particles on the sieve cloth are dispersed briefly by the Separation, fractionation and air jet at the lid - even before they are pulled downwards through the sieve cloth by the suction of the vacuum slotted nozzle which rotates inside the cleaner. The effect: the fine material is separated quickly and effectively. The coarse material remains on the sieve and is reweighed at the end of the sieving process.

> Further advantages: the automatic underpressure regulation as well as

specification of the sievingrelevant parameters guarantee reproducible results.

particle size analysis of powders in various industries:

- > Minerals
- > **Chemicals production**
- Pharmaceuticals through > compliance with 21 CFR Part 11
- > Toner production
- Food and nutrition industry
- > Cement and construction material applications

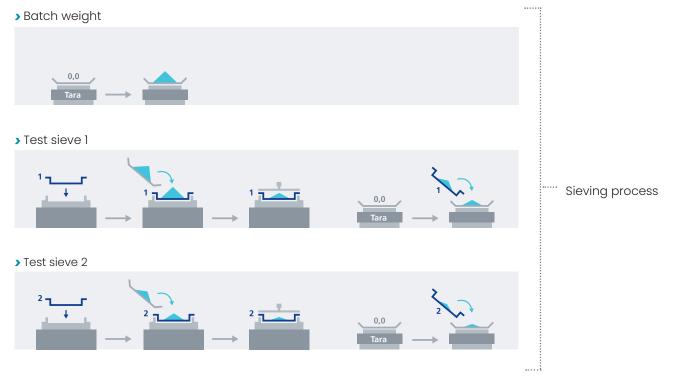


Illustration of the individual stages of a sieving analysis.

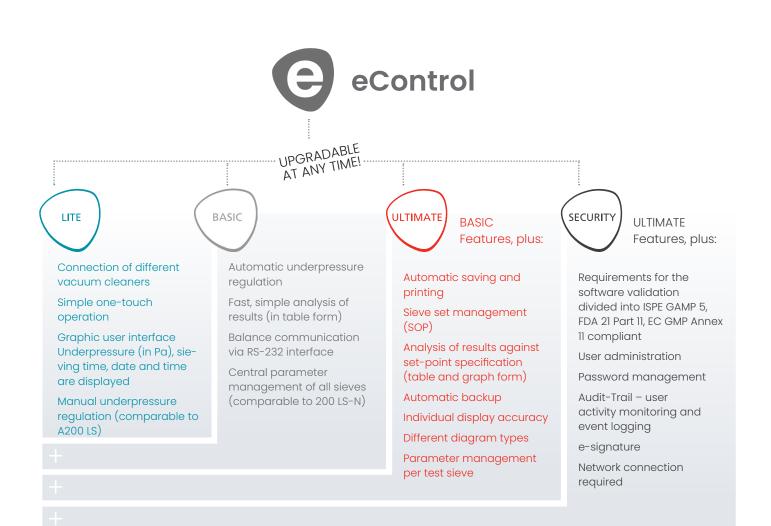
# SOFTWARE TAILORED TO REQUIREMENTS

### Four high-performance software-packages to choose from

Regardless of whether heavy-duty tasks with high throughputs in the minerals and cement industry are involved or highly regulated and documentationintensive processes in the production of harmaceuticals and food: our four high-performance software packages offer the optimum solution for every processtechnological environment.

A plus on comfort: regardless of which software package you decide to purchase – it is always pre-installed. Flexible: extend the functions of your e200 LS to optimise your analysing process by software-upgrades. We will send you a new license key that you can install on your device at any time – quick and easy.

**Service-oriented:** we will compile an individual software package tailored exactly to your requirements – take advantage of this offer now!



# INNOVATIVE, DIGITAL, AUTOMATED – OPERATION MADE EASY

The menu navigation is simple and well-defined. Comprehensible symbols on the intuitive touch screen guarantee high operating comfort. Twelve different languages are currently available for the language elements.

#### SETTINGS

System information, date/time, network, balances, sieving, numerical formats, units of measurement, etc.

#### SIEVING

Manual sieving, sieving according to SOPs

#### **TEST SIEVE MANAGEMENT**

Individual assignment of underpressure and sieving time parameters, etc.

