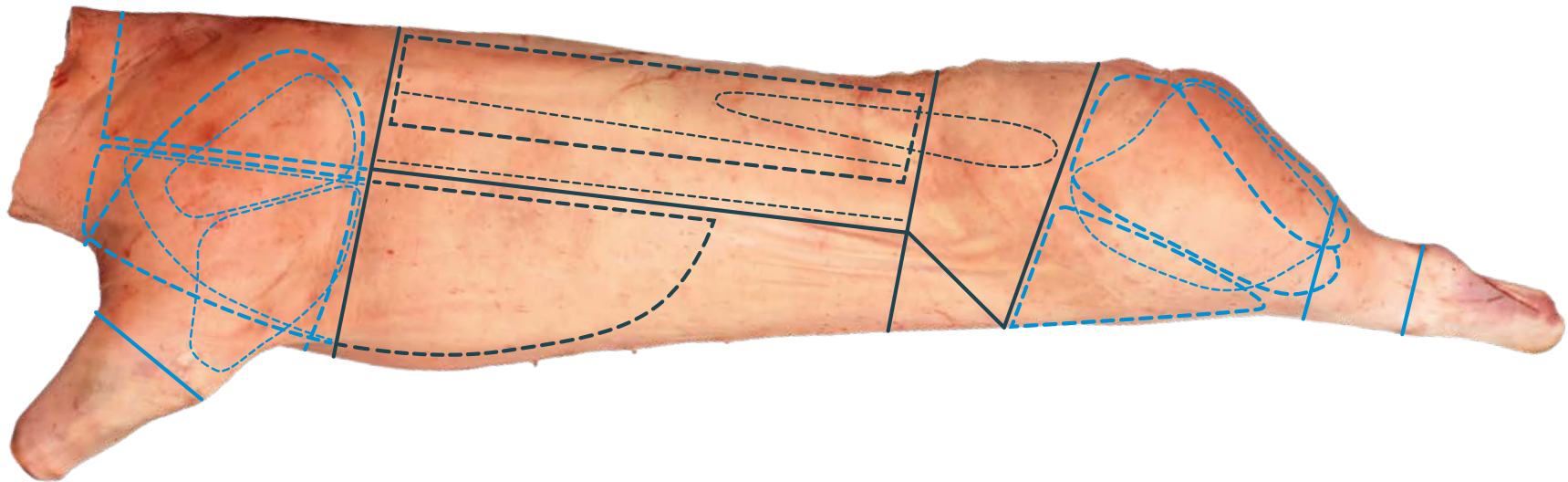


Pork – Practical Level 3

Cutting pork primal cuts into advanced retail and foodservice cuts



Contents

- 2 Introduction
- 2 Exam requirements
- 3 Pork carcass classification
- 4 Pork primal cuts
- 6 Pork bone structure
- 7 Pork cutting specifications

Introduction

Welcome to the AHDB Meat Education Programme, Pork – Level 3, which focuses on cutting pork primal cuts into more advanced retail and foodservice cuts.

By using seam butchery, the primal cuts are cut into different retail and foodservice cuts. The benefit of seam butchery is that pork primals containing more than one muscle can be cut into individual muscles or groups of muscles with similar eating qualities and usage. Gristle and connective tissue can then be removed, creating cuts that have a more consistent eating quality.

This brochure includes detailed step-by-step instructions on how to achieve this.

Each stage is shown with both written and photographic guidance, which will provide you with the required level of knowledge you will need to pass Level 3.

Good luck!

Dick van Leeuwen

AHDB Business Development Manager and Master Butcher



Exam requirements

You are required to know how to carry out the following:

- Seam cut the primal cuts into individual muscles or groups of muscles by following the natural seams
- Recognise the direction of the grain of the meat
- Understand that within certain muscles we can have a range of tenderness levels and certain parts of these muscles might have to be removed to create consistency in tenderness and eating quality
- Cut each primal cut into the retail and foodservice cuts illustrated in this manual, by following natural seams, where possible and without cutting unnecessarily into muscles. You are allowed to refer to the cutting specifications
- Prepare the cuts without any unnecessary cuts/stab marks or damage to the muscles
- Cuts should be without bone dust, bone splinters; stringing of joints should be even and tidy, steaks should be of even thickness
- Minimise wastage by removing gristle, connective tissue and fat cleanly, without wasting good meat
- Recognise and know the names of the primal and retail/foodservice cuts featured

Note: Learn first to do the job accurately, and speed will follow with practise. It is more difficult to lose bad cutting habits later!

On the day of the examination:

- The examiner will select a forequarter, a middle, and a leg and chump of pork
- The examiner will present you with nine printed copies of cutting specifications from this manual (three for each primal cut), to produce retail and foodservice cuts
- **You need to do this in a reasonable time**, taking into account all the requirements previously stated

Pork carcass classification

The following equipment is approved for use in the UK:

- Optical probe
- Hennessey Grading Probe (HGP)
- Fat-O-Meater (FOM)
- AutoFOM
- CSB Ultra-Meater

The HGP, FOM, AutoFOM and CSB Ultra-Meater are all automatic recording probes.

Method 1

Optical Probe is used to measure backfat and rind thickness at the P1 and P3 positions, level with the head of the last rib. The probe is inserted 4.5 cm and 8 cm from the dorsal midline, respectively. The sum of the P1 and P3 measurements is recorded.

Method 2

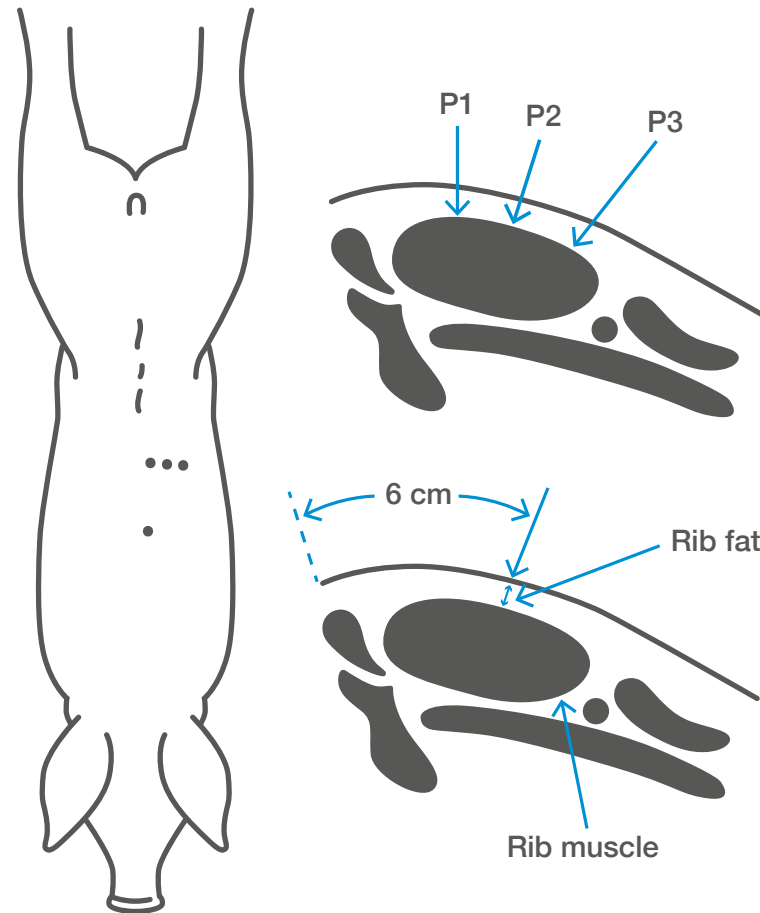
Optical Probe is used to measure backfat and rind thickness at the P2 position, level with the head of the last rib. The probe is inserted 6.5 cm from the dorsal midline.

