

## SEMI-AUTOMATIC INSPECTION MACHINE

New generation of high-quality visual inspection



#### **SEMI-AUTOMATIC INSPECTION**

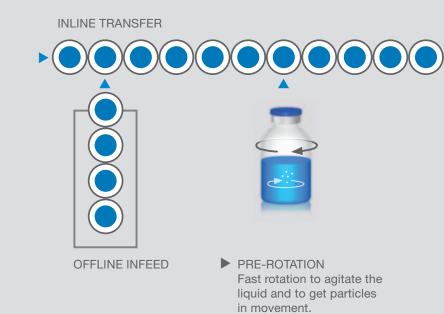
#### **Inspection criteria**

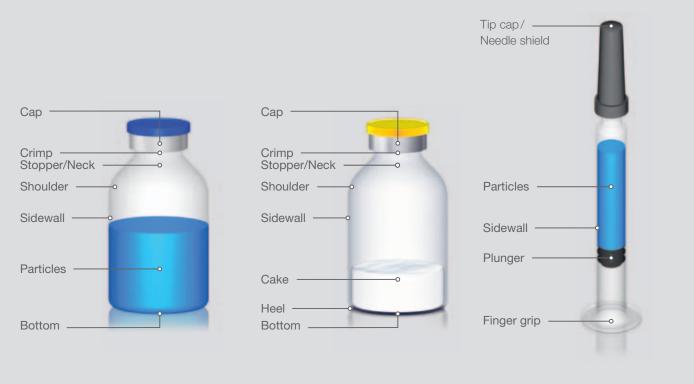
simultaneous inspection of many different criteria in one machine

