

# Full line solutions

From 40 to 1,600 pigs per hour



- Full line solutions from stable to chilling room (40-1,600 pigs/hour)
- Electronic and CO<sub>2</sub> stunning systems
- Various automation programs in F-line and M-line (robotics) technology

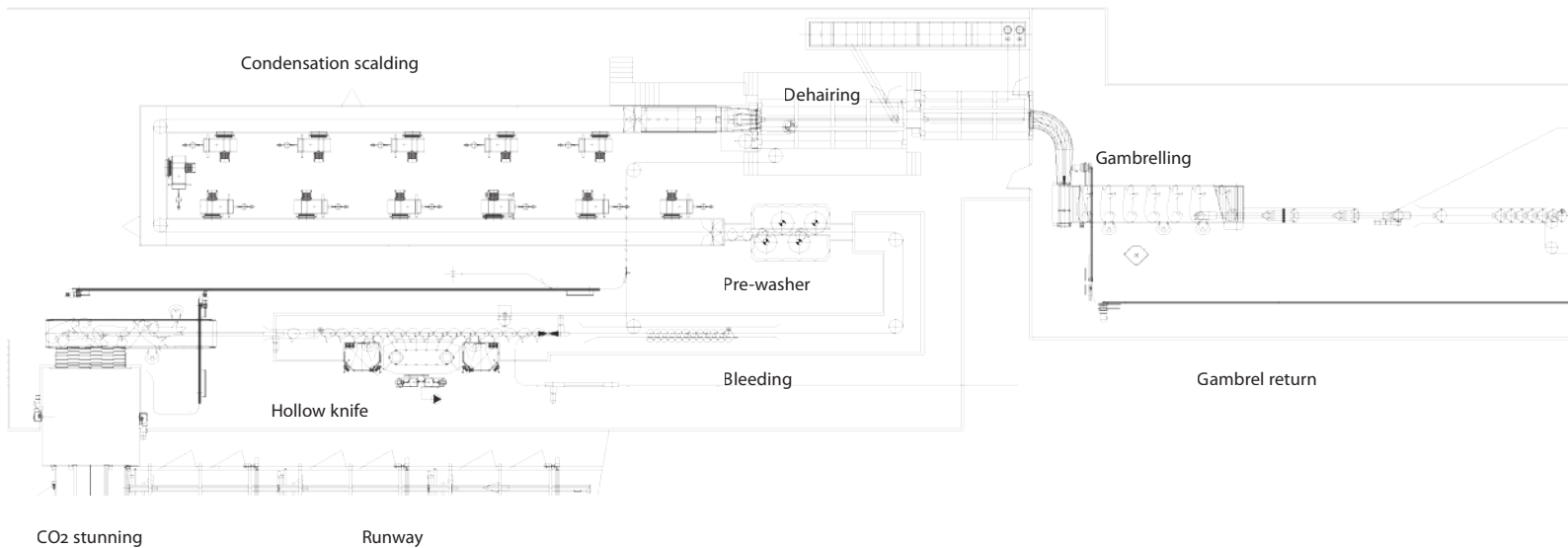
# Pig slaughter lines

## Pre-slaughter handling

Handling of animals pre-slaughter in the meat processing facility is essential for meat quality. We are able to design stables and runways and train your staff in animal handling procedures. Many sources state that the meat quality is determined more by animal handling, not the method of stunning.

## Bleeding and hollow knife systems

Depending on the capacity and customers' requirements, we supply both vertical and horizontal bleeding systems, from ergonomic manual workstations to advanced hollow knife blood collection systems.



## Stunning

How do you choose a stunning system? Which is better, electronic or CO<sub>2</sub> gas stunning? Not an easy question to answer, but since we build and supply both systems, we are the only company in the world that can provide the answer based on the element, that our customers get the best system to add value to their process!



