

Pig Head Deboner

Semi-automatic deboning of whole pig heads



- Higher yield
- Lower labor costs
- More flexible capacity
- Improved manual labor efficiency up to 100%
- Reduced risk of cross contamination

Deboning pig heads has finally become profitable

Pig heads are a valuable source of good quality meat. If only it was easier and cheaper to harvest... With Marel's Pig Head Deboner (PHD), it is! The semi-automatic PHD line requires significantly less skill, labor and time and guarantees a very high and constant output. Deboning pig heads has finally become profitable.

Products

Although up to 50 % of a pig head can be turned into valuable products, financial benefits of pig head deboning have traditionally been low. Pig head meat is notoriously difficult to harvest and compared to e.g. pork shoulders, yield is relatively low. As a result deboning has only been profitable for highly specialized companies. Until now.

Marel's Pig Head Deboner revolutionizes the world of whole pig head deboning. By dividing deboning tasks into well-defined and simple part actions, and replacing manual labor by automated mechanical actions on a number of key points, the need for skilled manual labor decreases considerably. This leads to a significant drop in labor costs and an increase in efficiency, throughput and yield. A former by-product from slaughtering turns into a prime source of meat and profit!

Product benefits

- Systematic working method optimizes the selection of high quality parts
- Constant product quality
- Minimized risk of bone fragments in products
- Minimized risk of cross contamination

Application

Pig head meat collected on the PHD-line can be processed in a large variety of end products. A couple of possibilities:

Part of pig head	Application
ear, nose	soup, roast, pet food
rind without meat	sausage emulsions
rind with meat	finely textured sausages
pork head trimmings	coarsely textured sausages
temple meat	babi pangang, pork satay, head cheese, aspic
cheek meat	pork satay, babi pangang
cheek bone with meat	galtas
whole head	porchetta di testa



1. Jawbone, 2. Mask with cheek meat, 3. Skull, 4. Head meat



Working principle

The Marel PHD line is a very flexible and versatile system that can be fully adapted to your needs, required end products and to the skill level of your workers. Below you will find a possible configuration for a line processing approx. 250 heads per hour, requiring a minimum of 6 people.

1. Semi-automatic preparation on Pig head Pre-cutter (PHPC)

- Pig head is placed inside PHPC
- Head skin is cut in half
- Prenasal bone and nose are cut in two
- Prenasal bone is separated from skull

2. Manual preparation on PHD line

- Head is firmly affixed to line
- Lower jaw halves are being precut

3. Automatic mask pulling & jaw splitting

- Jaw is opened
- Mask gets pulled from skull
- Lower jaw is split in half for easy removal

4. Efficient deboning on PHD line

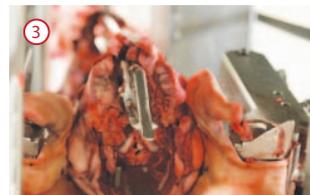
- Mask completely removed for further skinning and trimming
- Jaw halves are cut away and cheek meat is collected
- Meat from jaw cavity and palate is collected

5. Automatic unloading onto table

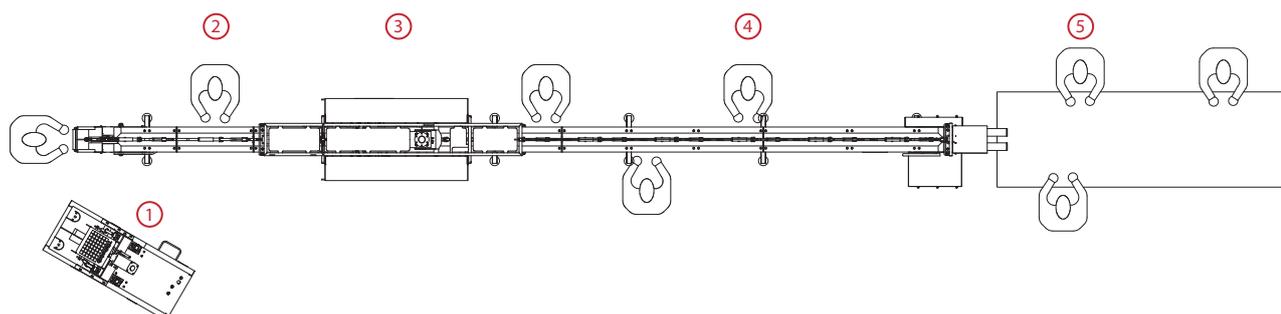
- Temple & occipital meat and other trimmings are recovered
- Deboned skull is disposed of

Equipment benefits

- High yield: can improve manual labor efficiency and therefore yield up to 100%
- Highly flexible capacity: designed to deal with fluctuations in the head supply without compromising labor efficiency
- Lower labor and training costs: requires significantly less skill in manual deboning because every worker constantly performs the same part-action
- Improved labor conditions: pig heads are firmly attached to the line and are ergonomically accessible
- Deboning is done under optimal hygienic conditions.
- In most cases this results in a payback period of less than 1 year



1. Pre-cutting on PHPC, 2. Preparation, 3. Mask Pulling, 4. Deboning



1. PHPC pre-cutting, 2. Preparation, 3. Mask Pulling & Jaw Splitting, 4. Deboning, 5. Trimming



Technical data

Length (A) 9742 - 12142 mm, 384 - 478 inch

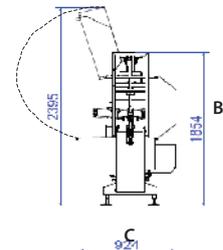
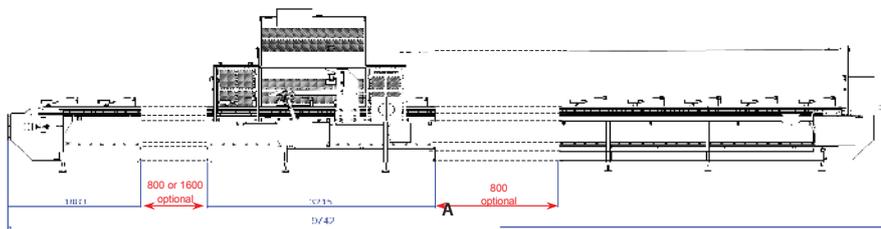
Height (B) 1854 mm, 73 inch

Width (C) 924 mm, 36.4 inch

Weight 900 kg, 1984.2 lbs

Total power 4 kW, 5.4 hp

Airborne noise < 80 dB(A)



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

In close partnership with red meat processors Marel Meat develops innovative systems and software for primary, secondary and further processing to ensure efficiency, sustainability and traceability.

With offices and subsidiaries in over 30 countries and a vast global network of agents and distributors our expertise in local markets and requirements helps us deliver superior service and support to our customers.