

# **DeboFlex**

Pork fore-end and leg deboning made easy





More "knife in meat" time



Focus on one task



Fore- end gripped firmly in carrier

DeboFlex is a groundbreaking new solution from Marel for deboning pork fore-ends and legs. Current pork deboning technology is based primarily on pace lines where products are transported on a belt in a random, sometimes chaotic flow and worked on by highly skilled staff.

DeboFlex uses an overhead conveyor fitted with special rotatable carriers for gripping fore-ends or legs, which transports them in a controlled flow past workstations.

The deboning process is split into simpler individual tasks with a dedicated workstation for each task. At each workstation the fore-end or leg is brought automatically into the correct position for the job to be done. Operators no longer need to handle products.

Deboning pork fore-ends or legs using DeboFlex means lower labor costs, higher yield, better quality and longer shelf life.

#### Increases "knife in meat" time

Turning and moving product around takes up a lot of the time spent deboning on a pace line, not to mention manipulating finished items.

With DeboFlex the fore-end or leg is gripped firmly in the carrier and positioned automatically for each task. This saves time and allows operators to concentrate fully on the task in hand.

#### De-skills the process into individual tasks

DeboFlex splits and de-skills the deboning process into simpler individual tasks. Operators focus on doing one task only.

Suspended from its carrier at an equal distance from its neighbor, product is better accessible ensuring that cuts are applied in the correct place. Gravity can now be used to help when separating muscles.

Making the job easier will ensure that it is done properly!

