

FORSFOOD

Machines from North



Forsfood Oy is a food industry
machinery and equipment professional



FORSFOOD OY

Forsfood Oy is a Finnish family owned company. Company is established by Mr. Heikki Lindfors in year 1991. Mr. Lindfors acts as a CEO of the company His daughter Mrs. Erika Mattila continues in the footsteps of her father as one owner and active player in the development of the company for decades to come.

Forsfood has years of experience manufacturing peeling machines and other fresh product process equipments. Forsfood`s core competence is of high quality equipment manufacturing for all kind peeled products. All the equipment are made of easy to clean materials.



Machines from North peelers are a new generation peeling machines!

Machines from North peelers are intent to peel vegetable roots like carrots, potatoes, sweet potatoes, red beets, swedes and other roots.

On potatoes the peelers have a maximum peeling waste capacity of 600-1800 kg/h dependent on machine, product and application

Aurora Borealis peeling machines are available in three different applications:

Knife peeler, abrasive peeler and combi peeler.

Forsfood's **Classic series peelers** have been on the market over 20 years and are now available directly from manufacturing company Forsfood Oy.

Classic series consists of high-quality equipment for peeling several different products, taking into account the different needs of customers.

Forsfood peeling machines are the ideal solution for industrial food production facilities that require efficient peeling capabilities.

Forsfood molding machines are developed to form raw material into round balls. The shaping tools can form balls of a desired diameter.

Forsfood is known for its expertise in the manufacture of **profiling machines**. Different root vegetables are shaped with these machines, such as balls of different sizes or snack products. The profiling machines offered by Forsfood enable efficient and precise shaping of various root vegetable products. With Forsfood profiling machines, manufacturers can easily create uniformly shaped and aesthetically pleasing balls or snacks, improving the overall quality and appeal of their products. Forsfood's reputation as a manufacturer of reliable and efficient shaping machines makes it a trusted choice in the industry.



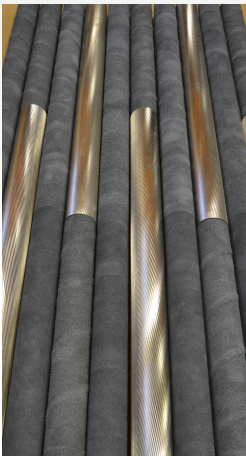
TABLE OF CONTENTS



PAGE 6-7

SUSTAINABILITY

Forsfood is committed to supporting sustainable development in their operating culture and strategy



PAGE 8-9

PEELING PRINCIPLE

The peeling method of Forsfood equipment differs from other methods in the market.



PAGE 10-11

AURORA BOREALIS PEELERS

Aurora Borealis peelers are the most powerful devices in their size.

PAGE 12-13



CLASSIC-1000

Suitable for peeling a wide range of root vegetables, like potato, carrot, swede, turnip, and celeriac etc. Capacity up to 1000kg/hour

PAGE 14-15



CLASSIC-5

Forsfood Classic series peelers are still available!
Classic-5 for smaller capacity up to 500 kg/hour.

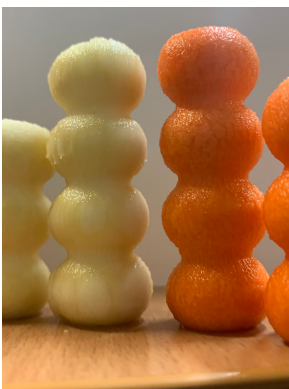
PAGE 16-17



SOL NOCTIS PROFILER

Sol Noctis` s shaping tools can form balls of a desired diameter from root vegetables.

PAGE 18-19



LUNA AND X-PROFILERS

Smaller capacity profilers for ball shape products or for snack products.

Sustainability

Forsfood oy have prioritized 6 goals of UN sustainable development goals. In these 6 goals we have the greatest potential to make an impact. We promote these goals by implementing sustainable practices in our operations, minimizing waste and emissions, supporting local communities, and collaborating with partners to drive positive change. Through these efforts, we aim to contribute to a more sustainable and equitable world.

Actions We Can Take

ENVIRONMENT



Enabling the process of the side stream product (peeling waste) generated in the production process, e.g. for biogas use.

Minimization of customers water consumption, e.g. with the help of dry peeling technology.

Ensuring the recyclability of machine material choices and enabling the refurbishing of equipment parts.



Carbon footprint calculation.

Carbon footprint monitoring and reduction.

Preparing the climate road map and complying with the goals.

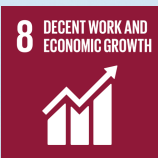
SOCIAL



We manufacture safe machines that reduce work accidents in accordance with directives.

Promote physical well-being at work by considering ergonomics in equipment design.

Measures are being taken to ensure the safety and well-being of personnel, including voluntary insurance options and programs supporting occupational well-being.



Guarantee full and effective opportunities for participation and leadership at all levels of decision-making, regardless of gender.

Supporting and enabling continuous training of personnel in all levels.

Achieve higher levels of economic productivity through diversification, technological upgrading and innovation.

