

Description of the lamb farm

1. Description of the farm

The farm is located at La Joyosa nearly 30 km west of Zaragoza. The farm owner is Jose María Navarro Farm for the classification and fattening of lambs belonging to the meat firm FRANCO Y NAVARRO S.A. (FyN), associated to the Cooperative CASA DE GANADEROS DE ZARAGOZA (CGZ). The Cooperative is one of the oldest livestock entities in Spain, recognised in the Middle Ages (1218) by King James I of Aragon, and has maintained its independent activity until today. Among other functions, the CGZ sells their lamb under the EU's Protected Geographical Indication (PGI) origin label of "Ternasco de Aragón"

2. Description of the building and lamb classification equipment

The FyN lamb classification and fattening farm was originally designed with 10 buildings (Fig. 2) including offices, livestock barns, straw barn and manure stocking area, with a total built area of 5,375 m². At present there are 3 barns (Fig. 3) for lamb classification and fattening covering a useful surface area of 2,629 m²: 1 (barn B) 70.3 × 15 m (1,244 m²) and 2 (barns A & C) 70.3 × 13 m (914 m²), with a holding capacity for approximately 5,000 "Ternasco de Aragón" lambs.

The large volume of air in the barns is noteworthy (4.79 × 7.46 and 4.88 × 7.16 m height), with open-ridged, insulated and green painted metallic roofs, gutters and drainpipes, insulated walls built with 3 types of materials (reinforced concrete at the bottom, FACOSA 40 × 20 × 20 cm concrete blocks in the middle and metal 30 mm sandwich panels at the top with and very luminous polyester sash windows. The barns have a NW-SE orientation to protect them from the predominant strong, cold wind locally known as "Cierzo" that blows constantly in the winter.

The entrance opens onto the central passageway of the FyN classification unit (B), which has a supplementary wing and 2 overhead doors with loading bays (Fig. 4), where lambs are weighed and sexed using a classification passage and circular holding pen (Fig. 5 & 6). Once classified, the lambs are distributed into homogeneous lots for fattening on commercial pelleted concentrates and barley straw fed ad libitum in 100 m² pens with straw bedding and feed hoppers and racks to distribute the concentrate and the barley straw, respectively, ad libitum. Straw consumption averages 5-10% of the total feed intake.

The barn floor is made of concrete and straw is distributed ad libitum through an outside gallery, placed onto the N façade. A tractor removes at the end of fattening the manure through the side doors of the barns on the S.

Concentrate is distributed through screw conveyors from vertical silos on the NW end of the barns. All barns have a side corridor (Fig. 10 & 11) on the S end and perpendicular train-like compartments where hoppers are fixed at two heights to adapt to the different ages of the lambs. The side corridor of all the barns is on the NW side in a transversal passageway so animals can move from one barn to the other.

