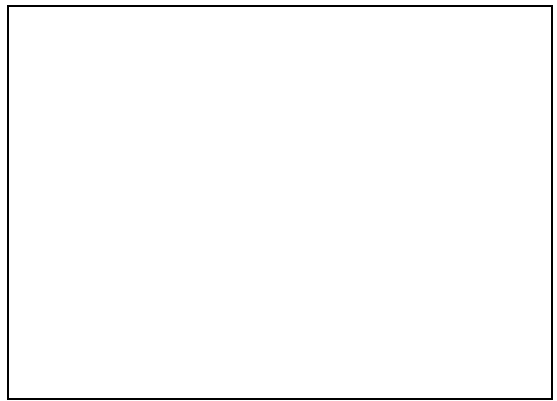


Manual
Automatic Vacuum Regulation AS 200 jet



Translation



Copyright

© Copyright by
Retsch GmbH
Retsch-Allee 1-5
42781 Haan
Germany

Table of Contents

1	Notes on the manual	5
1.1	Disclaimer	5
1.2	Copyright.....	5
1.3	Explanation of signs and symbols	6
1.4	Explanations of the Safety Instructions	6
2	Automatic Vacuum Regulation	8
2.1	Connecting the Automatic Vacuum Regulator.....	8
2.2	Adjustment of the Automatic Vacuum Regulation	9
3	Index	11

1 Notes on the manual

This manual provides technical guidelines for the safe operation of the device. Read this manual through carefully before installing, putting into service and operating the device. Reading and understanding this manual is essential for handling the device safely and as intended.

This manual does not contain any repair instructions. Please contact your supplier or contact Retsch GmbH directly if anything is unclear or you have questions about these guidelines or the device, or in the case of any faults or necessary repairs.

You can find further information about your device at <https://www.retsch.com> on the pages for the specific device concerned.

Amendment status:

The document amendment 0005 of the "Automatic Vacuum Regulation AS 200 jet" manual has been prepared in accordance with the Directive of Machinery 2006/42/EC.

1.1 Disclaimer

This manual has been prepared with great care. We reserve the right to make technical changes. We assume no liability for personal injuries resulting from the failure to follow the safety information and warnings in this manual. No liability will be assumed for damage to property resulting from the failure to follow the information in this manual.

1.2 Copyright

This document or parts of it or its content may not be reproduced, distributed, edited or copied in any form without prior written permission of Retsch GmbH. Damage claims shall be asserted in the case of infringements.

1.3 Explanation of signs and symbols

In this manual, the following signs and symbols are used:

Signs and symbols	Meaning
①	Reference to recommendation and/or important information.
Bold font	Labelling of an important term.
• • •	Lists
(1), (2), (...) (A), (B), (..)	The components have a fixed marking.
⇒	Action steps of instructions.
→	Result of an action step

1.4 Explanations of the Safety Instructions

The following **warnings** in this manual warn of possible risks and damage:

DANGER

D1.0000

Risk of fatal injuries
Source of danger

- Possible consequences if the danger is ignored.
- **Instructions and information on how to avoid the risk.**

Fatal or serious injuries may result if the “Danger” sign is disregarded. There is a **very high risk** of a life-threatening accident or lasting personal injury. The signal word **DANGER** is additionally used in the running text or in instructions.

WARNING

W1.0000

Risk of life-threatening or serious injuries
Source of danger

- Possible consequences if the danger is ignored.
- **Instructions and information on how to avoid the risk.**

Life-threatening or serious injuries may result if the “Warning” sign is disregarded. There is an **increased risk** of a serious accident or of a possibly fatal personal injury. The signal word **WARNING** is additionally used in the running text or in instructions.

CAUTION

C1.0000

Risk of injuries
Source of danger

- Possible consequences if the danger is ignored.
- **Instructions and information on how to avoid the risk.**

Average to slight injuries may result if the “Caution” sign is disregarded. There is an average or slight risk of an accident or personal injury. The signal word **⚠ CAUTION** is additionally used in the running text or in instructions.

NOTICE

N1.0000

Type of damage to property

Source of the damage to property

- Possible consequences if the information is ignored.
- **Instructions and information on how to avoid the damage to property.**

Damage to property may result if the information is disregarded. The signal word **NOTICE** is additionally used in the running text or in instructions.

2 Automatic Vacuum Regulation

As an accessory available from Retsch GmbH, the automatic vacuum regulation allows for the automatic control of the airflow strength on the Air Jet Sieving Machine AS 200 jet in the control range Δp of 50 mbar.

The AS 200 jet measures the current negative pressure in the nozzle chamber (A) and accordingly controls the automatic vacuum regulation. As a result, fluctuations caused by the industrial vacuum cleaner are compensated and thus the negative pressure kept stable.