Protect labour rights and promote safe and secure working environments for all workers.

GOVERNANCE



By employing local people and developing skills through cooperation with educational institutions, we support sustainable industrialization, with the aim of increasing the share of industry as an employer.

In developed countries, improving the position and opportunities of our small customer companies in the market by offering innovative machines for their use



By choosing strategic partnerships that support sustainable development.

Long-term customer relationships and supporting the development of customers' operations.

We do not accept corruption in any form.

SUSTAINABLE ROADMAP

Our sustainable development roadmap outlines our commitment to implementing activities and achieving goals that align with national sustainable development objectives.

We are focused on carrying out business operations that support the achievement of these goals, and we are dedicated to operating in an environmentally responsible manner. By doing so, we hope to contribute to the overall sustainable development of our community and the nation as a whole.

2021-2022

The company's carbon footprint calculation has been started (Scope 1-2) in cooperation with an external party.

Our product development strategy is focused on reducing food waste through the use of our devices.



2023

Sustainable reporting development and setting goals for business activities that support sustainable development.

The peeling machine Aurora Borealis's consumption has been tracked through initial measurements of water and electricity usage. The data collected will provide insight into the machine's efficiency and allow for potential adjustments to be made to improve resource utilization. These measurements will also contribute to the overall understanding of the environmental impact of the machine's operation, allowing for more informed decision-making regarding sustainability practices.



2024

Calculating the product-specific carbon footprint for most product.

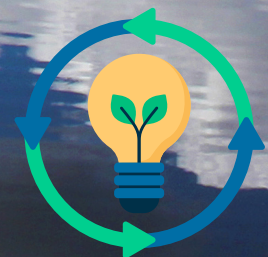
The company is implementing responsibility thinking across all levels of operations and personnel. This means that every employee is expected to take ownership of their actions and decisions, and understand the impact they have on the company as a whole.



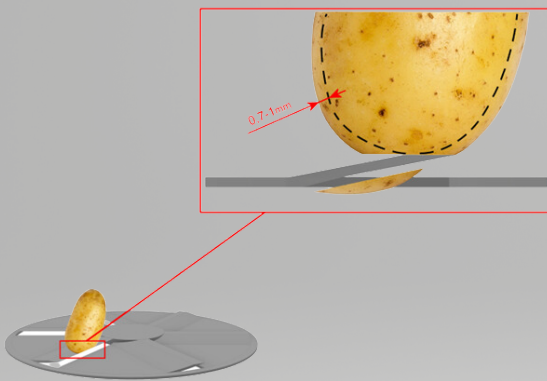
2025

Our company offers energy-efficient and recyclable machine solutions to help customers achieve their sustainability goals. We prioritize reducing energy consumption and minimizing waste in order to promote environmental responsibility and long-term sustainability.

We have proactively published a comprehensive and transparent responsibility report that provides an overview of our operations. The report includes information on our environmental impact, social responsibility initiatives, community outreach programs, and corporate governance practices.

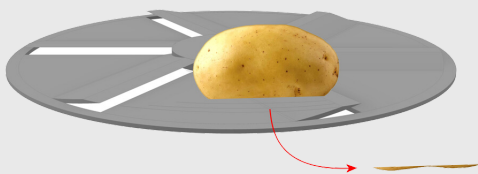


CONVENTIONAL KNIFE PEELER VERSUS FORSFOOD KNIFE ROLLER PEELERS

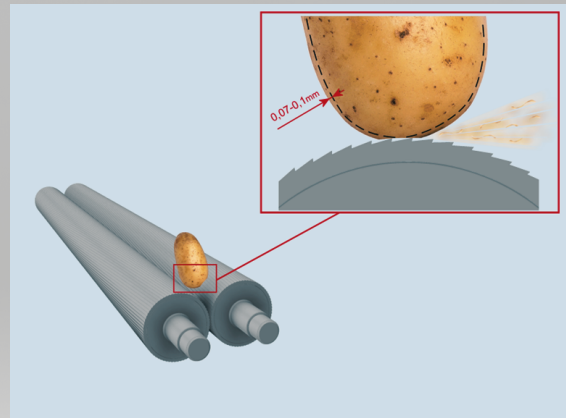


In a conventional knife peeler, each time the product is in contact with the blade, the knife cuts a chunk of the product with a preset dept of approx. 0,7mm occasionally smaller or bigger.

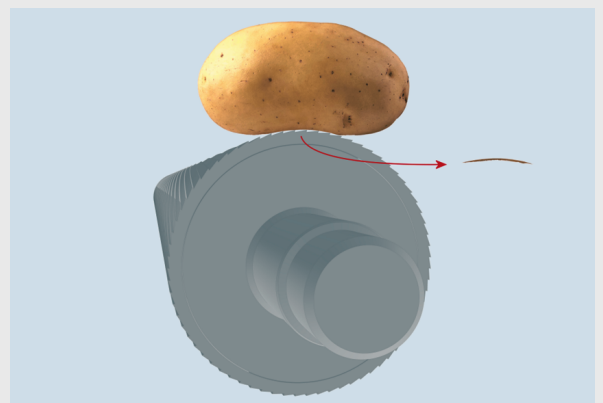
If bigger, the waste percentage increases.
If smaller, capacity decreases.