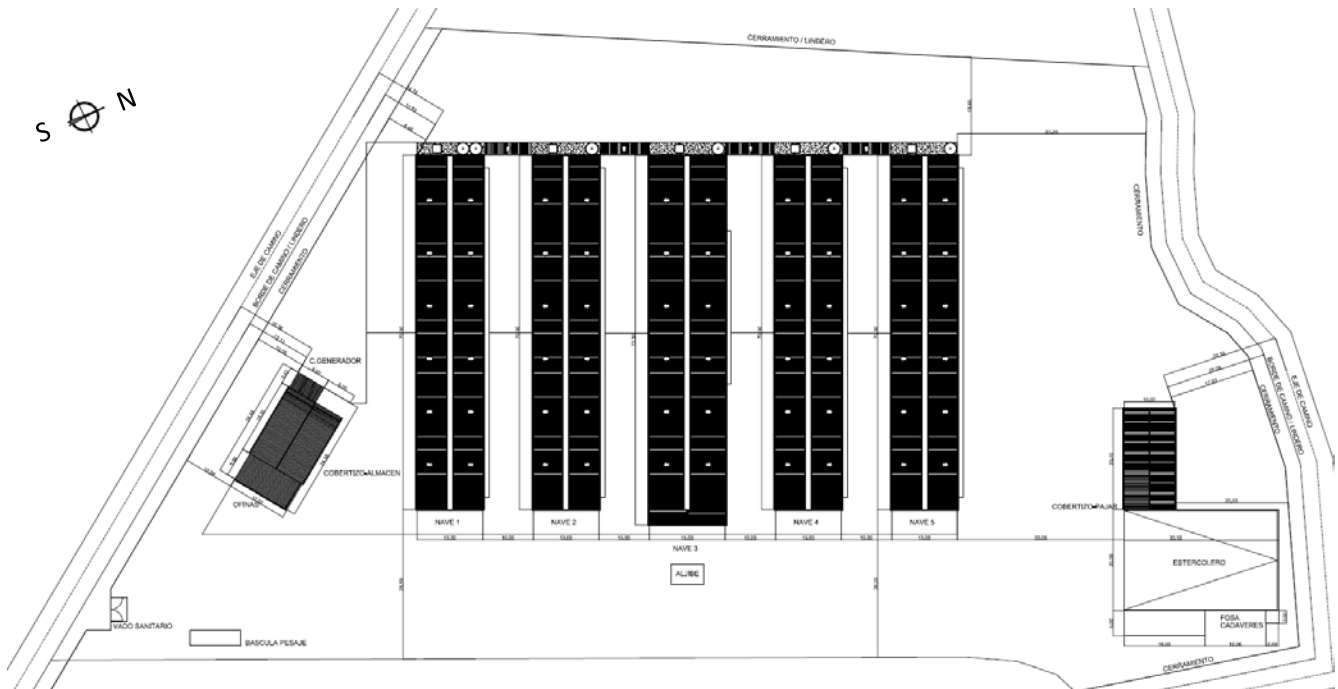


Figure 2. General plan of the FyN farm according to the building project.



Figure 3. General view of the FyN lamb complex, with truck scale, straw barn and manure stocking area in the background.



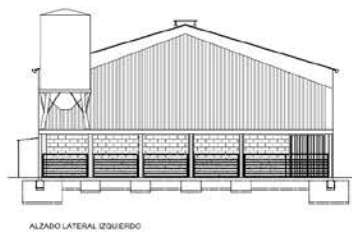
Figure 4. Lamb reception (B) and fattening (C) barns. Straw barn in the background.



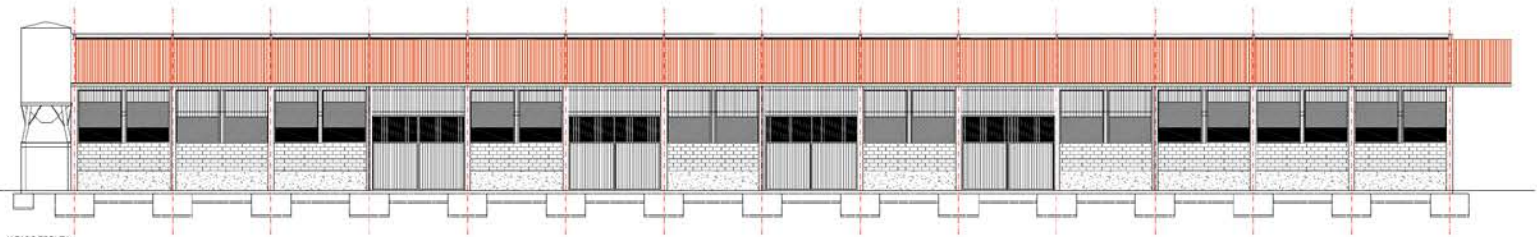
Figure 5. Loading bay and ramp inside the lamb reception barn B.



Figure 6. Lamb classification passage and weighing upon entry into barn B.