Method 3

HGP or FOM are used to measure:

- Backfat and rind thickness at the P2 position as for Method 2. The HGP or FOM probes are inserted 6 cm from the dorsal midline
- Backfat and rind thickness at a point 6 cm from the dorsal midline between the third and fourth last rib. This measurement is referred to as rib fat
- Longissimus dorsi (eye muscle) depth at a point 6 cm from the dorsal midline between the third and fourth last rib. This measurement is referred to as rib muscle

Locations of probing sites on a pig carcass



Lean Meat Percentage (LMP) and EU Grade

LMP is calculated as follows:

- Optical probe
- Cold carcass weight and P2 (or P1 + P3) fat depths are used to estimate LMP

An EU grade can be allocated to a carcass by using the LMP.

Lean meat percentage	EU grade
60% and above	S
55–59%	E
50–54%	U
45–49%	R
40–44%	O
39% or less	P

Visual Appraisal

This is the identification of pigs with carcass faults. These are described as 'Z' carcasses. Carcasses that are scraggy, deformed, blemished, pigmented and coarse skinned, those with soft fat or pale muscle, and those devalued by being partially condemned, are recorded as 'Z' on the carcass record (PCC1 or computer equivalent). Young boars are identified and recorded. Carcasses with poor conformation are recorded as 'C' carcasses at the request of the abattoir.

Pork primal cuts

Forequarter – bone-in



Collar of Pork – boneless



Denver Muscle (Presa)



Chuck Eye Joint – Collar



Boston Butt (Neck End)