In a conventional knife peeler, the knife is situated on a flat or concave surface. In order to peel the products completely we need to peel of a large amount of valuable product.

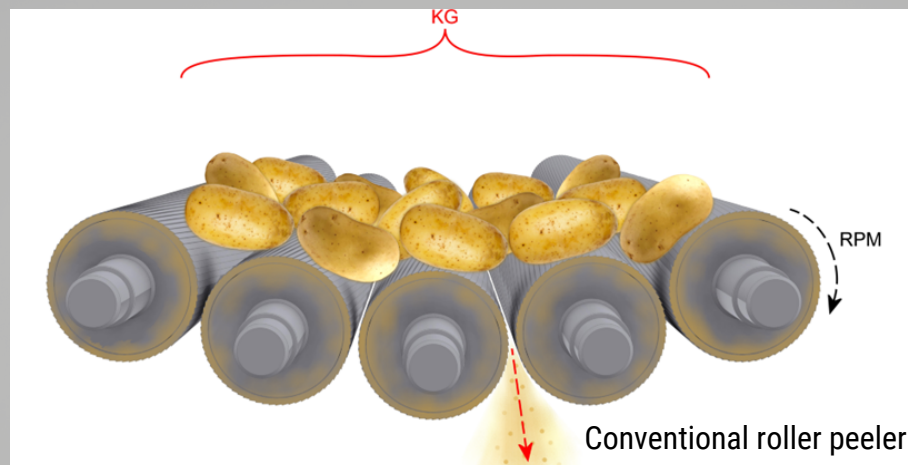


The **Forsfood** knife only cuts of a flake of 0,07-0,1mm products at each time this allows us to peel the surface of the product with a minimum of waste.



The **Forsfood** convex knife* shape allows us to peel concave products with a minimum of waste. Resulting in better overall yields.

THE EFFECTS OF ROLLER SPEEDS AND PRODUCT LOAD ON THE CAPACITY OF A ROLLER PEELER.



In a conventional roller peeler, the rotation speed of the rollers is 600-800 rpm.

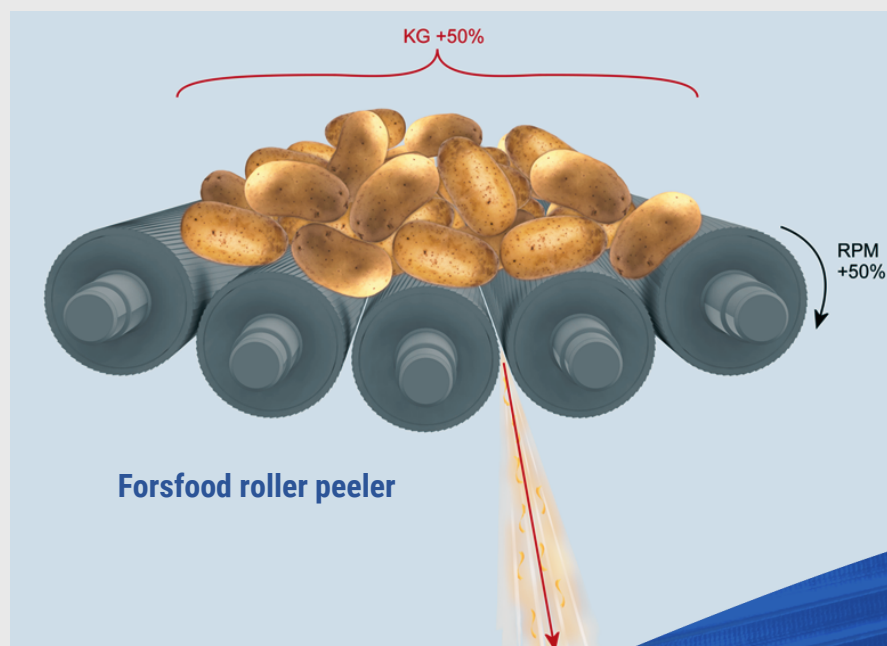
In the Forsfood peelers rollers speed is 1300-2100 rpm.

The increased roller speeds allow for an increased product load. Increased product load maintains a gentle tumbling in the peeler.

The increased rotation speed also keeps the rollers cleaner and assures a stable peeling result during the whole production. The usage of water is also minimized.

Increased product load and roller speeds increases the capacity as can be seen in the table on next page.

The chart is results on tests made at the recent development of our new peeler.



Aurora Borealis

AVAILABLE IN: KNIFE PEELER, ABRASSIVE PEELER AND COMBINATION PEELER

MACHINES FROM NORTH

Forsfood Oy is the world's northernmost manufacturer of peeling machines. Our expertise in the days of swords from iron forges has been refined into top professionalism as stainless steel benders and a manufacturer of first-class knife rollers. Our inspiration comes from the diverse nature and soil of the North, as well as our desire to manufacture first-class machines for processing a clean food product. Decades of experience as a peeler manufacturer gives us the perspective to look ahead and meet the needs of the market in the changing world. Therefore, the cornerstones of our renewed peeling machines are: The user friendliness and the hygienic design combined with the ecological material, what stainless steel has in terms of longevity and recyclability. Our peelers are the most powerful devices in their size class and are available in three different models.



