## Hercules

Your oppunity to be on the leading edge

Danish pastry and puff pastry folding and filling equipment



You name it - we fold it

FORM & FRYS

MASKINTEKNIK

### **ABOUT THE HERCULES FOLDING MACHINE**

One of our standard machine models is the "Hercules folding machine" this is the result of years of experience in automatic folding of typically folded dough products. Hercules folding machines have been build for different companies allover the world.

Form & Frys Maskinteknik has developed the Hercules folding machine to serve the high volume/capacity pastry manufacturers, having machine capacities up to 35.000 products per hour.

Form & Frys have been building machines for folding danish pastry since 1987. The original concept of the "Alfa" model has been refined and improved over the years and the resulting technology is still used for Danish pastry but can also be used for many type of products.

For optimizing the function and possibilities, FORM & FRYS has developed a filling machine, which matches exactly the needs for our Hercules machine.

#### **Materials**

The machine is produced predominantly in stainless steel, POM (polyoxymethylene trade name Delrin in other parts of the world) and evoprene. All parts in direct contact with the product are produced in FDA / USDA-approved materials.



#### **Capacity Example**

From a dough sheet of 600 mm

**Tool size:** 75 x 75 x 6 rows

Dough square: 75 x 75 mm

Output per row: 5.000 products/hour Output 6 row: 30.000 products/hour

Tool size:100 x 100 x 5rowsDough square:100 x 100 mmOutput per row:5.000 products/hourOutput 5 rows:25.000 products/hour

Tool size:125 x 125 x 4rowsDough square:125 x 125 mmOutput per row:5.000 products/hourOutput 4 rows:20.000 products/hour

#### Production process; filled & folded Danish pastry products ▶



Strip cutting on the inlet conveyor



Cross cutting into individual dough squares



Filling and water spray

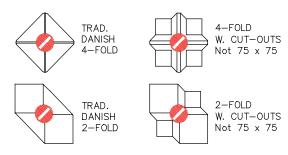


Folding the product and pressing the product

#### Standard size and products:

Dough thickness between 2.5 and 5 mm. All products are folded from puff pastry or Danish pastry dough.

Dough square size: 75 x 75, 100 x 100, 125 x 125 or 150 x 150.



Featured so the 4 shapes, fits one tool set.







Pinwheel products are made using an additional pressing device and turnover products require additional tool set complete or a new machine.



# THE ROTARY FILLING MACHINE

To optimize the function and possibilities of Form & Frys industrial folding machines, We have developed a filling machine, which fits the needs exactly.

The basic function principle of the rotary filler is a rotating drum with pistons, retracting when in the hopper and ejecting when right above the dough product. It can be seen as a rotating version of the well known slide-plate depositor used within the industry.

Due to the high capacity of this machine, fillings that are specially shaped or containing sensitive particles can be deposited at speeds and with an accuracy never before seen.

The unique concept of the rotaryfilling machine gives primarily two major advantages:

- An outstanding high capacity, even with shaped deposits, up to 100 strokes.
- A very gentle treatment of the mass, even relatively large and sensitive particles can be deposited, without any damage.

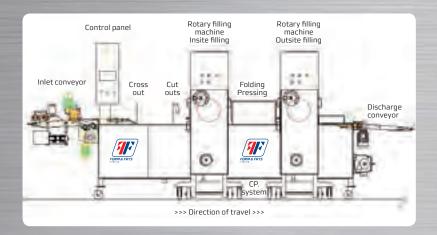


Top filling Discharge conveyor









#### Folding machine dimensions example

On a 100 by 100 mm (4" by 4") 5 row machine.

Working height: approx. 1.000 mm

Total length: approx. 4.500 mm

Total width: approx. 1.500 mm

Dough width: approx. 550 mm

The above mentioned dimensions include inlet and discharge conveyor. All dimensions, especially the heights and length of the inlet conveyor and discharge conveyor are made to fit the specific project or special requirement.

#### Capacity

The machines are capable producing and filled products with a rate up to.

Dough speed: 10 m/min or 84 strokes

per min

Output per row: 5.000 products/hour Output e.g.5 rows: 25.000 products/hour

Form & Frys Maskinteknik, a company that has found a niche in folding/forming and filling many different products such as danish pastry, pizza shells, special pies, puff pastry products etc.

For & Frys manufacture standard machines as well as custom build machines, tailoring the machines to our customers specific products.

The bakery industry continues to be a growth industry. Major producers are constantly looking to introduce new high-quality products to the market.

Form & Frys has, through our know-how and innovative ideas, proven to be a valuable partner in developing new products.

Please do not hesitate contacting us for your specific project.

#### Form & Frys Maskintekink A/S



Concept, design, testing and construction under one roof



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