Shoulder – round



LMC



Pork Henry – whole



Brisket Muscle – fully trimmed



Brisket Rib Rack



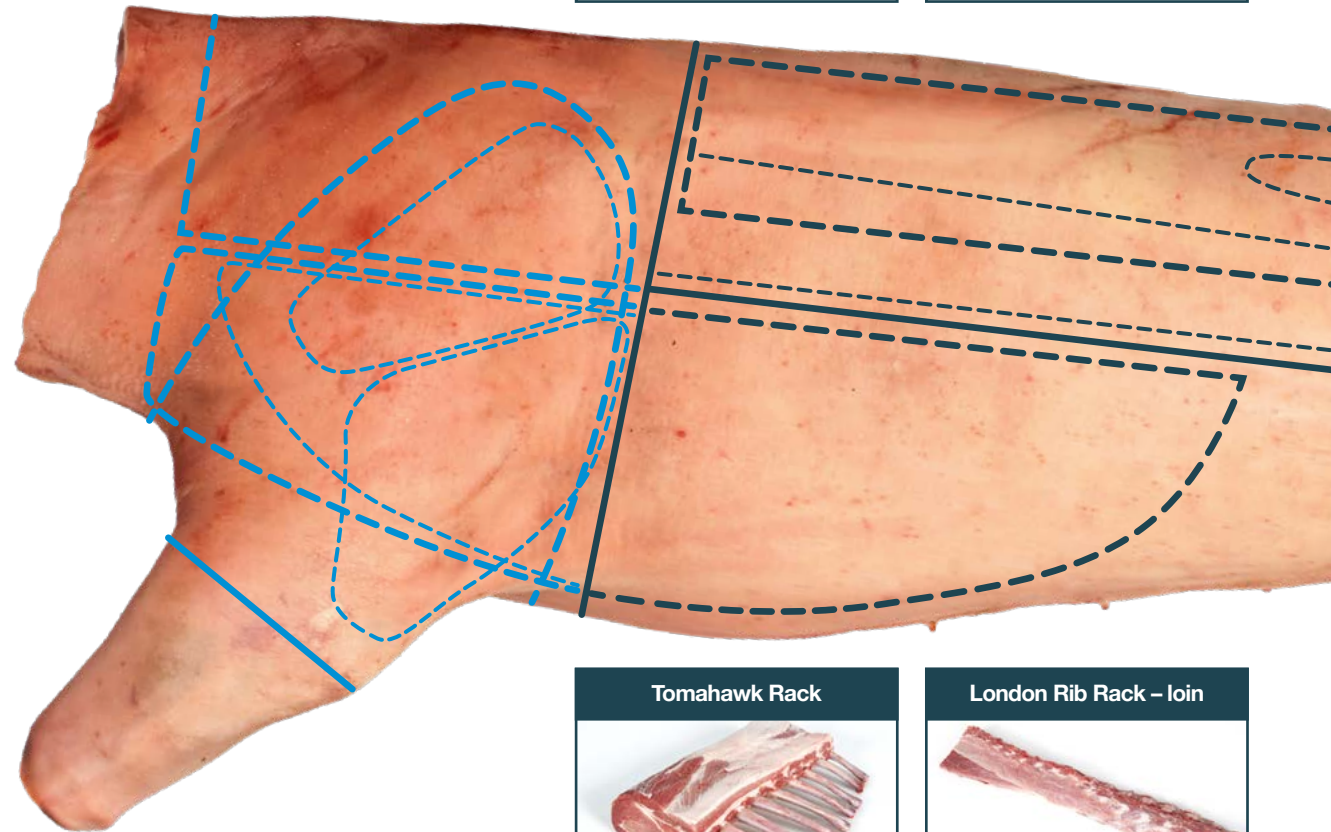
Shank – Forequarter



Middle



Loin



Tomahawk Rack



London Rib Rack – loin



Gloucester Ribs Rack – loin



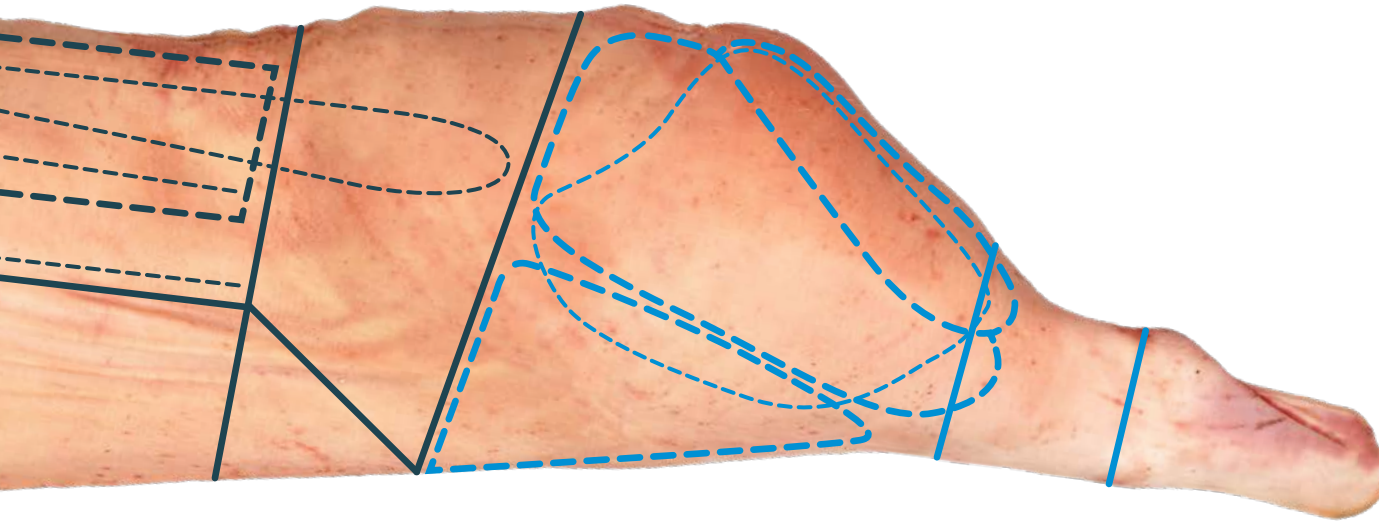
Spare Rib – loin



Fillet on the bone



Fillet



Leg of Pork incl. Chump



Leg of Pork



Topside



Topside excl. gracilis muscle



Silverside with Salmon Cut



Salmon Cut – fully trimmed



Belly



King Rib Rack – belly



Spare Ribs – belly



Thick Flank



Rump



Chump



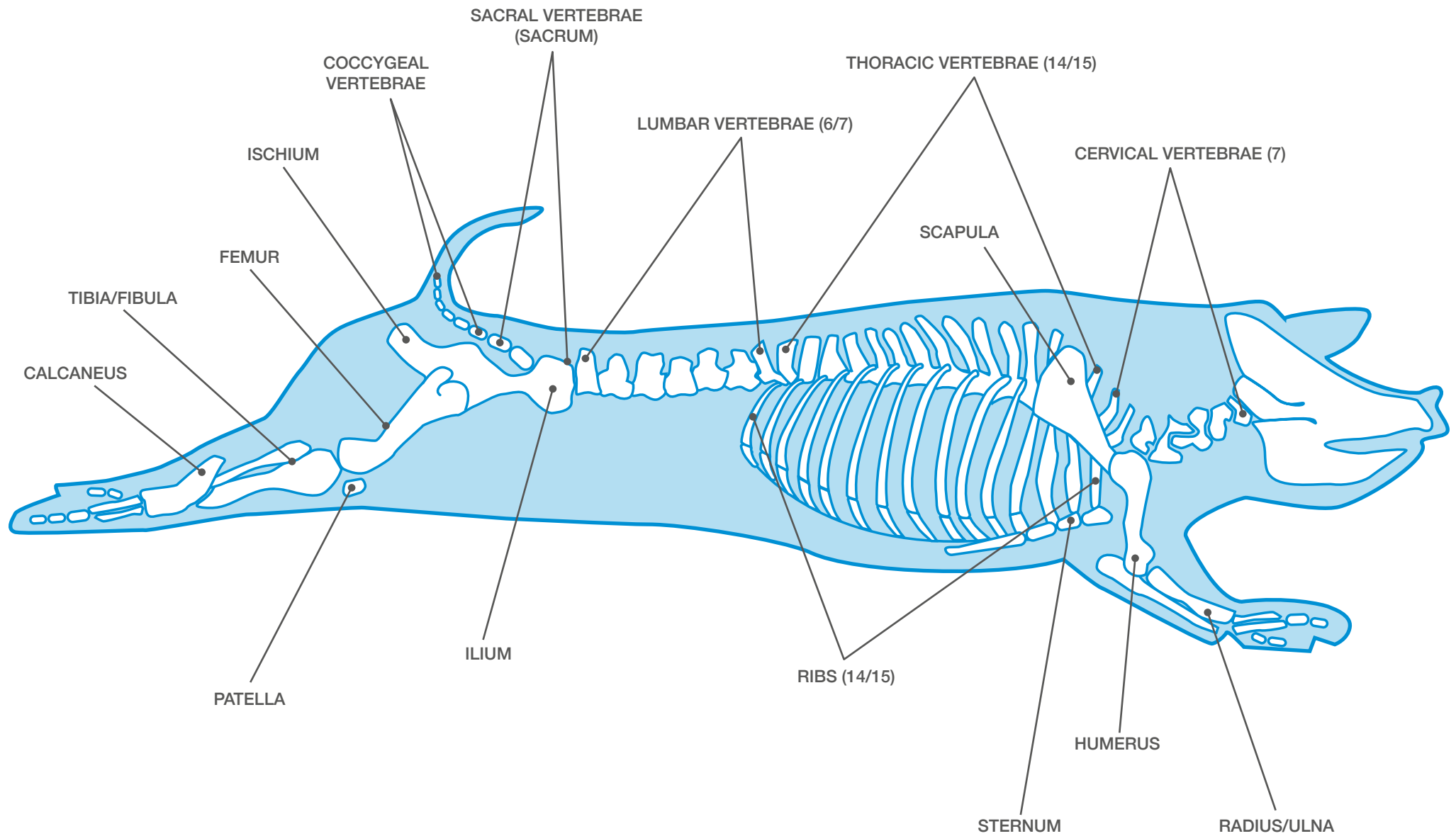
Hock



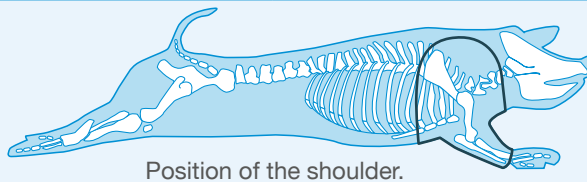
Shank – Hindquarter



Pork bone structure



Shoulder Joint – boneless (Feather and LMC muscles)



Code: 2021



1 Shoulder – round.



2 Seam cut the brisket muscle and fold it ...



3 ... back to expose the humerus.



4 Follow the contours of the shoulder blade ...



5 ... and remove the blade bone.



6 Remove the shank and ...

Shoulder Joint – boneless (Feather and LMC muscles) (continued)

Code: **2021**



7 ... humerus.