#### SOP MANAGEMENT

Standard Operation Procedure for the creation and management of sieving processes

#### ARCHIVE

Retrieval and evaluation of the stored sieving processes

#### USER ADMINISTRATION

User generation and management with up to 5 different authorisation levels



SOFTWARE FEATURE N DETAIL		BASIC		SECURITY
BASIC FUNCTIONS		$\smile$		$\smile$
Inderpressure regulation manually (leakage air flap)	•	-	-	-
Jser administration with authorisation levels	2 levels	2 levels	2 levels	up to 5 levels
system data display/device settings	•	0	f • • •	7 
2 languages available (CZ, DE, US, ES, FR, JP, BR, RU, TR, CN, HR, PL)	•	٥	•	•
Change measurement unit (weight, length, underpressure)	-	-	•	•
Change display accuracy (weight, ratio)	-	-	•	•
udio (acoustic signal for keyboard feedback)	-	-	2 	•
JSB keyboard, mouse, barcode scanner	-	٥	•	٠
thernet port	-	-	•	•
Printer via USB or LAN	-	-	•	•
Screenshot function				
Demo version available for 30 days	-	•	•	•
Connection of different vacuum cleaners (option)	•	-	-	-
ABORATORY BALANCES	1	t		
Standard balance driver (Sartorius/Mettler)	-	•	•	•
Balance driver list upgradable by update	-	-	•	•
alance values can be set with preceding signs	-	-	•	•
TEST SIEVES				
Automatic sieve recognition (RFID)	-	•	•	•
Nesh size unit selectable (µm, mm, ASTM)	-	-	•	•
ndividual parameterisation of sieving time and	_	_	-	
inderpressure per test sieve		_	•	•
SIEVING				
ieving	manual	manual	manual, SOP	manual, SOP
Result output selectable (relative/absolute value)	-	only in %	in g or in %	in g or in %
Automatic underpressure parameterisation	-	central for all sieves	individual	individual
SOP				
Sieve set management (SOPs)	-	-	•	•
mport sieve set	-	-	•	•
Export sieve set	-	-	XML	XML
ARCHIVE MANAGEMENT				
Display analysis result	-	display	display, printer, PC	display, printer, PC
External document archive adjustable via USB, LAN or FileServer	-	-	•	•
Save the analysis results to the ext. document archive	7 • • •		2 5 6 7 8 8	2 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
VALUATION				
abular evaluation	_	•		
Graph: comulative curve, RRSB, histogram	_	_		
Calculation of three individual dx values	_	_		
Graphic sieve analysis comparison (≤ 5) on display	-	-	•	•
Results evaluation against set-point specification	_	_	•	
tabular & graphical)				
MPORT / EXPORT / PRINT				
aboratory Information and Management Systems (LIMS)-capable	-	-	•	٠
nalysis report output to printer	-	-	manual/automatic	manual/automati
ML/PDF data export	-	-	•	•
ummary/daily report can be generated	-	-	•	•
ser list can be generated	-	-	-	•
IPDATE / BACKUP / RESTORE				
		manual	manual / automatic	manual / automati
Backup	-	manual	manual / automatic	manual / automati
JPDATE / BACKUP / RESTORE Backup Restore Jpdate / upgrade of software, firmware, OS	-	manual	manual / automatic	manual / automati

#### SERVICE

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Manufactor and the mention of a second second second		i de la companya de l			
Yearly calibration service (option)		:			
		:		1	

# ORDER NOW:

sales@nexopart.com

9200LS

# TECHNICAL SPECIFICATIONS

#### **RS 232**

Measurement range (with ø 200/203 mm) (with ø 76 mm)

Navigation

Power supply cable (m) Mains connection (V, ~, Hz) Underpressure (Pa) Air flow rate (m³/h) Speed (rpm) Weight (kg) Protection class (IP) Dimensions L × W × H (mm)

#### 20 µm to 4 mm 10 µm to 2,5 mm

High-resolution capacitive 7\* IPS multi-touch screen 3,0 90–264, 1, 50 / 60 1500 – 5000 70 – 130 18 20 54 54 535 × 370 × 386

# SCOPE OF DELIVERY

- > Main device
- > Software i included to match customer requirements
- Incl. accessories (sieve adapter, slotted nozzle, acrylic glass lid, suction silencer, hammer, brush, power connection cable, operationg manual)
- > Please note that it is mandatory to order a suction unit for the Air Jet Sieve Machine

# ACCESSORIES >>>

Adapt the possibilities of the NEXOPART Air Jet Sieve Machine e200 LS exactly to your analysis requirements and conditions on site: with useful accessories, operational supplies and spare parts as well as a unique range of services. All this to ensure that you can depend on the reliable and constantly high measuring accuracy for many years to come.



