



PORK // ROBOTIC CHINE BONE SAW

IMPROVE LOIN AND RIB YIELDS

The Robotic chine bone saw is a robust machine that unlocks the potential of loin boning operations by creating consistent high quality final products.

The RCBS accurately separates the chine bone from the loin with a complex 3D cut path that follows the natural shape of the piece, resulting in both loin and back rib yields improvement.

The vast experience of Frontmatec gained with the chine bone saw on pork middles is behind this technology, which combines a dual camera vision system, patented algorithms and robotics. Use the RCBS with other Frontmatec equipment, such as the Automatic loin puller or the new American back finner for unsurpassed yield opportunities.

Working process

1. An employee feeds the bone-in loin onto a special conveyor designed to hold the product firmly in place during the process
2. A dual camera vision system acquires several hundred thousand measurements to create a precise 3D model of the bone-in loin
3. The advanced software detects the joints between the chine bone and back ribs in order to determine the best cutting trajectory that maximizes back ribs and loin products while satisfying quality attributes
4. Synchronously with the conveyor, a 6-axis robot accurately displaces a servo-driven saw along the complex cutting pattern needed for the optimal chinebone separation
5. The chine bone is diverted to a conveyor
6. The loin exit the machine and transfers to loin boning table



Value for you!

- High capacity: Up to 1,100 loins/h
- Optimal 3D cut path, maximizing loin and back ribs yield
- Consistent final product
- Ability to process right and left loins
- Compact unit, small footprint
- Few parts to maintain
- Easy setup of machine parameters at operator panel
- Possibility of establishing recipes



Safety and legal requirements

The Robotic chine bone saw is designed to meet the strictest demand on health and safety.

Hygiene

The machine is manufactured in stainless steel and food grade components in order to withstand the harsh environment present in the food processing industry.

To ensure high hygiene levels, as well as easy efficient cleaning, the RCBS is covered in a strong, flexible cover with constant air pressure, keeping the vital parts of the robot clean and safe.

Technical data

Capacity	1,100 loins/hr (without sirloin) 1,000 loins/hr (with sirloin)
Dimensions (LxWxH)	3700x3150x2690mm 146x124x106"
Consumption	480V / 3PH / 100AMPS
Air Requirements	Pure, dry and free from oil

CONTACT

United States
+1 816 891 2440
kansascity@frontmatec.com

Canada
+1 418 885 4493
quebec@frontmatec.com

Denmark
+45 763 427 00
kolding@frontmatec.com

Uruguay
+598 2307 5898
info@asuan.com.uy

Germany
+49 252 185 070
hygiene@frontmatec.com