8 Remove the rind, including excess fat.



9 Boneless, rindless shoulder of pork.



10 Cut between the feather and blade to split the shoulder in two.



11 Blade and brisket muscle.



12 Trim the remaining feather and LMC, including additional small muscle groups, of excess fat and gristle.

Shoulder Joint – boneless (Feather and LMC muscles) (continued)

Code: **2021**



13 Remove the group of small muscles attached to the LMC, as illustrated.

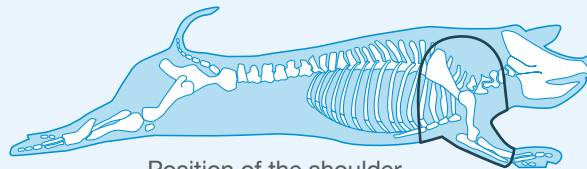


14 Remove the thickest part of the feather and LMC gristles.



15 Shoulder joint – boneless (feather and LMC muscles).

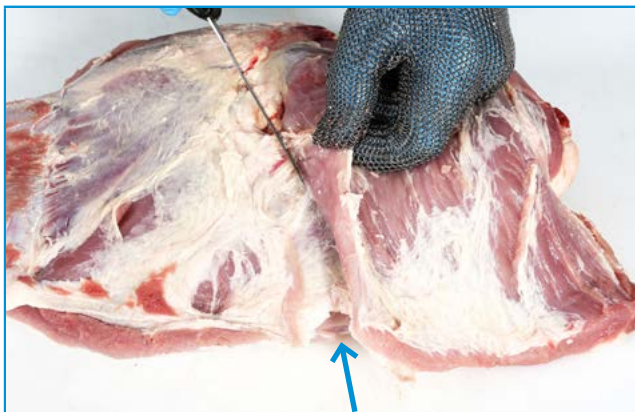
Shoulder Joint – boneless (Brisket and Blade muscles)



Code: 2022



1 Round shoulder.



2 Start separating the brisket muscle from the shoulder muscles by following the natural seam, (see arrow)



3 Continue to separate the brisket from the LMC muscle ...



4 ... to expose the humerus leaving the small shin-like muscle attached to the brisket ...



5 Follow the contours of the shoulder blade and ...



6 ... remove the blade bone.

Shoulder Joint – boneless (Brisket and Blade muscles) (continued)

Code: 2022



7 Remove the shank and ...



8 ... the humerus.



9 Remove rind and excess fat, taking care not to cut into underlying muscles (feather and LMC muscles).



10 Boneless rindless shoulder.



11 Separate the brisket and blade muscles by cutting between the blade and feather muscle.



12 Brisket and blade muscles.

Shoulder Joint – boneless (Brisket and Blade muscles) (continued)

Code: **2022**



13 Trim excess fat and gristle and ...

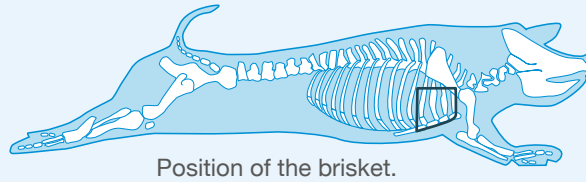


14 ... fold the brisket over the blade muscle and secure with net or roasting bands.



15 Shoulder Joint – boneless
(brisket and blade muscles).

Brisket Muscle – fully trimmed



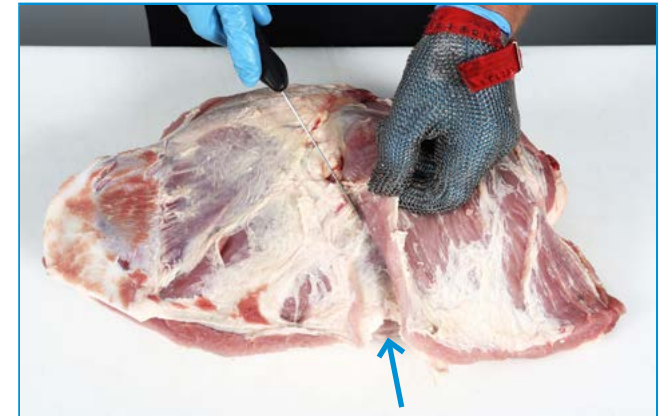
Code: **1031**



1 Bone-in shoulder of pork.



2 Remove shank and rind.



3 Separate the brisket muscle from the shoulder muscles by following the natural seam (see arrow).



4 Continue to separate the brisket from the LMC muscle and ...

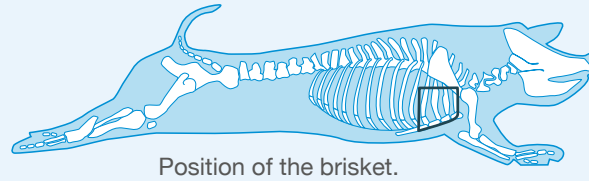


5 ... remove the brisket muscle from the shoulder.



6 Brisket muscle – fully trimmed.

Brisket Rib Rack



Code: **3069**



1 Remove the collar from the forequarter.



2 To remove the brisket rib rack ...



3 ... follow the line of the ribs and cut through ...



4 ... the underlying brisket muscle.

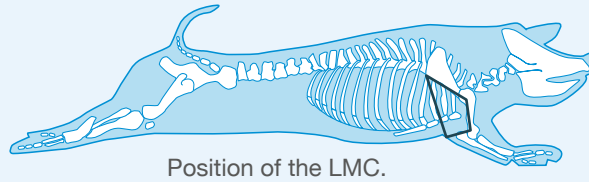


5 Remove the brisket rib rack including the brisket muscle which remains attached to the rib bones to create a very meaty rib.



6 Brisket rib rack.

Steaks – LMC



Code: **3064**



1 Shoulder – round.



2 Seam cut the brisket muscle and fold it ...



3 ... back towards the humerus.



4 Follow the contours of the shoulder blade...



5 ... and remove.



6 Remove the shank and ...

Steaks – LMC (continued)

Code: **3064**



7 ... humerus.



8 Remove the rind, including excess fat.



9 Cut between the feather and blade to split the shoulder in two.



10 Blade and brisket muscle.



11 Remaining feather, LMC, including additional small muscle groups. Trim of excess fat and gristle.



12 Remove the group of small muscles attached to the LMC, as illustrated ...

Steaks – LMC (continued)

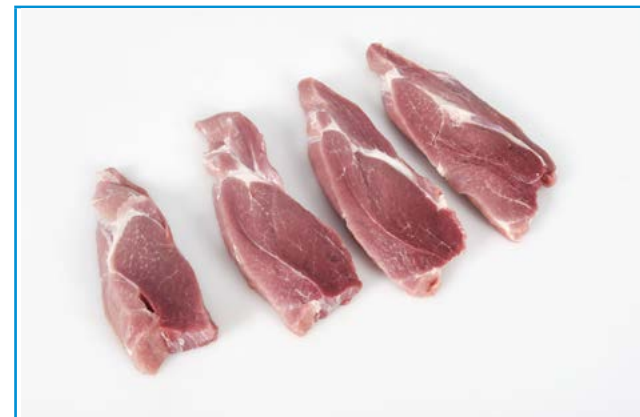
Code: **3064**



13 ... including the feather muscle.