THE DURABLE STAINLESS STEEL MATERIAL IS COMPLETELY RECYCLABLE.

HIGHEST PEELING CAPACITY IN IT'S SIZE CLASS.

EASY TO USE AND CLEAN

INTEGRATED MANUAL

SUITABLE FOR PEELING SEVERAL PRODUCTS

REMOTE CONNECTION



Knife peeler

The northern lights of the north (Aurora Borealis), intersect the sky, like the knife rolls we design cut the surface of the roots.

Available also an application "Usva" for re-peeling steam peeled products

Abrasive Peeler

Ice has polished the surfaces of the northern rocks for centuries, as a wear-resistant carborundum roller grinds the surface of the product to be peeled.

Combination peeler

The polar night and the midnight sun meet, such as carborundum and knife meet on the surface of combination roller; giving a first-class and effective peeling result.

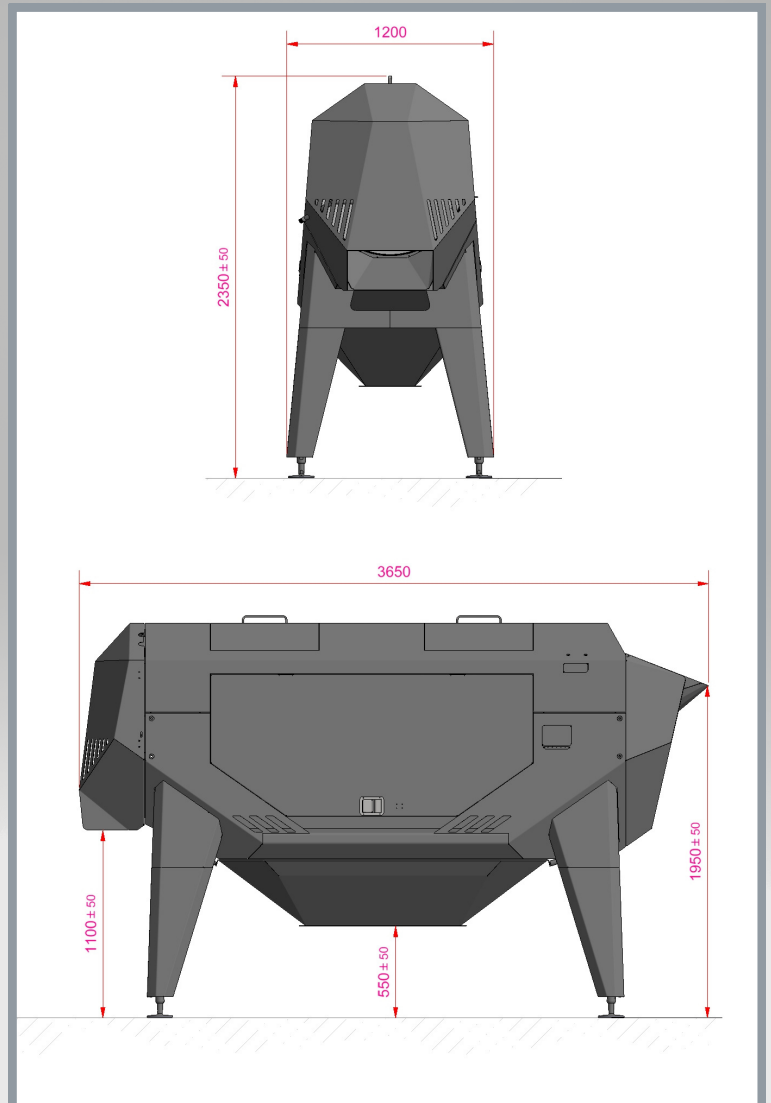


PEELING APPLICATIONS

TECHNICAL DATA

AURORA BOREALIS

- Available with 6 or 10 peeling rollers
- Roller diameter 88 mm, Roller length: 1700 mm
- Dimensions: 3.65 m x 1.19 m x 2.29 m ± 16 mm (l x w x h),
- Feed height: 1.93 m (+ -16mm), Output height: 1.09 m (+ -16mm)
- Weight: prox. +/- 1200 kg (depending on execution).
- Auger: Diameter: 820 mm, Pitch: 420 mm
- Supply voltage: 200-400 V, 3-phase, 50-60 Hz
- Motors: Rollers 2x1,5 kW, Auger 1x0,37 kW



Peeling rollers:
Knife,
Combination
and Carborundum



Machines from North

CLASSIC - 1000

AVAILABLE IN:
COMBINATION PEELER, KNIFE PEELER AND ABRASIVE PEELER

FORSFOOD CLASSICS

Forsfood Oy is the world's northernmost manufacturer of peeling machines. Forsfood's Classic Combi peelers have been on the market over 20 years and are now available directly from manufacturing company Forsfood Oy.