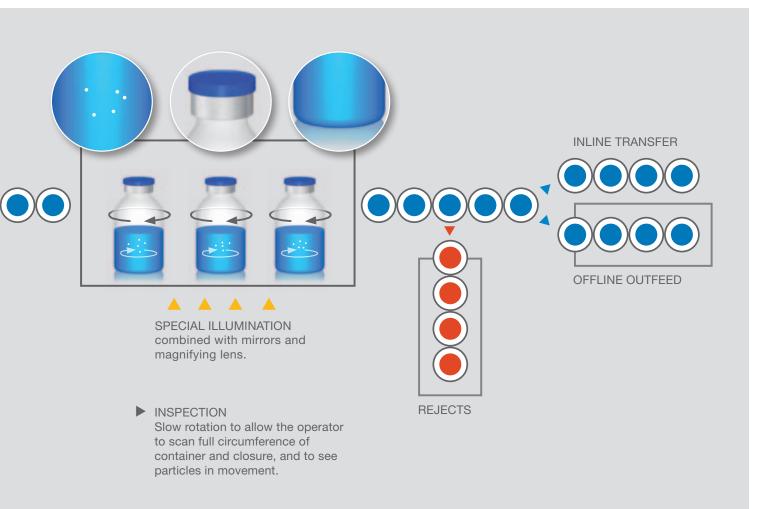


#### Inspection process

detection of particles and cosmetic defects



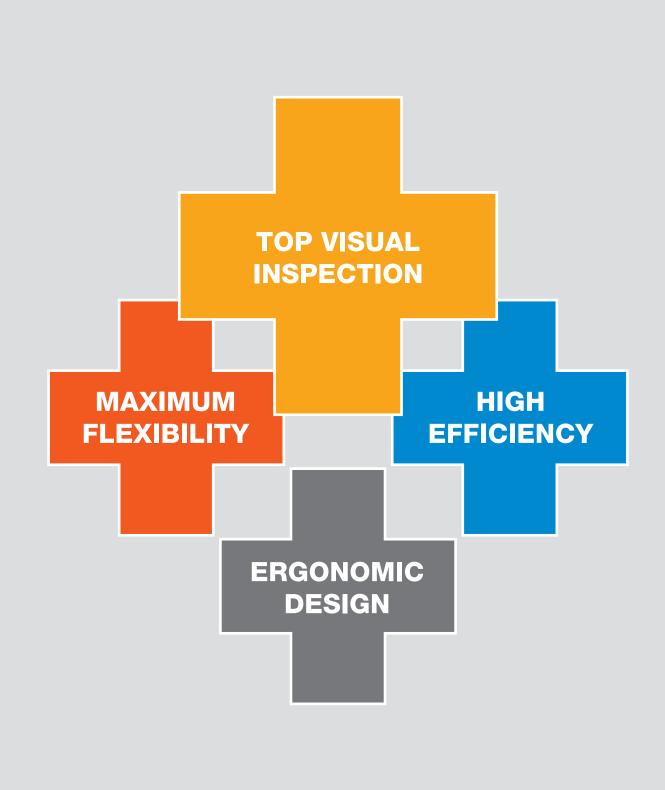




#### **INTELLIGENT INSPECTION SOLUTIONS –** WITH EXPERTISE AND KNOW-HOW

When we develop our products we have the entire service life of the machine in view: repair costs, maintenance cycles, energy consumption and the expandability of our systems. Intelligent solutions offer great potential for savings on total operating costs. Rapid amortisation of procurement costs is ensured with our machines, thanks to e.g. their long service life, minimisation of wearing parts, optimisation of service intervals and spare part costs as well as reduced training costs for operators and maintenance personnel.

The flexibility of our machines reduces your capital outlay: an existing system can be reconfigured quickly and simply to suit any of your container formats and products. If your product line is expanded, a Seidenader inspection machine can be upgraded or retrofitted even after many years.



## OPTIMISED PERFORMANCE WITH IMPROVED TECHNOLOGY.

HIGHEST INSPECTION QUALITY	A variable high-speed rotation system driven by servo motors whirls up any particles in the container. In the operator's field of vision the container rotates around its own axis for a 360° inspection at an individually selectable speed. Inspection of the seal area and the bottom of the container is also conveni- ent using various mirrors. A magnifying glass and the Tyndall effect also make detection easier: diffuse light causes partic- les to shine, like dust in the beam from a projector.
OPTIMIUM OVERVIEW	An LED feedback bar provides an optimal overview: the operator receives confirmation of the container's status in the form of coloured light markings – indicating whether it has been marked as defective or not.
ADJUSTABLE INSPECTION ANGLE	The machine can be optionally configured so that the inspec- tion angle can be adjusted to 60° or 75° depending on the task to be performed. Products which require different angles for inspection purposes can be inspected in one machine.
INDIVIDUAL SPEED	Depending on the product and the customer's requirements, containers can be fed through the inspection cabin conti- nuously or intermittently. For optimal adaptation to the items, the roller diameter and the roller distances of the chain trans- port system are changed according to the shape and size of the container.