14 Remove the thickest part of the gristle running through the LMC muscle, and cut muscle into steaks.

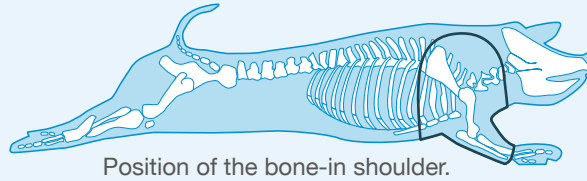


15 Steaks (LMC).



16 Steak (LMC).

Pork Henry – portions



Code: 2026



- 1 Remove the shoulder blade with all attached muscles ...



- 2 ... by following the contours of the bone as illustrated.



- 3 Trim excess cartilage and fat from the Pork Henry.



- 4 Pork Henry.

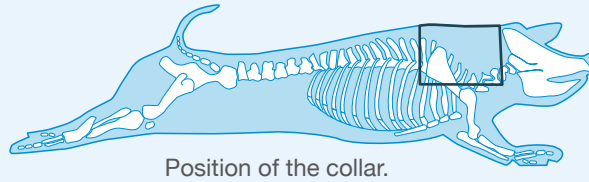


- 5 Cut and saw Pork Henry into halves.



- 6 Pork Henry – portions.

Chuck Eye Joint – collar



Code: 2023



1 Collar – boneless.



2 Follow the natural seam to separate the two main muscle blocks of the collar, as illustrated.



3 The top of the collar (A) and the presa (Denver muscle) (B).



4 The top of the collar contains the chuck eye which is the continuation of the rib eye.

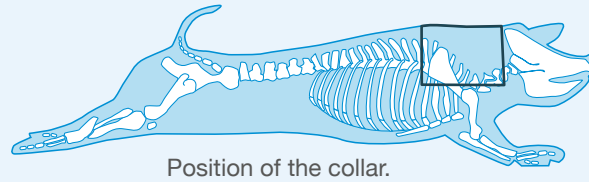


5 The chuck eye is removed from the collar.



6 Chuck eye joint.

Chuck Spatchcock – collar



Code: **3065**



1 Collar – boneless.



2 Follow the natural seam to separate the two main muscle blocks of the collar as illustrated.



3 The top of the collar (A) and the presa (Denver muscle) (B).



4 The top of the collar contains the chuck eye which is the continuation of the rib eye.



5 The chuck eye is removed from the top of the collar leaving the remaining chuck joint.



Chuck Spatchcock – collar (continued)

Code: **3065**

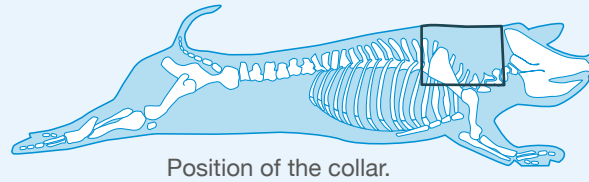


6 The chuck joint is butterflied to create the chuck spatchcock.



7 Chuck spatchcock.

Presa Steak (Denver Steak)



Code: 3072



1 Pork collar – bone-in.



2 Remove the bones by sheet boning, taking care not to cut into underlying muscles.



3 Boneless collar of pork.



4 Starting with the remaining piece of the loin eye muscle, follow the natural seam to remove ...



5 ... the muscle that lies on top of the presa (Denver muscle) ...



6 ... continue to separate the two muscles.

Preso Steak (Denver Steak) (continued)

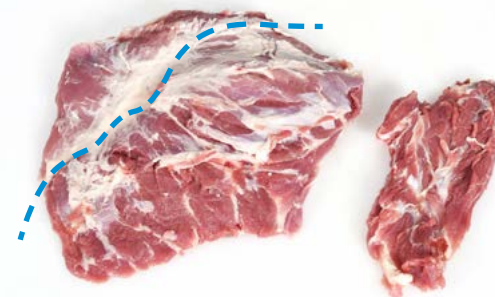
Code: 3072



7 Preso - Denver muscle (A).



8 Remove the chain muscle ...



9 ... and trim muscle by following the natural seam, as illustrated by dotted line.



10 Fully trimmed preso (Denver muscle)

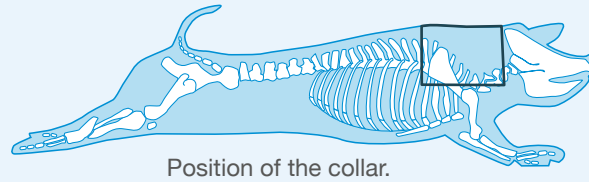


11 Cut muscle across the grain to create preso steak (Denver steak).



12 Preso steak (Denver steak).

Derby Ribs – collar



Code: **3066**



1 Collar of pork – bone-in.



2 Collar of pork – bone-in.



3 Remove the bones by sheet boning, leaving a minimum of ...



4 ... 20 mm of meat on the bones.

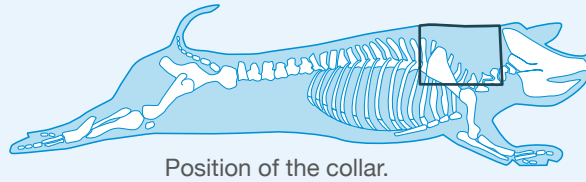


5 Cut/saw the bones into 30 mm wide portions.



6 Derby ribs.

Derby Ribs – collar, boneless



Code: **3067**



1 Collar of pork – bone-in.



2 Remove the bones by sheet boning.



3 Butterfly cut the joint in two lengthways ...



4 ... to create two equal pieces.

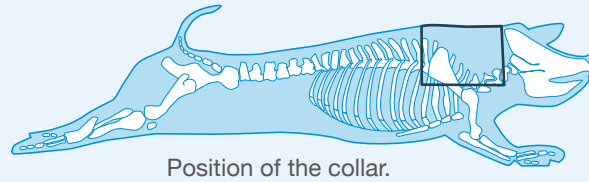


5 Cut the pieces into 30 mm thick portions.



6 Derby ribs – boneless.

Derby Pavé – collar



Code: **3068**



1 Collar of pork – bone-in.



2 Collar of pork – bone-in.



3 Remove the bones by sheet boning.



4 Butterfly cut the joint in two lengthways to create two equal pieces.

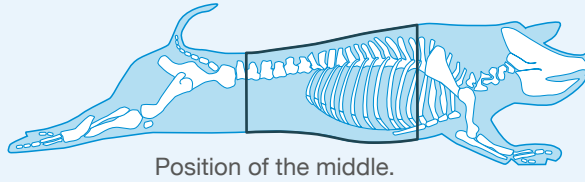


5 Cut pieces into required weight portions to create Derby pavés.



6 Derby pavé.

Loin and Belly Joint – boneless



Code: **2004**



1 Bone-in middle of pork.



2 Remove bones by sheet boning, taking care not to cut into underlying muscles.



3 Remove all rind and the thickest part (50 mm wide) ...



4 ... of the loin gristle. Remove excess fat. Maximum fat level 10 mm.