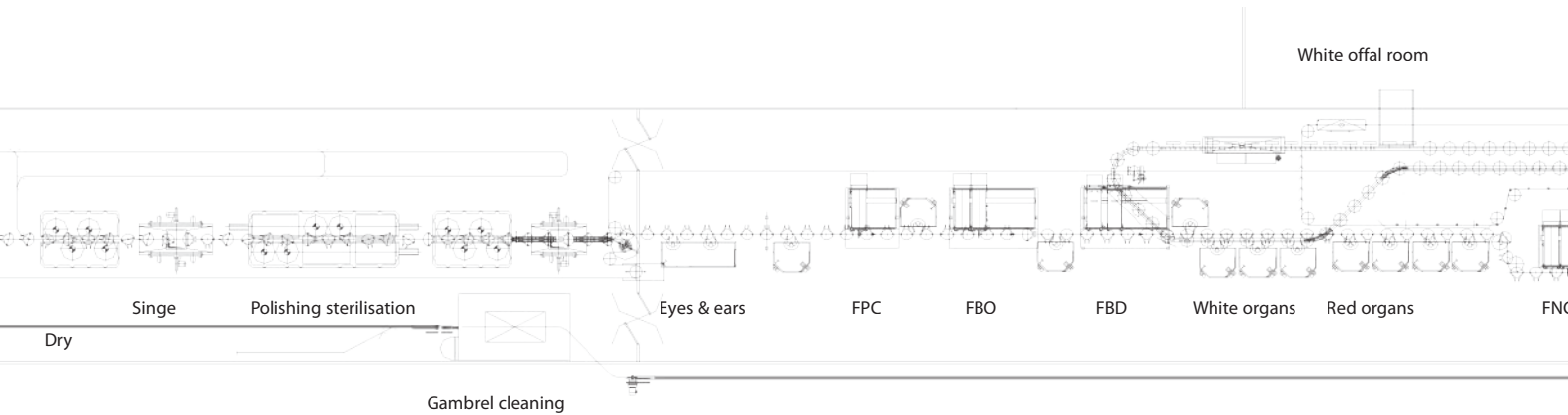
## Scalding

We supply the traditional pull through scalding or the condensation scalding system. The scalding method is becoming increasingly more important because of operating costs and the occurrence of cross-contamination from scalding water recycling. All scalding systems are supplied with the necessary temperature control systems and circulation pumps. Heat exchangers are optional.



## Dehairing

Maximum dehairing results can only be achieved if the dehairing equipment is optimally designed for the scalding system. In addition to the equipment used, factors such as the scalding time, scalding temperature, breed of pig and seasonal influences can all affect the dehairing result. Marel therefore offers different types of dehairing machines for specific conditions.

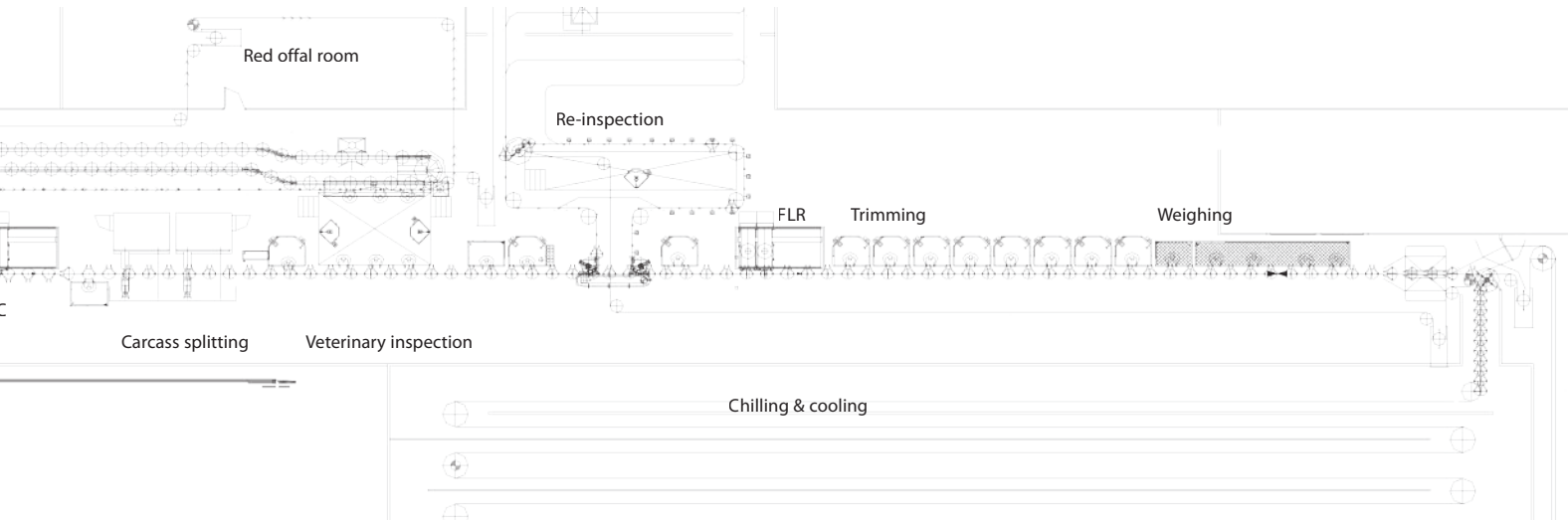
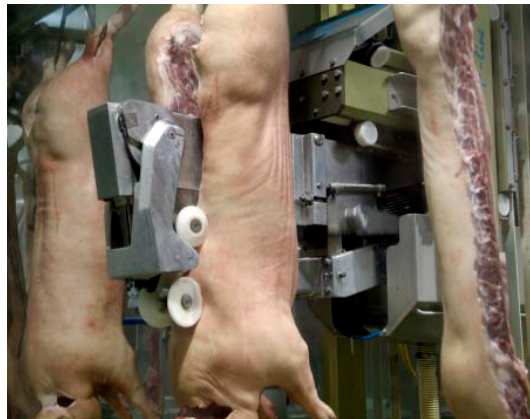