Classic series consists of high-quality equipment for peeling several different products, taking into account the different needs of customers.

THE DURABLE STAINLESS STEEL MATERIAL IS COMPLETELY RECYCLABLE.

EASY TO USE AND CLEAN

SUITABLE FOR VARIOUS PRODUCTS

LOW MAINTENANCE COST



CARBORUNDUM ABRASIVE+KNIFE ELEMENT (Combi)

The abrasive carborundum element combined with knife element gives effective peeling without leaving any particles from the peeling elements in the final product.



KNIFE

Knife element on one roll gives a powerful peeling of a pre-peeled product. The first element can be equipped with rough cuttings and the second part with a finer cutting knife to achieve the best peeling results.

ABRASIVE ELEMENT

Full carborundum abrasive roll element for pre-peeling of all types of products.



Forsfood Classics

PEELING APPLICATIONS

TECHNICAL DATA

CLASSIC SERIES CLASSIC-1000

Dimensions: L 2990 mm (118") x W 1100 mm (43") x H 2206 mm (87")

In-feed chute width 500 mm (20")

In-feed height 1642 mm (65")

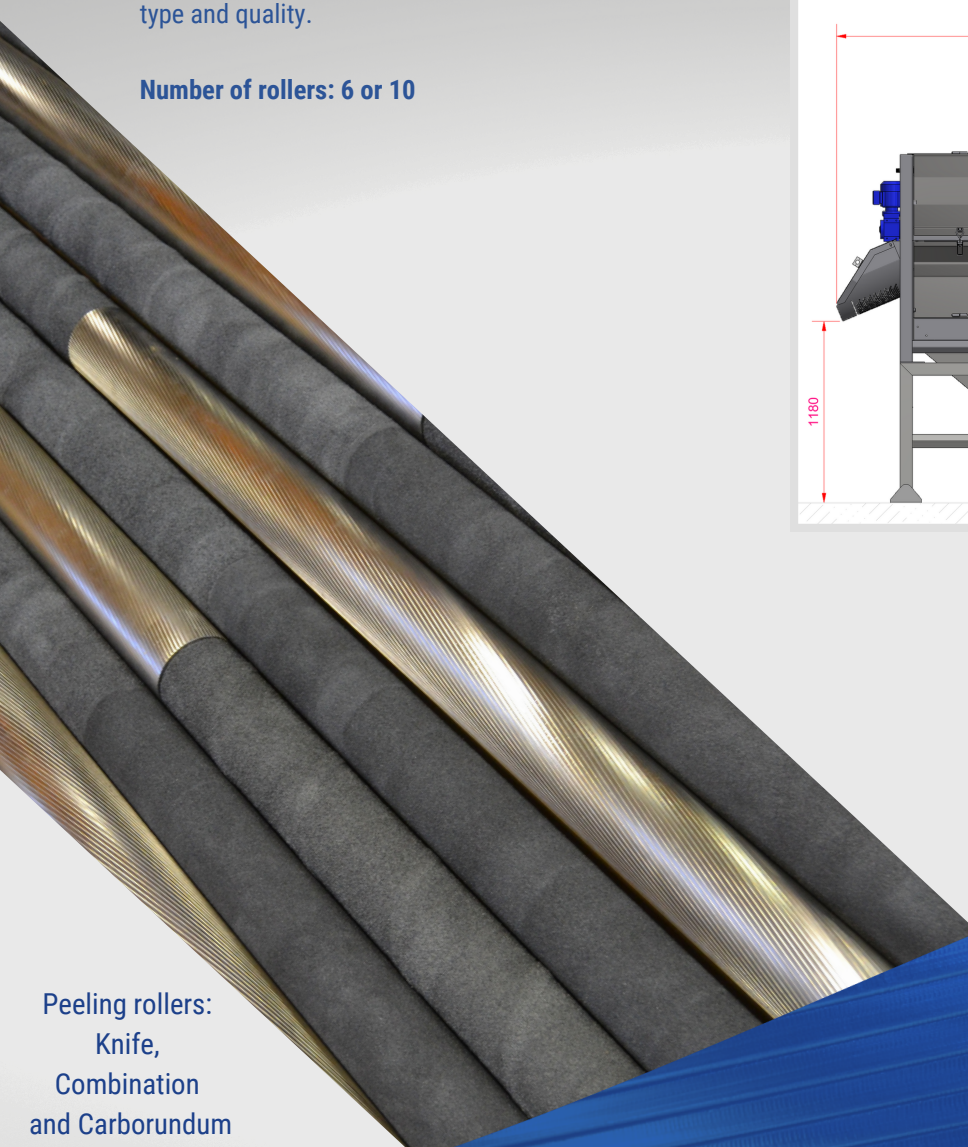
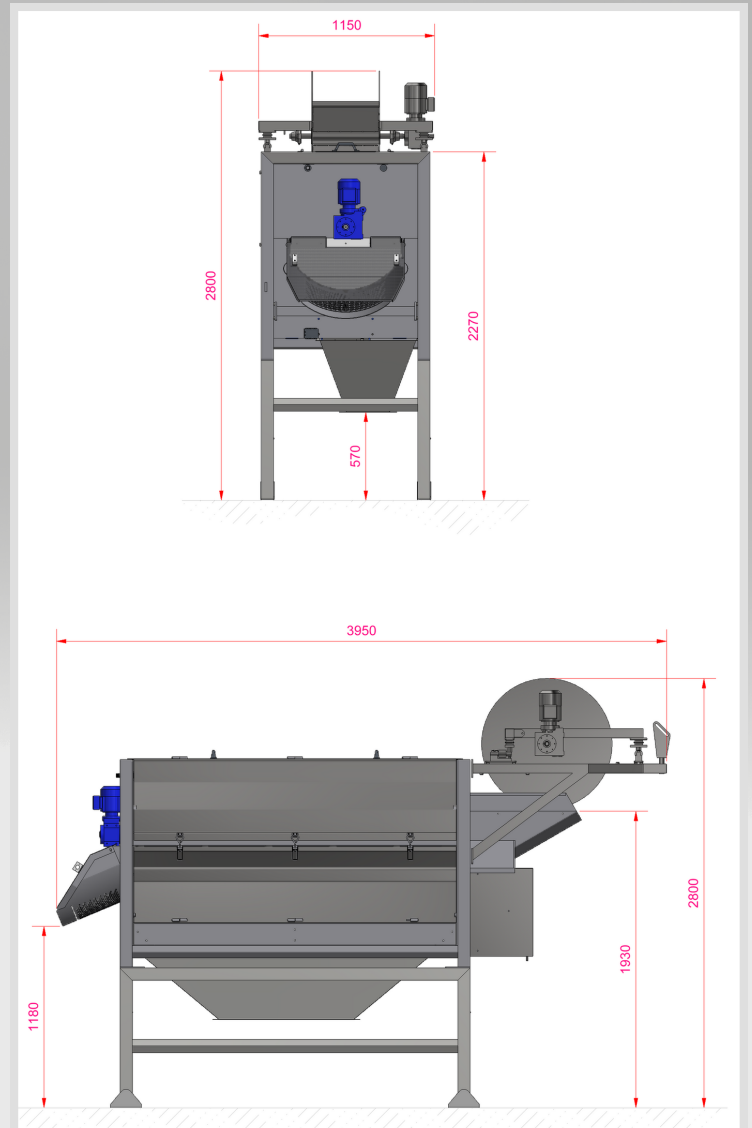
Discharge height 1254 mm (49")