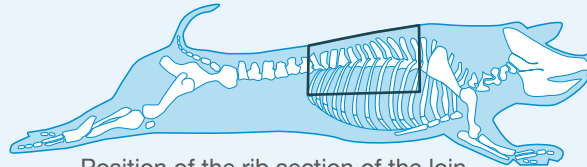


5 Roll joint and secure with string at regular intervals.



6 Loin and belly joint – boneless.

Rack of Pork

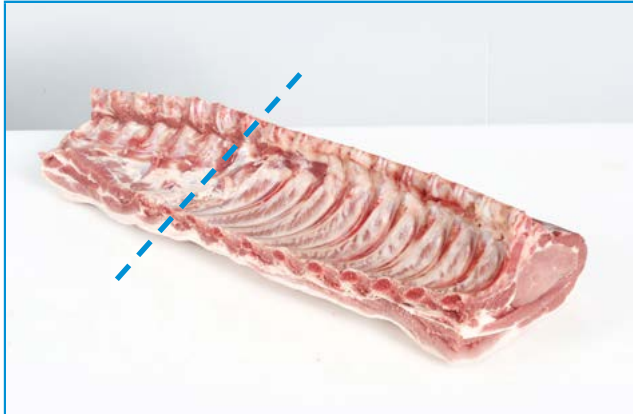


Position of the rib section of the loin.

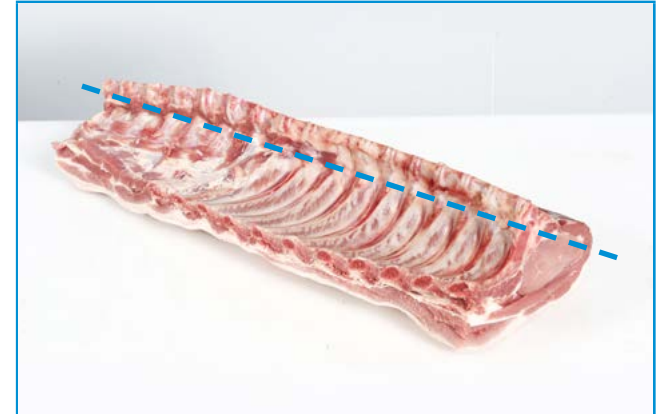
Code: 2008



1 Loin of pork – bone-in, rindless.



2 The lumbar section is removed from the loin.

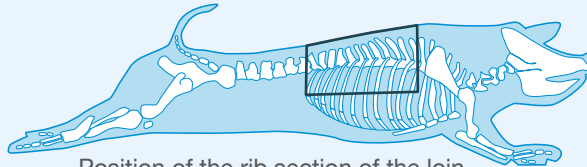


3 The top of the ribs joined to the vertebrae are sawn through, and the vertebrae and feather bones are removed.



4 French-trim the ribs to leave 50 mm of bone exposed. Cut into required weight racks. Rack of pork.

Club Steaks



Position of the rib section of the loin.

Code: 3009



- 1** Remove the lumbar section from a rindless loin of pork as illustrated.



- 2** The ribs are sawn through at a point where they join the vertebrae.



- 3** Remove the vertebrae by sheet boning.

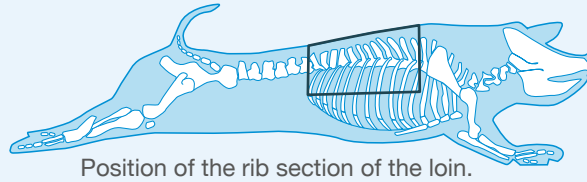


- 4** French-trim the ribs to leave 50 mm of the bone exposed. Cut between the ribs to create club steaks.



- 5** Club steaks.

Cote de Porc



Code: **3081**



- 1 Remove the lumbar section from a rindless loin of pork, as illustrated.



- 2 The ribs are sawn through at a point where they join the vertebrae.



- 3 Remove the vertebrae by sheet boning.



- 4 Remove the tail muscle and French trim the ribs.



- 5 Remove every other rib, as illustrated.

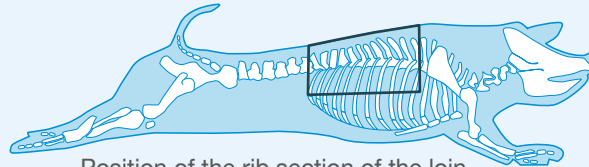


- 6 Cut in between the ribs to create Cote de Porc.



- 7 Cote de Porc.

Tomahawk Steaks



Code: 3059



- 1 Middle of pork. Make a mark on the first loin rib 20 cm from the tip of the loin eye muscle and remove the belly in a straight line from the loin.



- 2 Remove the lumbar section from the loin, as illustrated.



- 3 The ribs are sawn through at a point where they join the vertebrae.



- 4 The vertebrae and the feather bones are then removed.



- 5 Make a mark 25 mm from the tip of the eye muscle and ...

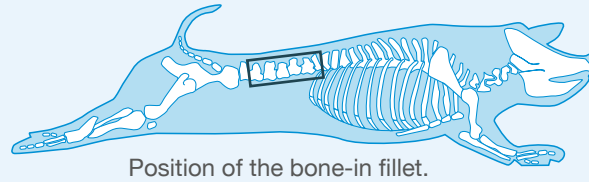


- 6 ... trim meat to expose the ribs. Cut in between the ribs to create Tomahawk steaks.

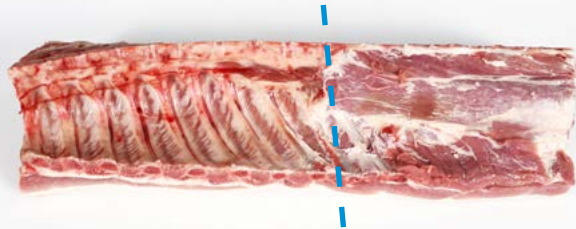


- 7 Tomahawk steak.

Fillet Steak on the bone



Code: 3060



1 Loin of pork.



2 The lumbar section of the loin is used for this cut.



3 Saw through the feather bones, as illustrated, taking care not to damage the loin muscles.



4 Remove the feather bones, as illustrated.



5 Remove the fillet, with bones attached, from the loin.

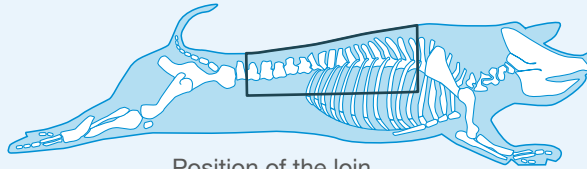


6 Fillet on the bone. Cut between the vertebrae to create fillet steaks on the bone.



7 Fillet steaks on the bone.

Gloucester Ribs Rack – loin



Code: **3055**



1 After removing the London ribs ...



2 ... (vertebrae) section of the loin leaving a minimum of 20 mm meat on the bone.



3 Remove the rib section, starting at the top of the eye muscle. Follow the seam of the eye muscle, leaving all remaining muscles and loin tail on the rib section.