## Gambrelling

After dehairing, the pigs are gambrelled or hooked and hoisted up to the buffer rail in front of the machine/ dressing line conveyor. There are several gambrelling tables with a fixed or moving top execution.

## Carcass finishing (dry, singe, wash and polish)

The Marel machine line can be supplied with various kinds of pre-dryers, flaming furnaces, and washing and polishing machines in order to achieve the most effective skin cleaning and decontamination. These machines will minimize bacterial growth and contribute to good plant hygiene.



## Evisceration

Adding value to the carcass drives the evisceration process. We designed both the manual and automated evisceration systems on the basis of:

- optimizing labour use
- maximizing slaughter efficiency
- minimizing contamination

## Automated Evisceration

The use of different automatic systems will increase shelf life and reduce your kill floor costs: guaranteed!

## Chilling and Cooling

Chilling – Most modern meat plants are equipped with a quick chill tunnel to reduce the carcass temperature as quickly as possible and avoid unnecessary weight loss.

Cooling or equalization rooms – We supply both automatic and manual transport systems for the cooling rooms.

## Dispatch

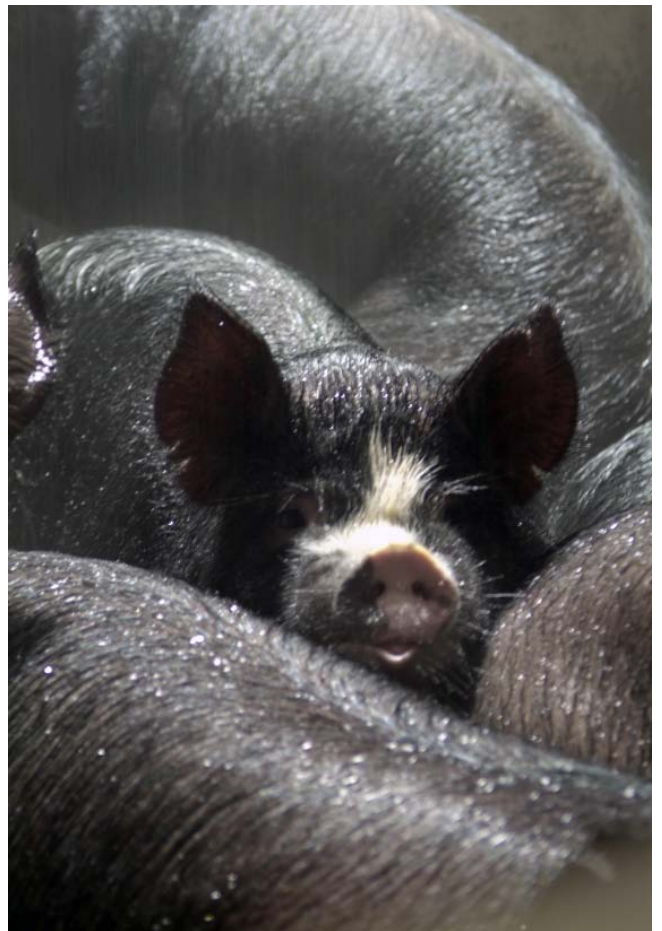
For efficient dispatch of carcasses or meat racks, we provide several solutions for loading the trucks from the internal rail system.

# Delivery program

**Marel Meat supplies industrial pig slaughter lines worldwide with capacities from 40 pigs an hour up to the fastest line in the world today: 1,600 pigs per hour!**

We focus on quality, reliability, efficiency and hygiene. The challenge for the meat industry today is to use production techniques that meet the customers' rising demands while at the same time complying with all the hygiene and food safety rules.

We have the knowledge and experience required for supplying advanced processing systems that eventually produce high quality food products for our customers.







# Advantages at a glance...

- State-of-the-art technology
- Focus on uptime
- 24/7 support service
- Innovative solutions



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

In close partnership with our customers we in Marel Meat develop advanced systems and software for primary, secondary and further processing, to ensure maximum efficiency, sustainability and traceability.

We have an extensive global sales and service network that spans more than 30 countries; and our red meat processing experts are always within easy reach when you need support.