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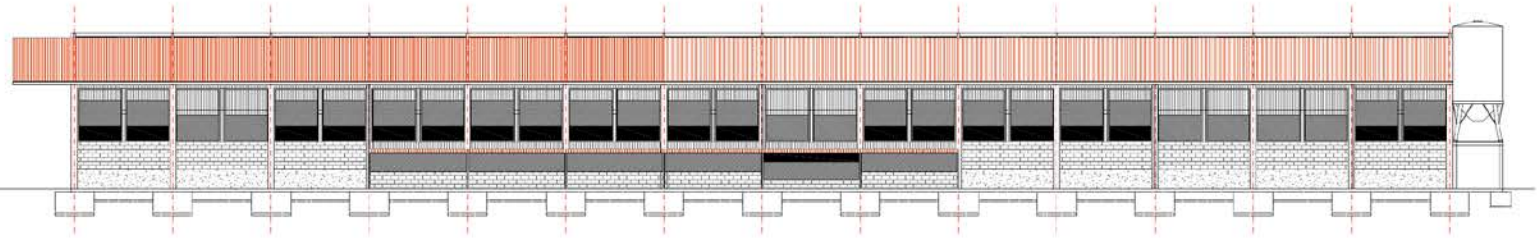
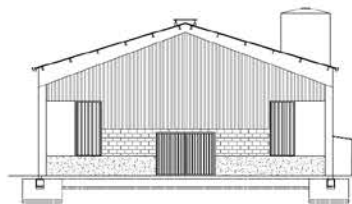
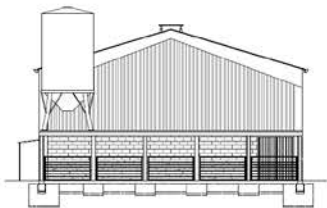
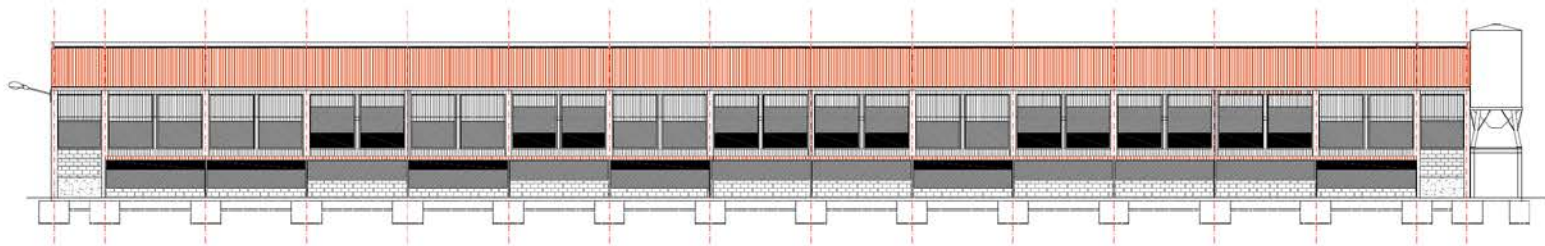


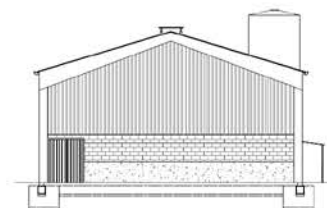
Figure 7. Lateral views (NW-S and SE-N façades) of barn B for lamb unloading and classification.