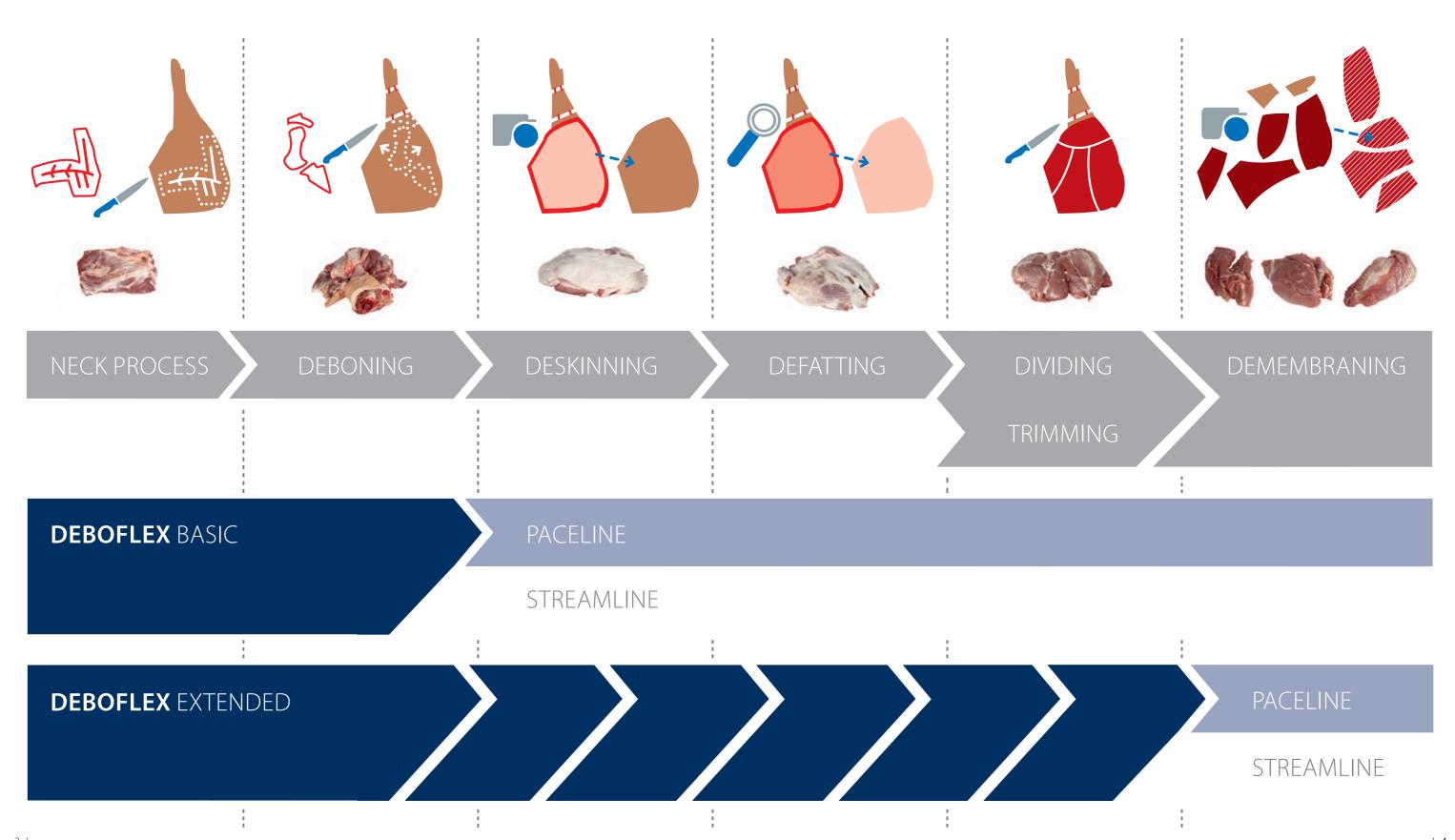
#### **Better working environment**

Height adjustable workstations, also available with chairs, and integrated knife sharpeners have been ergonomically designed to create a comfortable, stress-free and safe working environment.

Thanks to the low noise level, communication with colleagues is much easier.

## DeboFlex, a flexible system

Composition on individual requirement



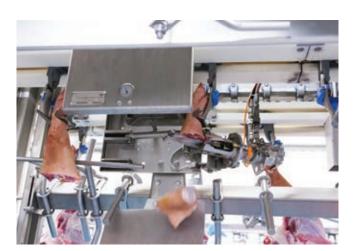
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In line de-skinner



Shoulderblade Puller



Low foot cutting module



Shank pre-cutting module

#### **Automation too**

Unlike pace lines, DeboFlex allows some operations to be done automatically. Automation allows work to be done more quickly and more accurately, resulting in a much more consistent end product.

Each DeboFlex system includes automatic modules for loading fore-ends or legs into the carriers (no more heavy lifting) and for cutting the low foot.

Automatic options include in-line de-skinners, Eisbein cutting equipment for shoulders and shoulder blade removers.

#### Better hygiene and longer shelf life

In the DeboFlex system, there is no product to product contact and far less cross-contaminating hand to product contact. Also cross contamination from skin to end products is reduced to absolute minimum.

Product moves smartly through the system in a controlled way; primals and trim fall into bins or onto a takeaway conveyor system.

### Consistently better results at lower operating cost

Fore-ends or legs move smoothly from one operation to the next. Perfect positioning, attention to operator ergonomics and more "knife in meat" time translate into higher yield, improved quality and greater line efficiency.

As the product is firmly gripped in Deboflex only a small amount of pressure is required to create an ideal separation on the seam. Combined with ideal product presentation, this ensures maximum yield.

By de-skilling the process and making it less physically demanding, labor can now be recruited from a much wider pool of people and operators can be trained much more quickly.



#### **Future-proof**

DeboFlex is a flexible system whose composition will depend on individual customer requirement.

It can start small and grow. Replacing an existing pace line or StreamLine, either completely or in part, is easy.

As an example a DeboFlex line can be used to de-bone only (DeboFlex Basic) in combination with a pace line or StreamLine for the rest of the process.

De-skinning, de-fatting, dividing and trimming can always be added at a later stage (Deboflex Extended).

By investing in DeboFlex you can be sure that you will be ready for the future.

DeboFlex gives you automation, optimizes logistics and by using intelligence, lets you maximize added value of all your different products.

#### **DeboFlex at Compaxo Meat**

The first customer to install the DeboFlex system was Compaxo Meat Ltd in Zevenaar, Holland. At the Compaxo pig slaughterhouse, craftsmanship goes hand in hand with the latest technologies and sciences – and the new DeboFlex fits well within that philosophy.

Menno van der Post, Production Manager at Compaxo in Zevenaar, immediately adapted to the new way of working. "We are very happy with the DeboFlex. The flexibility and easy logistics of the system are simply impressive." The DeboFlex offers many benefits for Compaxo, as Menno explains, "The efficiency in the production hall has risen, the transport of products has become simpler, the cutting process has become easier and the bacterial counts have dropped. And all this within just a couple of months after installation."



Pork leg deboning.



Marel is the leading global provider of advanced equipment and systems for the fish, meat and poultry industries.