

Fladder®
Automatic Deburring Machines

Automatic Machines for Deburring and Denibbing

The machines are a result of intensive, targeted product development, producing a design which is able to meet all manufacturers' requirements for durability, efficiency and ease of operation.

Emphasis are made to make the machine as strong and compact as possible.

Simplicity is another keyword: Few but strong components, easy to operate, settings are simple etc.



Fladder®
200/GYRO



Fladder®
300/GYRO



Fladder®
400/GYRO

Technical Specifications

	200/GYRO	300/GYRO	400/GYRO
Total height	2135 mm	2210 mm	2400 mm
Machine width	1800 mm	2300 mm	2300 mm
Total length	1690 mm	2070 mm	2430 mm
Working height	840 mm	850 mm	865 mm
Vacuum belt	1000 mm	1300 mm	1300 mm
Max. work piece height	100 mm	100 mm	100 mm
Max. work piece width	1000 - 1200 mm	1300 - 1600 mm	1300 - 1600 mm
Infeed speed	0.3 - 10.0 m/min	0.3 - 10.0 m/min	0.3 - 10.0 m/min
Spindles lock-it™	6 x Ø100x350x mm 6 x Ø200x250 mm	6 x Ø100x350x mm 6 x Ø200x250 mm	6 x Ø100x350x mm 6 x Ø200x350 mm
Voltage	3 x 400/500V	3 x 400/500V	3 x 400/500V
Max./min. fuse	63A/32A	63A/50A	63A/63A
Max. power fuse	17.5 kW	25 kW	29.5 kW
Net weight	1500 kg	2300 kg	3000 kg

OPERATION

The machine is highly user-friendly with symbols and touchscreen that makes it easy and clear for the operator to manage the functions of the machine.



SHIELDS

The open large shields offer perfect access for maintenance and tool change. The closed windows give the operator perfect conditions for monitoring the process.

As a safety precaution the machine will stop when the shields are opened.

The shields are equipped with various curtains, brushes, antistatic brushes and chains for safety reasons and to suppress noise.



CONVEYOR BELT

The conveyor belt is a component of the highest quality.

The belt is an endless belt consisting of several layers of synthetic fibre material covered by a layer of natural rubber for improved friction properties.

The drive shaft is convex shaped. This ensures accurate tracking of the belt throughout its life cycle.



VACUUM SYSTEM

A special designed vacuum turbine with optimized air flow is used to hold even small parts through the process.



SPINDLES AND TOOLS

All machines are equipped with lock-it™ spindles either Ø100 or Ø200 mm mounted on the gear head's conical spindles.

Lock-it™ spindles keep tools balanced, offer a perfect fixation and make the change of tools easier and faster.

The tools being used are abrasive brushes in different size and density. Other kind of tools (for metal) - read our Tool Options below.

ENERGY SAVING SYSTEM

As an option a device is offered which will reduce power consumption with up to 30%. It reduces the time where the machine is running empty and prevents unnecessary wear of tools and transport belt.



Movements That Make the Difference



The strong, compact gear head is equipped with a total of six spindles, mounted in pairs, rotating alternately clockwise and counter-clockwise.



The gearing of the spindles vary between the pairs to ensure uniform finishing of all faces on the parts and uniform wear on the finishing tools.



During the process, the entire head and the six spindles rotate and oscillate across the surface of the parts, which means that the processing of the surface is applied from every possible direction, no matter how the part is placed on the conveyor belt.



The movements are two by two synchronized to each other. It makes the operation of the machine easy: The operator has only to set the speed of the brushes and the speed of the conveyor.



The Central Gear Head

The central head carrying the tools is an extremely strong and compact unit. The gear head is mounted in an ingenious, unique scissor-type suspension system. The strong design allows transmission of high torque values through the 6 conical spindles.

Tool Options

The conical spindles on the main gear head allow the use of different spindle types and thereby different types of tools.



The most common and universal tools are the abrasive cylinders. They are made by a combination of:

Diameter
150, 250, 300, 350 or 400 mm
Grit size
P100, P150, P180, P220 or P220
Density of abrasives
Standard: 7, 9 or 11 mm.



Special tools for metal:



Removal of oxides on the edges:
Spring threaded cylinders knocking the oxides off the edges.



Removal of slags on the surface after plasma cutting:
Heavy duty tool that knocks off the large burrs on the edges.

The Manufacturer

Fladder Danmark A/S is established by Hansen & Hundebøl who in the 1970's started a development centre designing unique methods and finishing machines for the wood and metal industry.

Today FLADDER® is a known and acknowledged trade mark of high quality. The target is designing, producing and marketing efficient machines and tools able to meet specific work processes in an effective and reliable way.