> e200 LS workstation

### DUST EXTRACTION: VACUUM CLEANER

#### High-performance industrial vacuum cleaner, type L

#### A vacuum cleaner that thinks for itself

The Tact automatic filter cleaning system allows uninterrupted work, even when large volumes of fine dust are produced. The filter cleans itself with targeted, powerful blasts of air. The process is triggered automatically, with the suction pow

- > Dust class L
  - (max. permeability 1% according to EN 60335-2-69)
- > The removable filter housing allows dust-free filter replacement
- > Central rotary switch for toggling between working with or without filter cleaning

#### **TECHNICAL DATA**

Max. power rating (W)	1380
Voltage (V)	220-240
Frequency (Hz)	50-60
Air flow rate (m³/h)	150
Vacuum (mbar)	230
Container capacity (litres)	31
Sound pressure level (dB (A))	69
Weight (kg)	13,5
Dimensions L × W × H (mm)	560 × 370 × 580

#### SCOPE OF DELIVERY

- > Electrically conductive suction hose with e200 LS sleeve
  - in DN 35 × 2500 mm (ø × L)
- > 2.5-m connection cable with special plug for e200 LS
- > 1× fleece filter bag
- > 1× flat pleated filter PES

#### ADDITIONAL INFORMATION

The vacuum cleaner is not designed for continuous operation. To this end, we recommend ordering our High Power vacuum cleaner. A 120-volt vacuum cleaner for the NEXOPART Air Jet Sieve Machine e200 LS is available on request.



## DUST EXTRACTION: FAN

#### High Power vacuum cleaner DBFV – dust class H

# A reliable option by usage of harmful, explosive products or big product samples

- > Integrated filter cleaning system
- > Easy filter replacement
- > Nearly no service needed
- > For continous operation
- > Regulated underpressure via frequenzy converter

#### **TECHNICAL SPECIFICATIONS**

Max. power rating (W)	2200
Voltage (V)	400
Frequency (Hz)	50
Airflow rate (m³/h)	318
Vacuum (mbar)	ca. 245
Container capacity (litres)	15
Noise level (dB(A))	71
Weight (incl. control box) (kg)	60
Dimensions L × W × H (mm)	630 × 680 × 1130

#### **POSSIBLE OPTIONS**

- > Antistatic / ATEX zone 22
- > Stainless steel version

#### SCOPE OF DELIVERY

- High power vacuum cleaner dust class H14
- > 1× filter cartrigde dust class M and HEPA each
- Electrically conductive suction hose
   DN 35 × 2500 mm (ø × L)

> High Power vacuum cleaner DBFV Please note: Product image may differ from the original

## DUST COLLECTION: DEDUSTING

#### Pre-separator D360

#### For active dedusting of the process air

- > Pre-separator with robust steel housing
- > Half-automated filter cleaning with dust-stop
- > Changable collection bin of 13 I volume

#### **TECHNICAL SPECIFICATIONS**

Container volume (litres)	13
Weight (kg)	11
Dimensions ø × H (mm)	390 × 460 × 650

#### POSSIBLE OPTIONS

> Carrier board

#### SCOPE OF DELIVERY

 Electrically conductive suction hose, DN 35 × 2500 mm (ø × L)

#### Pre-separator D360 – dust class M

- > Dust class M acc. to EN 60335-2-69, for usage of dust with explosion level higher than 0,1 mg/m<sup>3</sup>
- > Polyester-filter cartrigde with filter surface 1.2 m<sup>2</sup>