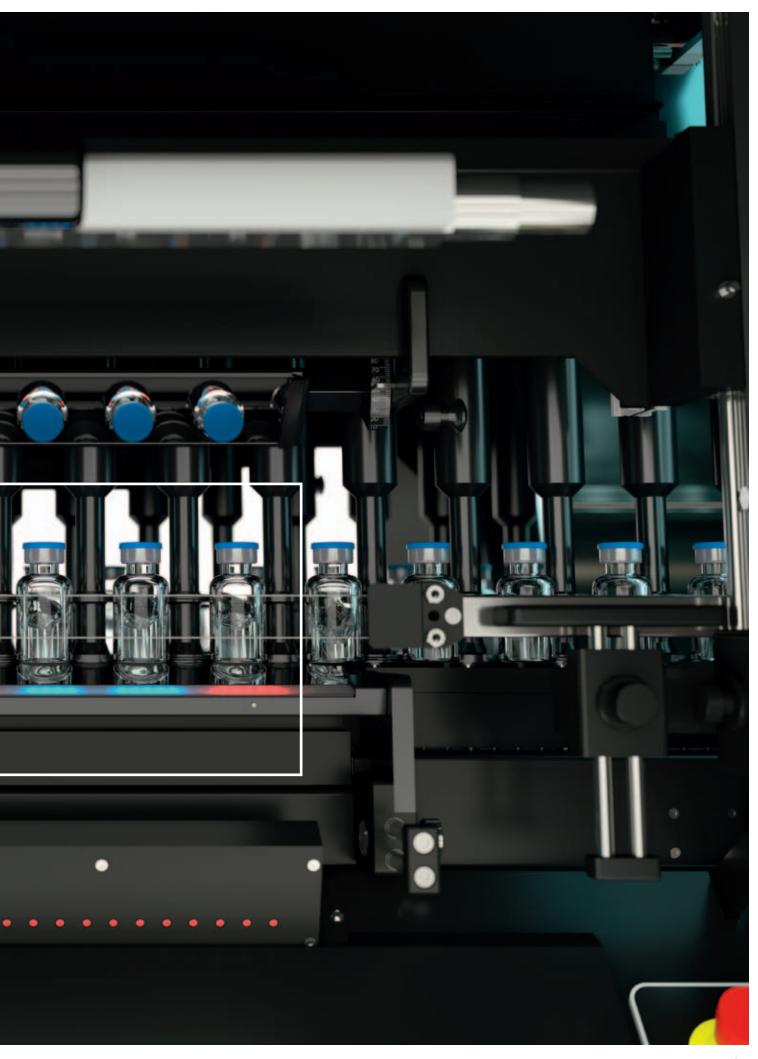
## THE HIGHEST — INSPECTION QUALITY

INDIVIDUAL ROTATION SPEED, SPECIAL LIGHTING SYSTEMS, ADJUSTABLE MIRRORS.

### OPTIMUM OVERVIEW LED FEEDBACK BAR CONFIRMS CONTAINER STATUS.

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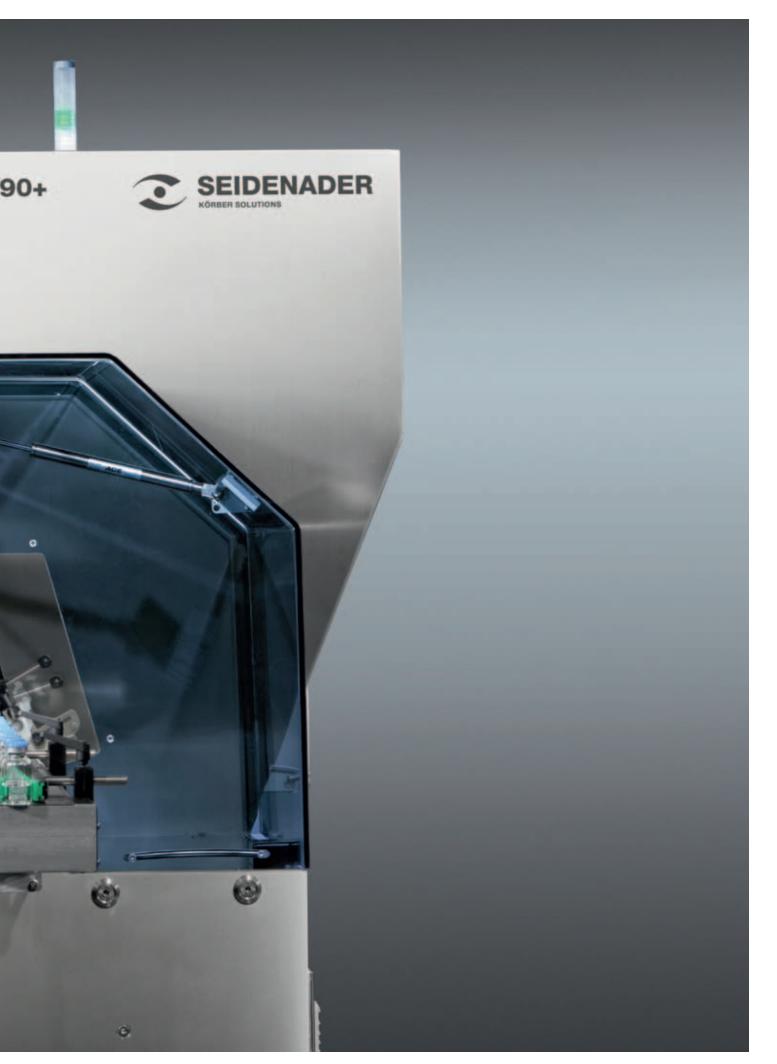
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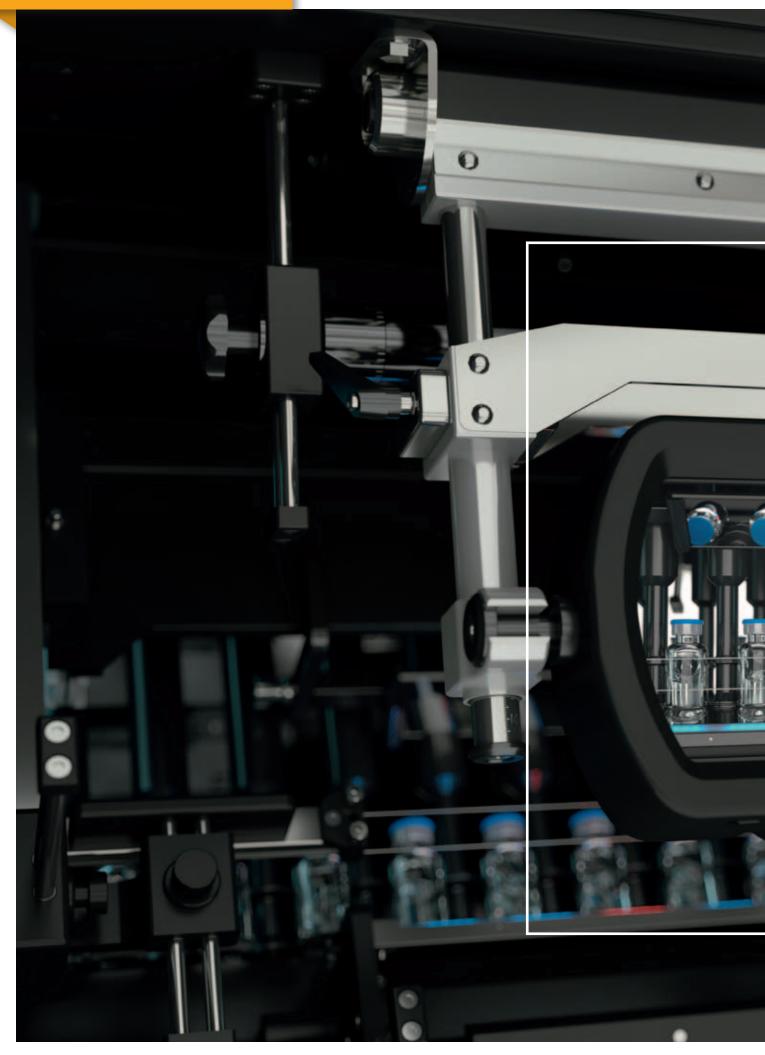
## ADJUSTABLE \_\_\_\_\_\_ INSPECTION ANGLE