Overall weight 1250 kg (2750 lbs)

220-400 V 3 phases 50-60hz

Capacity: 600-1100 kg/h depending on raw material type and quality.

Number of rollers: 6 or 10



Peeling rollers:
Knife,
Combination
and Carborundum

CLASSIC -5

AVAILABLE IN:
COMBINATION PEELER, KNIFE PEELER AND ABRASIVE PEELER

FORSFOOD CLASSICS

Forsfood Oy is the world's northernmost manufacturer of peeling machines. Forsfood's Classic Combi peelers have been on the market over 20 years and are now available directly from manufacturing company Forsfood Oy.

Classic series consists of high-quality equipment for peeling several different products, taking into account the different needs of customers.

*THE DURABLE STAINLESS
STEEL MATERIAL IS
COMPLETELY
RECYCLABLE.*

*EASY
TO USE AND CLEAN*

*SUITABLE
FOR VARIOUS PRODUCTS*

*LOW
MAINTENANCE
COST*



KNIFE

Knife element on one roll gives a powerful peeling of a pre-peeled product. The first element can be equipped with rough cuttings and the second part with a finer cutting knife to achieve the best peeling results.

CARBORUNDUM ABRASIVE+KNIFE ELEMENT (Combi)

The abrasive carborundum element combined with knife element gives effective peeling without leaving any particles from the peeling elements in the final product.

ABRASIVE ELEMENT

Full carborundum abrasive roll element for pre-peeling of all types of products.

Forsfood Classics

PEELING APPLICATIONS

TECHNICAL DATA

CLASSIC SERIES CLASSIC-5

Overall length 2500 mm (94,4") * w 1250 mm (49,2")

Height 2000 mm (78,7)

Frame length 1420 mm (55,9")

In-feed chute width 165 mm (6,5")

In-feed height 1750 mm (68,9")