4 Make a straight cut to separate the eye muscle from the rib section.

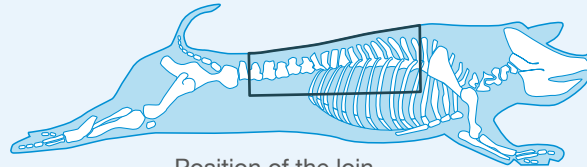


5 Gloucester ribs rack – loin.



6 Gloucester ribs rack – loin.

London Ribs



Code: **3058**



1 Loin of pork – bone-in, rindless, excluding fillet.



2 The ribs are sawn through at a point where they join the vertebrae, including flat bones of the lumbar section.



3 Remove vertebrae and feather bones, leaving a minimum of ...



4 ... 20 mm of meat on the bones.



5 London rib rack is cut into portions of 30 mm wide.

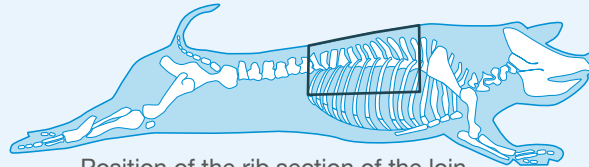


6 London ribs.



7 London ribs.

Rib Eye Steaks



Position of the rib section of the loin.

Code: **3014**



1 Loin of pork – boneless, rindless.



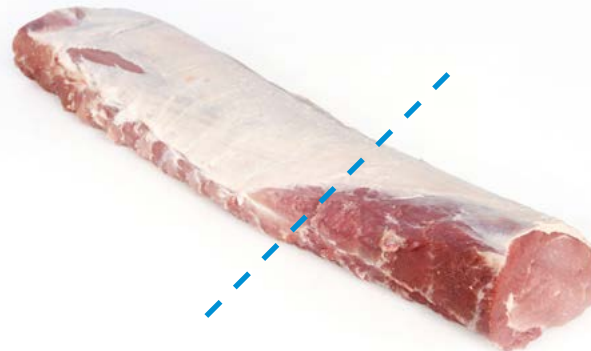
2 Loin of pork – boneless, rindless.



3 Follow the natural seams to remove the eye muscle from the remaining loin muscles, including all back fat.



4 Taking care to leave the chain and spinalis muscle on the eye muscle.

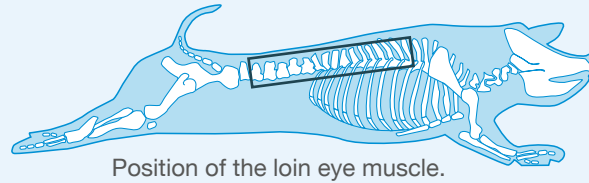


5 Eye muscle including loin chain and spinalis muscle. The part with the spinalis muscle can be used for rib eye steaks.



6 Rib eye steaks.

Loin Escallops – 99%VL



Code: **3048**



1 Loin of pork – boneless, rindless.



2 Loin of pork – boneless, rindless.



3 Follow the natural seams to remove the eye muscle and backfat from the remaining loin muscles.



4 Remove the loin chain and spinalis muscle by following the natural seams.

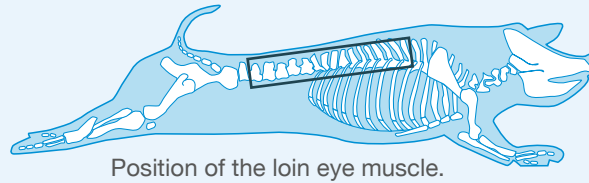


5 Trim eye muscle of all remaining fat and gristle (99%VL) and cut into 20 mm steaks.



6 Loin escallops – 99%VL.

Loin Cannon Steaks



Code: 3051



1 Loin of pork – boneless, rindless.



2 Loin of pork – boneless, rindless.



3 Follow the natural seam to remove the eye muscle. Trim eye muscle of excess fat, maximum fat thickness 7 mm.



4 Cut eye muscle lengthways into required weight to create loin cannons.

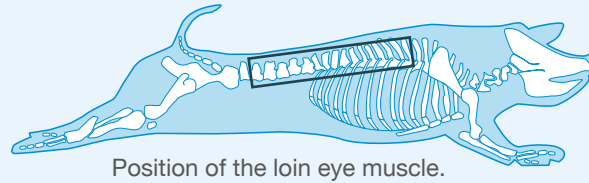


5 Loin cannon. Cut the cannons into required weight steaks.



6 Loin cannon steaks.

Oyster of Pork – Loin 99%VL



Code: 3052



1 Loin of pork – boneless, rindless.



2 Loin of pork – boneless, rindless.



2 Follow the natural seam to remove the eye muscle, including chain and spinalis muscle.



4 Trim eye muscle of all fat and gristle.

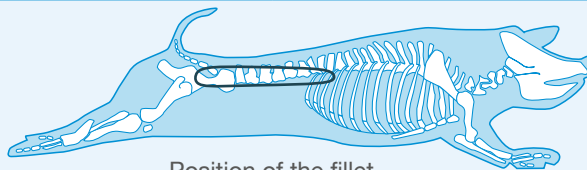


5 Cut the eye muscle in half lengthways and cut into loin oysters 99%VL. Maximum thickness 15 mm.



6 Loin oysters – loin 99%VL.

Fillet of Pork Spatchcock – portions



Code: **3046**



1 Fillet of pork.



2 Remove chain, the silverskin and fat.



3 Butterfly cut the fillet ...



4 ... lengthways.

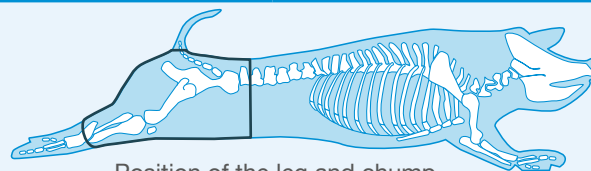


5 Fillet of pork spatchcock.



6 Cut the spatchcock in half to create fillet of pork spatchcock portions.

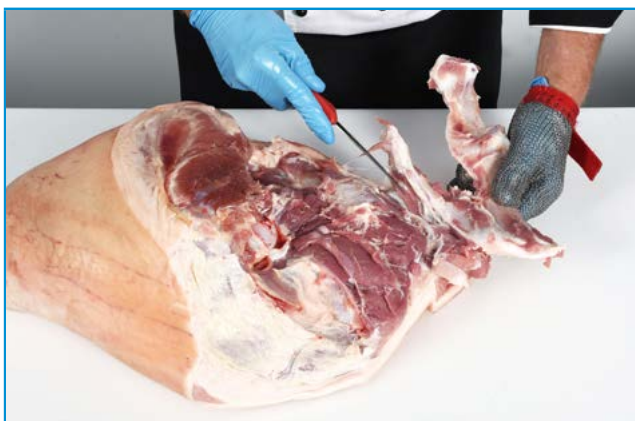
Leg and Chump of Pork – seam cut



Code: **1058**



- 1 Remove the thin layer of muscle from the aitch bone.



- 2 Remove aitch and tail bones.



- 3 Remove the rind, together with ...



- 4 ... excess fat.



- 5 To remove the topside, follow the seam between the topside, thick flank, ...



- 6 ... silver side and salmon cut taking care not to cut into under lying muscles.

Leg and Chump of Pork – seam cut (continued)

Code: 1058



7 Topside.



8 Follow the seam between the heel muscle and the shin muscles ...



9 ... and remove the shank.