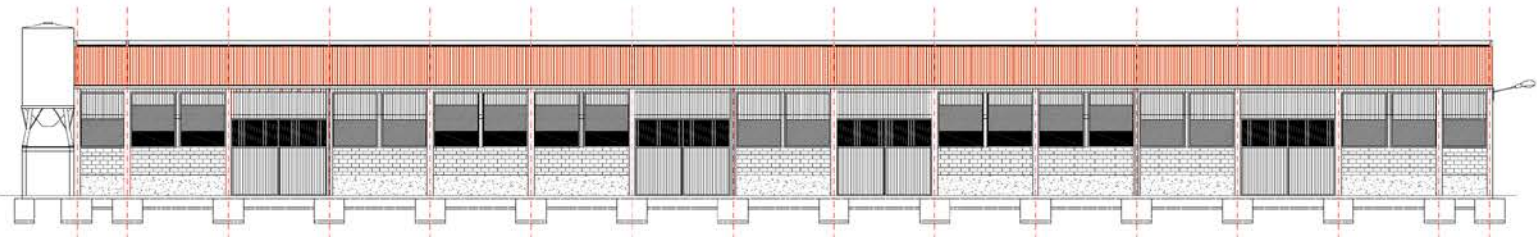
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Figure 8. Lateral views (NW-S and SE-N façades) of barns A and B for lamb fattening.



Figure 9. Lambs classified according to weight and sex.

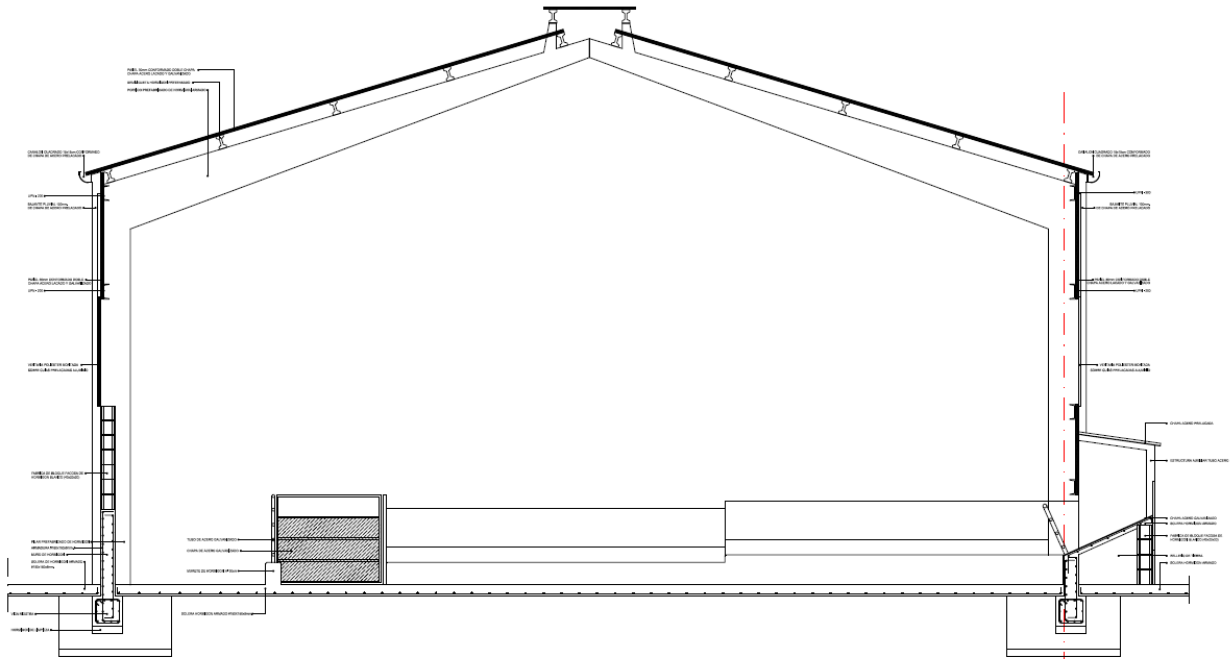


Figure 10. Cross-section of lamb fattening barns A and B.



Figure 11. Inside the lamb fattening barns A and B.



Figure 12. View of a lamb fattening lot with mangers and straw racks.



Figure 13. View of the drinking troughs in a lamb fattening lot.