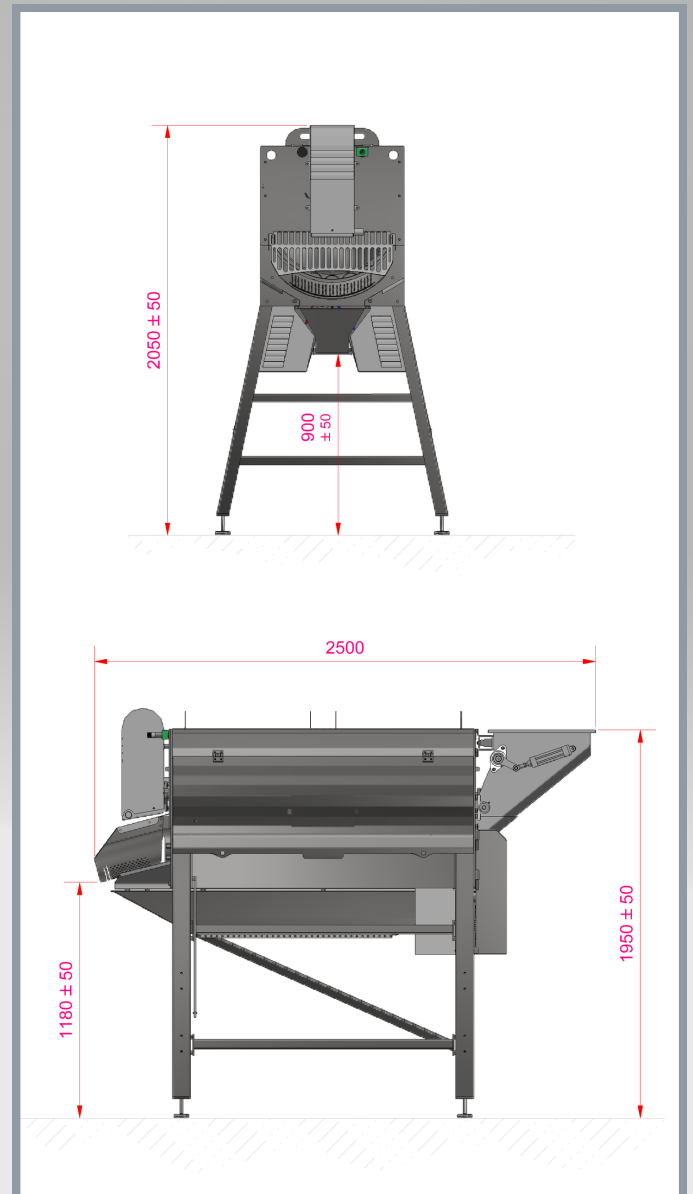
Discharge height 1060 mm (41,7")

Overall weight 500 kg (1100 lbs)

220-400 V 3 PHASES 50-60HZ

Rollers 2 x 1.5 kW (2 x 2HP)

Number of rollers 5



MACHINES FROM NORTH SOL NOCTIS-PROFILER



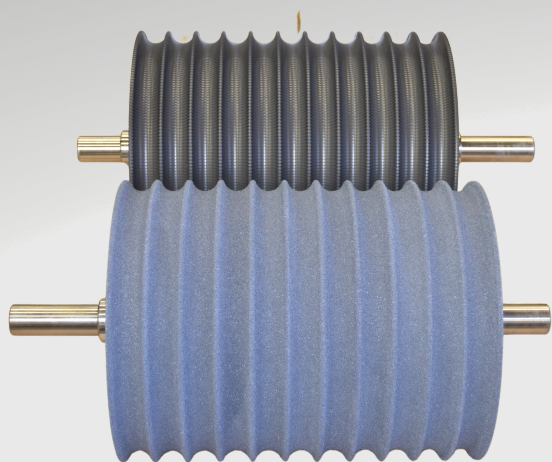
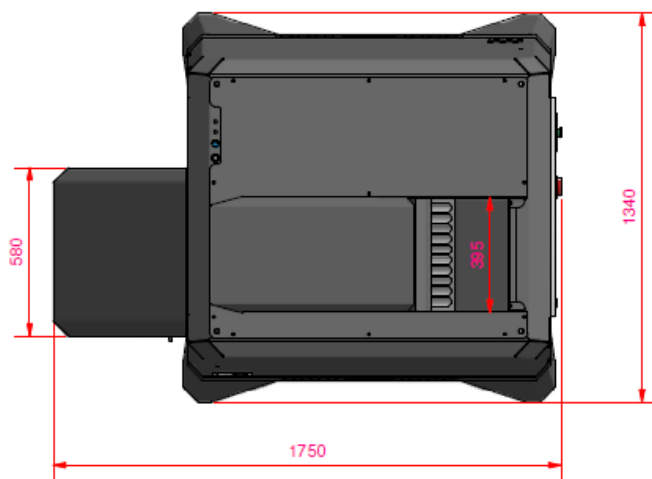
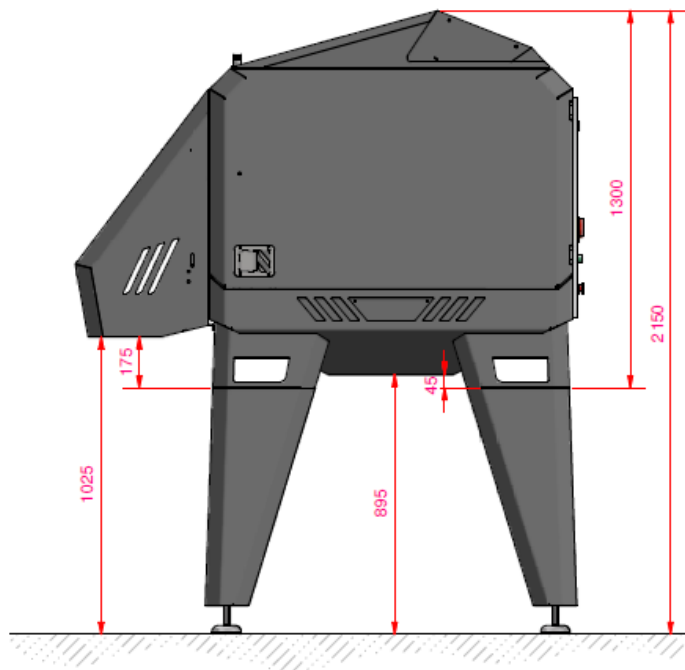
- Forsfood profiling machines are developed to form raw material into round balls.
- Standard diameters available from 17 to 35 mm, for other sizes please contact .
- The machine is suitable for profiling both snack products and more demanding fine dining products.
- It is suitable for potatoes, different kinds of root vegetables, fruits etc.