2.1 Connecting the Automatic Vacuum Regulator

⚠ CAUTION

C2.0046

Risk of hearing damage

High sound level

- High sound levels can occur due to suction noise at the suction opening. Excessive sound, in strength and duration, can cause impairment or permanent damage to hearing.
- **Provide suitable sound protection measures.**
- **Wear hearing protection in the event of any high or continuous sound levels.**



⚠ CAUTION

C3.0049

Risk of injury caused by the ejection of liquid or particles

Sieve stack has not been tightly clamped or sieve lid is missing or damaged

- If the device is operated with a sieve stack that has not been tightly clamped or with a faulty sieve lid or a missing or faulty inspection glass, liquids or particles may be ejected and cause injuries.
- **Only start the device with a sieve stack that has been tightly and securely clamped.**
- **Never use a sieve lid with faulty or missing inspection glass.**
- **Always use undamaged Retsch sieves with seals that are intact.**

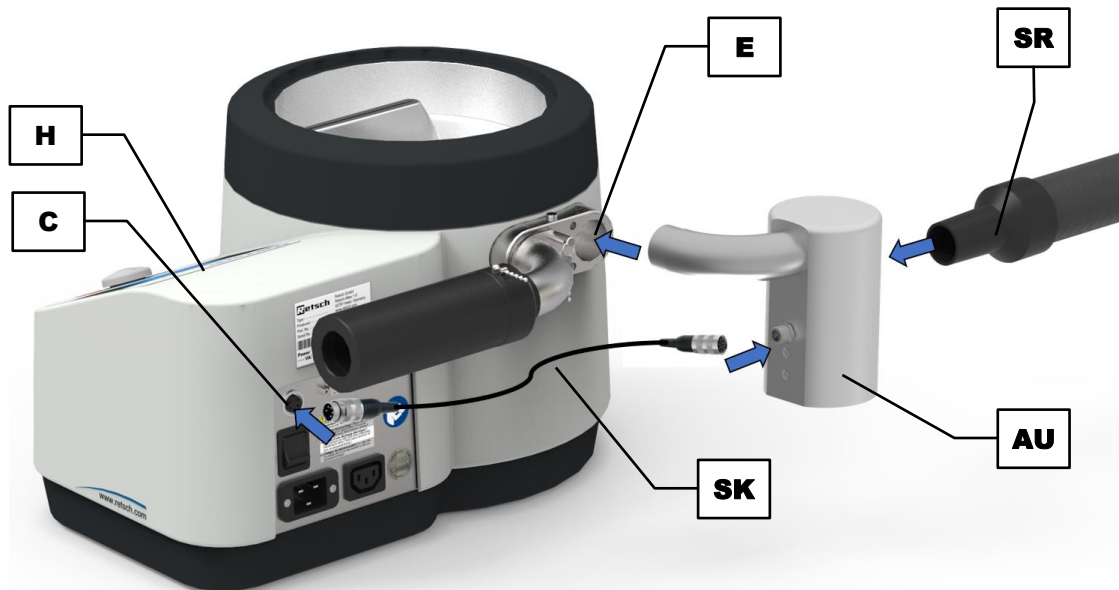




Fig. 1: Installation of the automatic vacuum regulation

- ⇒ Insert the automatic vacuum regulation (**AU**) into the air outlet duct (**E**).
- ⇒ Connect the 5-pin control cable (**SK**) to the device interface (**C**) for the automatic vacuum regulation.
- ⇒ Connect the suction pipe (**SR**) of the industrial vacuum cleaner to the automatic vacuum regulation (**AU**).

If the control cable of the automatic vacuum regulation is connected to the AS 200 jet, it is automatically detected and the  icon is displayed in the control unit (**H**). If no automatic vacuum regulation is connected, the  icon is displayed in grey.

2.2 Adjustment of the Automatic Vacuum Regulation



Fig. 2: Automatic vacuum regulation

When the automatic vacuum regulation is connected, the desired negative pressure can be set between 20 and 100 mbar. The automatic vacuum regulation can keep the negative pressure stable in a control range Δp of 50 mbar.

NOTICE Make sure that the negative pressure during the sieving process is always less than 100 mbar (10 000 Pa or 1.45 psi).

3 Index

A

Amendment status.....	5
Automatic vacuum regulation adjustment.....	9
Automatic vacuum regulator connecting.....	8
Automatische Unterdruckregelung Montage.....	9

C

Control range.....	9
Copyright.....	5

D

Disclaimer.....	5
-----------------	---

E

Explanations of the safety instructions.....	6
--	---

H

Hearing damage.....	8
---------------------	---

M

Manual.....	5
-------------	---

N

Notes on the manual.....	5
--------------------------	---

S

Signs.....	6
Sound level.....	8
Symbols.....	6

V

Vacuum regulation automatic.....	8
-------------------------------------	---

W

Warning.....	6
Information.....	7

AUTOMATIC VACUUM REGULATION

AS 200 jet - | 32.100.0004

EU DECLARATION OF CONFORMITY

We, represented by the undersigned, hereby declare that the above device complies with the following directives and harmonised standards:

Machinery Directive 2006/42/EC

Applied standards, in particular:

DIN EN ISO 12100 Machine Safety - General Design Principles

Electromagnetic compatibility 2014/30/EU (tested at 230 V, 50 Hz)

Applied standards, in particular:

EN 55011 Industrial, scientific and medical equipment - Radio-frequency disturbance characteristics - Limits and methods of measurement
DIN EN 61326-1 Electrical equipment for measurement, control and laboratory use - EMC requirements

Restriction of hazardous substances (RoHS) 2011/65/EU

Authorised person for compilation of the technical documentation:

Julia Kürten (Technical Documentation)

Furthermore, we declare that the relevant technical documentation for the above device has been prepared in accordance with Annex VII Part A of the Machinery Directive and we undertake to submit the documentation to the market surveillance authorities on request.

In the event of a modification of the device not agreed on by Retsch GmbH, as well as the use of non-approved spare parts or accessories, this declaration loses its validity.

Retsch GmbH

Haan, 09/2023



Dr. Stefan Mähler, Technical Manager





Retsch[®]

Copyright

© Copyright by
Retsch GmbH
Retsch-Allee 1-5
42781 Haan
Germany