



REALIZE YOUR MACHINE'S FULL POTENTIAL

Size parts are where you benefit most from our 80 years of experience in tube filling. They are crucial when it comes to optimizing your production line and ensuring every finished product looks great when it hits the shelves.

Our size parts also give your machines exceptional flexibility. Just imagine that, as standard, a single Norden line can handle tubes that range from 10 to 65 mm in diameter simply by swapping size parts. We guarantee the performance of each and every one of those parts so you can rest assured that production will run smoothly and that you'll keep hitting your targets.

Inside this leaflet, you'll find the various size parts that your machine may be equipped with. An illustration of each size part is shown, along with its location in the machine.

For your convenience, the leaflet is laid out in the same format as the size settings tables in your machine manual.

NEW SIZE PARTS ARE NECESSARY WHEN CHANGING:

Norden Tube Infeed

- Tube size
- Cap design
- Tube material
- Robot Tube Loader or Nordenfeed
 - Box design / size
 - Box pack pattern

Nordenmatic Tube Filler

- Tube size
- Cap design
- Tube material
- Filling product
- Filling volume
- Different sealing / coding

Nordenpac Cartoner

- Tube / carton size
- Carton design
- Coding
- Cap design
- Tray design
- Case design

When sending a size part inquiry, remember to include the machine type and machine number.





1. Cassette

Feeds empty tubes into the tube filler

Size parts to match correct tube box measures, tube length and tube diameter



2. Hinged cassetteFeeds empty tubes into the tube filler

Parts to match correct tube box measures, tube length and tube diameter



3. Rocker plate

Facilitates tube infeed

Have to match correct tube length



4. Tilter

Moves empty tube into vertical position

To match exact tube diameter and length



5. Down pusher cone

Presses the tube into the tube holder

The cone must match exact tube diameter



6. Tube holder

Holds the tube during transport

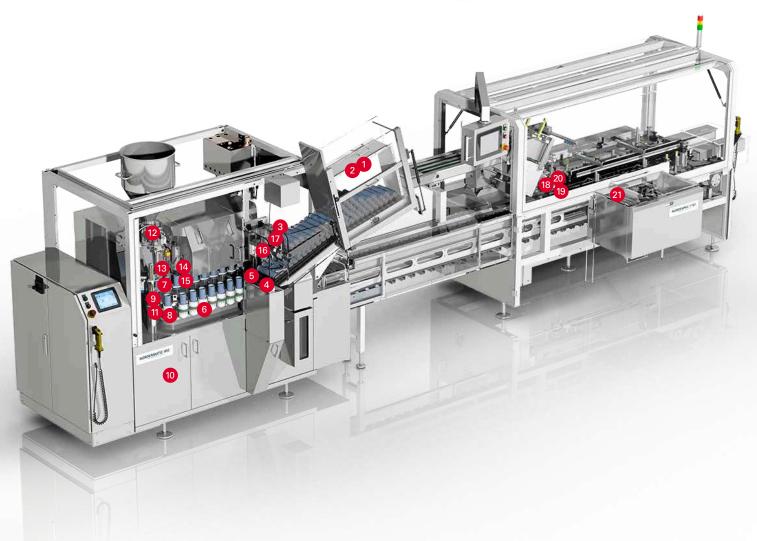
The holders have to match exact tube length, diameter and cap design



7. Tube cleaning

Removes foreign matter from the tube

Spindle, bushing and washer to match correct tube diameter and length





8. Cap tightening cone

Checks that cap is present and tightened

The cone must match tube diameter and the cap design



9. Orientation centering cone

Holds the tube during rotation

The cone must match exact tube diameter



10. Lifting cam (filling)

Controls the lifting movement in filling position

The cam profile must match correct tube length



11. Lifting head filling

Moves tube holder up to filling position

The head must match tube cap and tube holder design



Pump insert / filling nozzle

12. Pump insert:

13. Filling nozzle:

the pump to tube

Controls product transfer from

Size parts available to match tube

diameter and product properties

Matches filling volume and product properties

Valve, sleeve, cylinder, piston, piston centre and piston rod size parts required to fit requested filling volume range. Pump insert parts selected based on filling product



Clamp cap first or Pick & Place

17-1. Clamp cap first:

Transfers the tube to the cartoner

The cap first parts must be designed to match tube dimensions



17-2. Pick & Place:

Transfers the tube to the cartoner

The Pick & Place parts must be designed to match tube dimensions



14. Hot Air sealing kit

Heats the plastic tubes prior to sealing

Kit consists of hot air nozzle, cooling ring, holder and outside heating ring (if necessary) All require exact fit for tube diameter



15. Suction cup for Hot Air

Holds the tube head firmly during hot air heating

The cup must fit tube cap/head design. Clamp design if flower pot cap is used



16. Discharge

Pushes the filled and sealed tubes out of the filler

Discharge parts must fit tube cap/head design



18. Suction cups and holder

Picks up the flat carton from the magazine

These parts must fit carton design and measures



19. Carton erection guide

Pre-erects the cartons prior to final positioning

The parts must fit carton design and dimensions



20. Carton erection guide

Pre-erects the cartons prior to final positioning

The guide must be compatible with the carton design and measures



21. Product pushers

Pushes the tubes into the erected cartons

Pushers have to match correct tube size and seal appearance



"Our size parts team is obsessed with details. We have to be since they're the key to Norden's biggest advantages, like being able to produce a wide range of products on one line with zero drop in quality. For that to happen, every little piece has to slide into place and do its job perfectly. We guarantee each one will."

Ola Axelsson Norden Senior Designer, After Sales





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Coesia is a group of innovation-based industrial solutions companies operating globally, headquartered in Bologna, Italy.

 ${\it Coesia's \ companies \ are \ leaders \ in \ the \ sectors \ of:}$

- Advanced automated machinery and materials
- Industrial process solutions
- Precision gears

Coesia's customers are leading players in a broad range of industries, including Consumer Goods, Tobacco, Healthcare, Aerospace, Racing & Automotive and Electronics.





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