Machines from North

Sol Noctis Profiler

TECHNICAL DATA

- Length: 1750 mm
- Height: 2150 mm
- Width: 1340 mm
- Weight: approx. 580 kg
- Supply voltage: 400VAC 50 Hz,
- 3-phase, 16A
- Water connection: 2/3 "
- Noise level: <80dbA
- Capacity: approx: 500 kg/h



Profiling rollers

MACHINES FROM NORTH LUNA-PROFILER

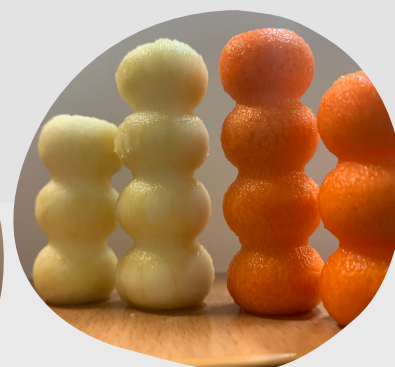
TECHNICAL DATA (10-1000A-XX)

- Length 960 mm
- Height 975 mm
- Width 320/685 mm
- Weight appr. 90 kg
- Supply voltage 380V 50 HZ 3 ph
- Connected load 0.75 kW
- Water connection 8 mm
- Noise level < 80 dB(A)

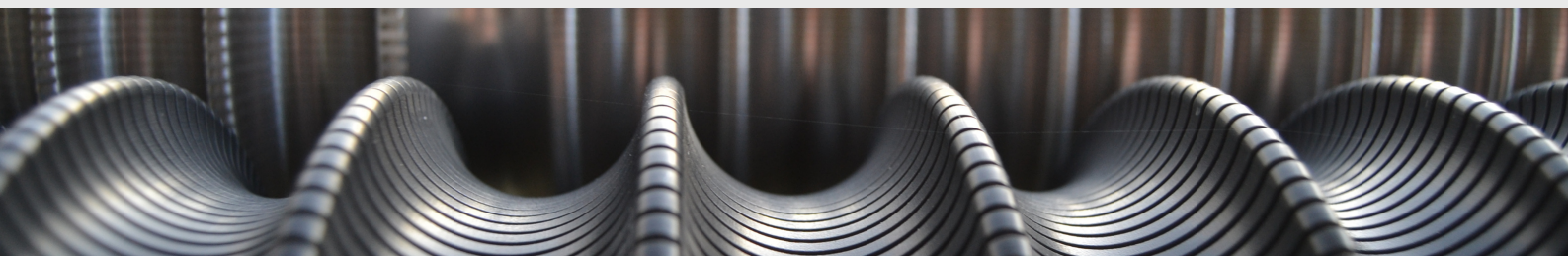


“

- Forsfood's profiler Luna is developed to form raw material into profiled sticks.
- The machine is suitable for profiling both snack products and more demanding fine dining products.
- It is suitable for carrots and different kinds of root vegetables etc.
- Capacity is prox. 70kg/hour



”



CLASSIC X-PROFILER

TECHNICAL DATA (10-1000A-XX)

- Length: 850 mm; Height: 1100 mm; Width: 320 mm
- Weight: 80 kg
- Capacity: 50-150 kg/h
- Supply voltage: 200-405 VAC 3-phase 50/60 Hz. Connecting load: 0.75 kW
- Water connection (optional)
- Noise level: <85dbA



- Food molding machines are developed to form raw material into round balls. The shaping tools can form balls of a desired diameter.
- Diameters available from 17 to 33 mm .
- The machine is suitable for profiling both snack products and more demanding fine dining products.
- It is suitable for potatoes, different kinds of root vegetables, fruits etc.



To see all our machinery solutions, visit our website:
forsfood.fi



Forsfood Oy
Ajokkikuja 5
61800 Kauhajoki
Finland
sales@forsfood.fi
+358 20 7995 888