> Pre-separator D360 Please note: Product image may differ from the original

#### Pre-separator D360 - dust class M + ATEX

- > Dust class M acc. to EN 60335-2-69, for usage of dust with explosion level higher than 0,1 mg/m<sup>3</sup>
- > Polyester-filter cartrigde with filter surface 1.2 m<sup>2</sup>
- > Antistatic / ATEX Zone 22 marking II 3 D

#### Pre-separator D360 - dust class M + H

- > Dust class H acc. to EN 60335-2-69, separation of different dust types with all explosion level, including carcinogenic and pathogenic dust
- > HEPA-filter, filter class (EN 1822) H14 with filter surface 2.05 m<sup>2</sup>

#### Pre-separator D360 - dust class M + H + ATEX

> Dust class H acc. to EN 60335-2-69, separation of different

dust types with all explosion level, including carcinogenic and pathogenic dust

- HEPA-filter, filter class (EN 1822)
  H14 with filter surface 2.05 m<sup>2</sup>
- > Antistatic / ATEX Zone 22 marking II 3 D

#### NEXOPART High-performance cyclone GAZ 120

#### Perfect filtering with easy cleaning

- > Effective upstream separator as pre-separator
- > Simple emptying via collecting bag
- > Extends vacuum cleaner service life
- Can be used for a wide range of applications (wood, plaster board, grinding, clay, concrete and flour dust)

#### **TECHNICAL SPECIFICATIONS**

Capacity (litres)	34
Weight (kg)	approx. 7
Dimensions L × W × H (mm)	275 × 155 × 772

#### SCOPE OF DELIVERY

- > Stand
- > 1-litre screw-cap jar
- Electrically conductive wire spiral hose, abrasion-resistant, largely smooth on the inside DN 32 × 2000 mm (ø × L)

> NEXOPART High-performance cyclone GAZ 120



### SIEVE HOLDER: ADAPTERS

#### UNIVERSAL SIEVE ADAPTER

Whether the predecessor model or a non-NEXOPART product: the different sieve adapters allow use of a wide range of the test sieves available on the market in the NEXOPART Air Jet Sieve Machine e200 LS. Quick, easy and inexpensive.

#### Adapter for test sieves ø 200 mm »ALPINE A200 LS« / »Haver & Boecker« / »NEXOPART«

#### Allows the use of existing and non-NEXOPART sieves

- > For ø 200 mm sieves from Haver & Boecker
- Significant costs savings as opposed to buying new sieves
- For sieves of the NEXOPART air jet sieve predecessor model A200 LS

Adapter for test sieves ø 200 mm »Retsch«

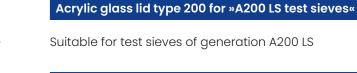
Adapter for test sieves ø 203 mm / 8" »W.S. Tyler«

Adapter for test sieves ø 203 mm / 8" »ALPINE A200 LS«

»Haver & Boecker« / »NEXOPART«

Adapter for test sieves ø 203 mm / 8" »Retsch«

Adapter for Japan Industrial Standard Sieves (JIS) ø 200 mm



COVER

**SIEVE HOLDER:** 

#### Acrylic glass lid for off-brand test sieves

Suitable for non-NEXOPART test sieves



> Acrylic glass lid



 Adapter for different sieves with sieve (example) and universal lid

## PERIPHERAL DEVICES: LABORATORY BALANCES

#### Mettler Toledo ME 1002T laboratory balance

# High-precision laboratory balance up to 1200 g in high-quality cast aluminium housing

- > Maximum load up to 1200 g
- > Reading resolution: 0.01g
- > Force-compensation measuring cell
- > Internal calibration weight at the touch of a button
- > Operation via touch screen

#### **TECHNICAL SPECIFICATIONS**

# Sartorius Practum® 1102-15 laboratory balance

#### Compatible high-precision laboratory balance to 1100 g with weighing pan suitable for all test sieves up to ø 220 mm

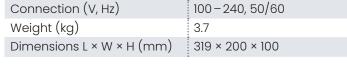
- > Maximum load up to 1100 g
- > Reading resolution: 0.01 g
- > Touch screen with Sartorius user interface

#### **TECHNICAL SPECIFICATIONS**

Connection (V, Hz)	100–240, 50/60
Weight (kg)	3.1
Dimensions L × W × H (mm)	359 × 214 × 95