10 Shank – hindquarter.



11 Follow the contour of the bone and remove the femur.



12 Remove the patella (kneecap).

Leg and Chump of Pork – seam cut (continued)

Code: **1058**



13 To remove the thick flank, follow the seam between the silverside and the thick flank.



14 Thick flank.



15 The remainder of the leg and chump. Rump, silverside, salmon cut and heel muscle.



16 Remove the rump square as illustrated.



17 Rump.



18 Remaining silverside, salmon cut and heel muscle.

Leg and Chump of Pork – seam cut (continued)

Code: **1058**



19 To remove the heel muscle, follow the seam between the silverside and heel muscle.



20 Silverside, salmon cut and heel muscle.



21 Remove the salmon cut from the silverside by following the natural seams.

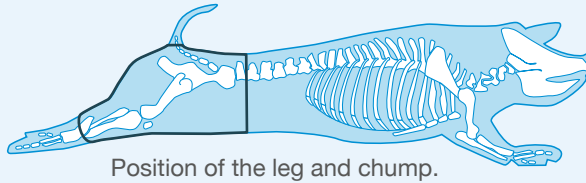


22 Silverside.



23 Salmon cut.

Mini Leg Joint with Crackling – boneless



Code: 2036



- 1 Remove the thin muscle situated on top of the hip bone.



- 2 Remove the lumbar vertebrae, hip and tail bones.



- 3 Peel back the layer of rind and fat from the topside.



- 4 Remove the topside by following the natural seams.



- 5 Remove the shank.



- 6 Shank – hindquarter.

Mini Leg Joint with Crackling – boneless (continued)

Code: 2036



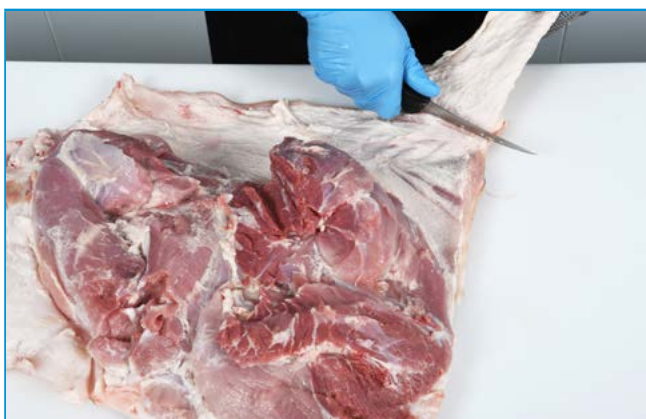
7 Remove the femur.



8 Remove the patella.



9 Trim and remove ...



10 ... excess gristle and fat.



11 Follow the silverside gristle and ...



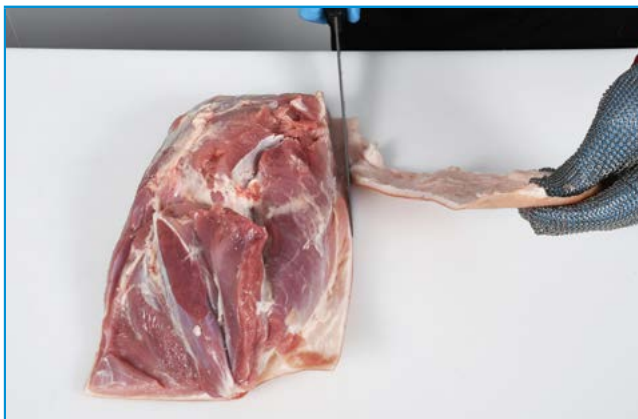
12 ... separate the silverside, salmon cut and heel muscle ...

Mini Leg Joint with Crackling – boneless (continued)

Code: 2036



13 ... from the rump and thick flank.



14 Remove excess fat, gristle and rind from ...



15 ... both muscle blocks.



16 Cut both muscles blocks.....



17 ... lengthways in two.



18 Secure with roasting bands at regular intervals.

Mini Leg Joint with Crackling – boneless (continued)

Code: **2036**



19 Cut into required size mini joints.

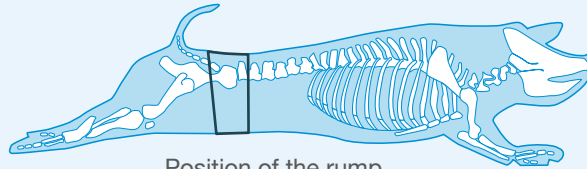


20 Mini leg joint with crackling – boneless.



21 Mini leg joint with crackling – boneless.

Rump Steak



Code: **3016**



- 1** The rump is removed from the silverside by a square cut.



- 2** Rump.



- 3** Remove excess fat and gristle, including the small group of muscles which lie ...



- 4** ... under the tail bone, as illustrated.

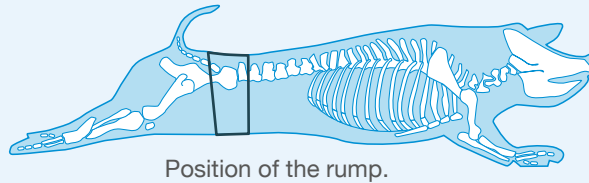


- 5** Cut rump across the grain into steaks of 25 mm thickness.



- 6** Rump steak.

Rump Steak on the bone



Code: 3037



1 Chump of pork.



2 Remove the back and tail bones.



3 Remove the small group of muscles that lie under the tail bone as illustrated.



4 Chump with remaining aitch bone.

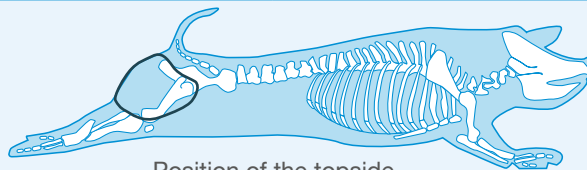


5 Saw through the bones at 25 mm intervals to create steaks of even thickness



6 Rump steaks on the bone.

Oysters of Pork – Topside, excl. gracilis muscle



Code: 3039



1 Topside of pork.



2 The gracilis muscle is removed from the top side.



3 The remainder is trimmed of visible fat and ...



4 ... cut lengthways into 50 mm wide portions.

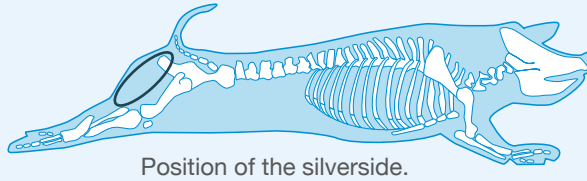


5 Cut the portions into 15 mm thick steaks.
Oysters of pork.



6 Oyster of pork – top side.

Oysters of Pork – Salmon Cut



Code: **3040**



1 Trimmed silverside with salmon cut.



2 The salmon cut is removed by following the natural seam.



3 Salmon cut is cut into 15 mm thick steaks. Oysters of pork.



4 Oyster of pork – salmon cut.

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ISBN: 978-1-911181-06-4