ONE MACHINE TO MEET MANY DIFFERENT REQUIREMENTS.

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## CLOSE-UP ON DETAILS.

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A MAGNIFYING LENS HELPS TO DETECT THE SMALLEST DEFECTS.

## ECONOMICAL. SIMPLE. PROFICIENT.

#### **BEST PERFORMANCE**

Seidenader's semi-automatic inspection machines ensure the highest standards in the quality control of pharmaceutical products, at a speed of up to 9000 pharmaceutical containers per hour. In comparison with manual inspection, a visual inspection with automated product handling can be carried out more accurately, effortlessly and up to 5 times faster.

#### Maximum efficiency means: the simultaneous inspection of multiple criteria in one machine and by one person. The conditions required for this are created by various lighting and mirror systems. At a glance, the operator can therefore inspect containers for foreign particles in the product, contamination, cracks or glass damage to the bottom, shoulder and cap area.

#### GENTLE PRODUCT INFEED

**VERSATILE AND** 

**EFFICIENT** 

Perfectly matched components at the infeed reduce the risk of glass breakages, so downtime is prevented. For example, a tilted container is detected immediately at the infeed star wheel and the product feed is automatically stopped.

INDIVIDUAL INSPECTION PROFILES

#### SIMPLE FORMAT CHANGES

Inspection parameters such as rotation speed or light intensity are saved with the respective recipe. in the HMI and uploaded automatically. It is therefore a simple matter to implement a reproducible setting of inspection parameters for each batch.

When changing to another product the machine is adapted by a quick and toolfree format change: All format parts are clearly marked and numbered. With the product recipe automatic settings are loaded. Instructions for manual changes can be saved in the HMI.

# UP TO 9000 CONTAINER/HOUR

BEST PERFORMANCE AT BEST QUALITY.

## GENTLE PRODUCT INFEED

AVOIDS FRICTION, AIR BUBBLES AND GLASS BREAKAGE.





## VERSATILE AND HIGHLY EFFICIENT

SIMULTANEOUS INSPECTION OF CAP, SIDEWALL, BOTTOM AND THE LIQUID FOR PARTICLES.