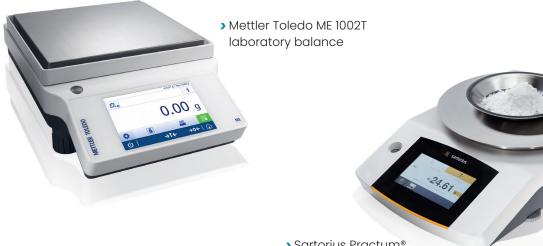
#### SCOPE OF DELIVERY

- > 1× special serial data cable
- > Sample pan ø 130 mm



#### SCOPE OF DELIVERY

- > 1× special serial data cable
- > Sample pan ø 130 mm



Sartorius Practum®
 1102-1S laboratory
 balance

# **SPARE PARTS & SUPPLIES**

## The NEXOPART Air Jet Sieve Machine e200 LS is irreplaceable. Its spare parts and supplies are not.

It makes good sense to order any especially stressed components and disposables at the same time you order your Air Jet Sieve Machine! 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 use of your NEXOPART Air Jet Sieve Machine e200 LS.

### MACHINE

Acrylic glass cover type 203

With special coating for rapid cleaning after analysis.

#### Suction silencer FFSD 112

Effective noise reduction of the process air.

#### Serial test sieve adapter ø 203 mm

For quick and easy mounting of the standard sieves.

#### Hammer

For tapping off any deposits from the acrylic glass cover.

#### Brush

Natural bristle brush for cleaning test sieve and cover.

## **VACUUM CLEANER**

#### Fleece filter bags dust class M

5 to a package, 30-litre volume, tear-resistant.

#### Flat pleated filter PES BIA-C dust class M

Made of rot-proof polyester fleece. Particularly suitable for abrasive materials.

#### Flat pleated filter HEPA

The HEPA flat pleated filter – dust class H (HEPA 13) – with fibreglass layers increases filter performance when

vacuuming up hazardous and carcinogenic dusts.

#### Spare vacuum cleaner hose

Electrically conductive suction hose with bayonet catch and e200 LS sleeve. DN 35  $\times$  2500 ( $\emptyset \times$  L).

#### Disposal bag

10 to a package, easy handling for large product volumes, suitable only for non-critical substances.

ADDITIONAL INFORMATION Replaces fleece filter bags M.

#### Power contactor for eControl Lite

Electrical regulation unit for connections of vacuum cleaner of different brands (similar technical details). Pin Connection on site required.

### **DUST COLLECTION**

Screw-cap jar for high-performance cyclone GAZ

incl. screw cap

Spare hose for pre-separator and cyclone – incl.sleeve

Spare filter M for pre-separator D360

Spare filter M + ATEX for pre-separator D360

Spare filter M + H + ATEX for pre-separator D360

Carrier board for pre-separator D360

### LABORATORY BALANCES

Spare Sartorius balance cable

For Sartorius balances.

Spare Mettler Toledo balance cable

For Mettler Toledo balances.

Spare sample pan ø 130 mm

WE SET NEW STANDARDS IN PRECISION AND FUNCTION. YOU CAN COUNT ON US!

@ 200h

HIGHEST QUALITIY - MADE IN GERMANY.

1 3 1

HOSOKANA ALPINE



### MAINTENANCE

Maintenance contract



#### SCOPE OF SERVICE

- > On-site annual maintenance of the analysis device
- > General check for function and condition
- > Pressure test
- > Test run
- > Preparation of a system log

### QUALIFICATION specifically for the pharmaceuticals industry

Qualification documentation for e200 LS

Qualification is the »documented

proof that the equipment, systems

and units in the installed or modi-

design and the manufacturer's

fied version comply with the approved

#### On-site training and qualification



If required, we offer a comprehensive range of further services for the e200 LS:

- > Training of operating personnel
- > Test run and inspection of
- qualification documents (IQ, OQ)
- > Implementation on site
- > Qualification master plan

(ZLG – Aide Memoire 2010)

recommendations«

Risk analysis / assessment according to FMEA

#### Qualification templates for:

- > Installation qualification (IQ)
- > Operational qualification (OQ)

The above qualification templates are supplied without performance of the tests.

#### NEXOPART GmbH & Co. KG

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