## ONE SOLUTION FOR ALL REQUIREMENTS.

#### A WIDE RANGE OF CONTAINER TYPES AND SIZES

#### VARIABLE PRODUCTION REQUIREMENTS

The semi-automatic inspection machines are suitable for many different container shapes and sizes, from 0.5 to 1000 millilitres in volume. Depending on the format set, ampules, cartridges, vials and bottles with liquid or freeze-dried contents can be inspected, as well as syringes. Diameters can be between 6.85 and 95 millimetres and height up to 240 millimetres.

Container infeed can take place inline from an upstream system or offline from cassettes with or without a buffer. Defective products can be categorised, and good products either removed manually using cassettes or conveyed inline to the next machine in the line.

#### LATER RETROFITS

When your production requirements change – new containers, different sizes, different products or other inspection criteria, new technologies, inline instead of offline operation – the modular structure of Seidenader machines allows them to undergo many types of retrofit - even many years after commissioning.

## WIDE VARIETY OF CONTAINER \_\_\_\_\_ SHAPES AND SIZES

VOLUMES FROM 0.5 ML UP TO 1000 ML.

## **ERGONOMIC CONCEPT FOR BEST RESULTS.**

FOCUSING ON THE OPERATOR	Maximum support and ease of use for the operator: the opti- mal ergonomic design of the machine effectively prevents pre- mature fatigue and therefore provides a basis for the highest quality standards in visual inspection.
ERGONOMIC DESIGN	The cabin, widened to 80 centimetres, and a completely open leg area make for optimal working. Defective products are marked by a brief, effortless lifting of the index finger – the hand is continuously ergonomically supported. In addition, an LED feedback bar provides an optimal overview: a coloured light indicates if a container is marked.
EASY HANDLING, TOTAL COMFORT	To facilitate visual inspection, a magnifying lens, adjustable mirrors and, depending on the container, product and inspec- tion criteria, various lighting systems are available. The variab- le-speed transport system for the containers also considerab- ly speeds up and facilitates inspection.
INTUITIVE OPERATION	The machine is operated intuitively via a user-friendly wide- screen touchpanel. The software and control panel (HMI) meet the high standards of Seidenader's fully automatic inspection machines.

## INTUITIVE OPERATION

**REPRODUCIBLE INSPECTION CRITERIA BY UPLOADING AUTOMATIC SETTINGS.** 

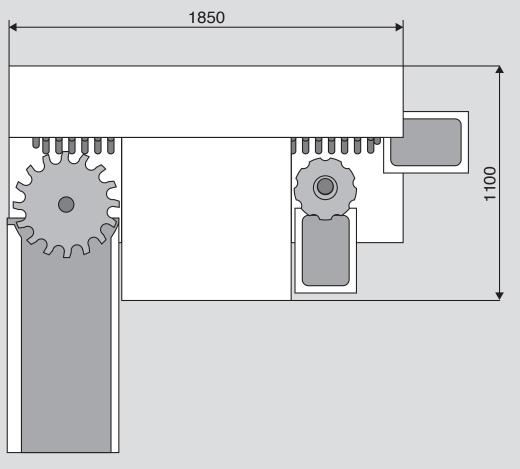
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## IN GOOD SHAPE FOR INSPECTION

AMPLE SPACE AND CONVENIENCE SET NEW STANDARDS IN VISUAL CONTROL.



# V90+



All units are in millimetres. Footprint illustrated is example only.

#### SEIDENADER LIFE CYCLE SERVICE



#### Seidenader Service Desk

The Service Desk is staffed by qualified experts. They can provide 24/7 service 365 days a year. The Service Desk combines maximum competence with short response and solution times.



#### Seidenader Academy

Our customized training and support programs impart theoretical and practical knowledge to enhance the productivity of your employees.



#### **Seidenader Field Service**

Our technicians have the expertise and understanding that comes from time, training, dedication to their craft and the determination to provide superior service to every customer.



#### **Seidenader Original Spare Parts**

We stock an extensive inventory of original spare parts at our locations worldwide to ensure speedy delivery. Machine-specific spare parts packages are also offered to give you in-house stock for immediate installation.



#### Seidenader Retrofit/Upgrades

Retrofit: For more flexibility and functionality take advantage of the modularity and expandability of your machines and profit from consistently modern equipment. Upgrades: Improve your installed equipment and software with upgrades.



#### Seidenader Process Optimization/OEE

Consulting and technical support to increase equipment performance, availability and reliability.

#### Seidenader Maschinenbau GmbH

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