

1999 Hydrau Lean Meat System

Mfg: Machinefabriek Amersfoort

Model:

Stock No. GAFF004.

Serial No.:

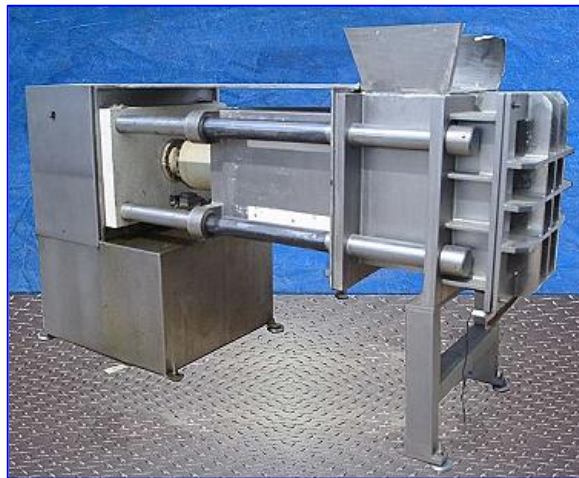
1999 Machinefabriek Amersfoort Hydrau Lean Meat System

The Presizer

To ensure a consistent input and product flow to the Hydrau Separator the ideal bone size is max. 25 cm. Therefore it will be necessary to cut the larger bones in suitable sizes. For this we have developed the Presizer.

From the deboning line the bones are automatically feeded into the Presizer by means of a beltconveyor. All bones can be put through the system, but we suggest that back-, neck-, rib- and brisket bones and possible the inner tail (without rind) be utilised. However femur bones can be put through, but yield and quality is poor. The presizer reduces any type of bones to a lenght of 15 cm.

From the presizer the bones are automatically introduced into the Hydrau Separator. This can be by means of a beltconveyor or lifter.



The Hydrau Separator

The principle of the Hydrau Separator system works on the basis of two different grades of solids in which bones are the harder grade, and meat is the softer grade.

To achieve a superior meat product the Hydrau Separator is equipped with a filterscreen which has 4 to 8 mm holes. The bones are introduced into the Hydrau Separator via its automatic feeding system. This system loads batches of 20 kg of bones into the pressing tube, and closes the filler- opening during the deboning cycle. This prevents bones are pushed up, and can't get in touch with the piston- rod what prevents temperature rise. After the bones have entered the pressingtube these are transported to the separation filter, which is at the end of the pressingtube. The separation filter has holes whit a diameter of 4 to 8 mm. This is sealed off by a counter- ram head. The counterramhead contains a further conical filter to ensure separation of product at the center of the bone pad.

During a few seconds the bones are subjected to an overpressure of 50 to 200 bar, at which point the residual meat becomes free from the bones, and is leaving the separation filter with no smearing and without damaging the meat structure. The pressure and pressingtime can easily be adjusted to get the most profitable meat product. The meat from the conical counterram filter and the separation filter leave the machine via one product outlet.

The counterram then retracts and the pressingpiston advances through the separation filter to eject the bonepad. Bones ejected from the system are reasonable clean from meat.

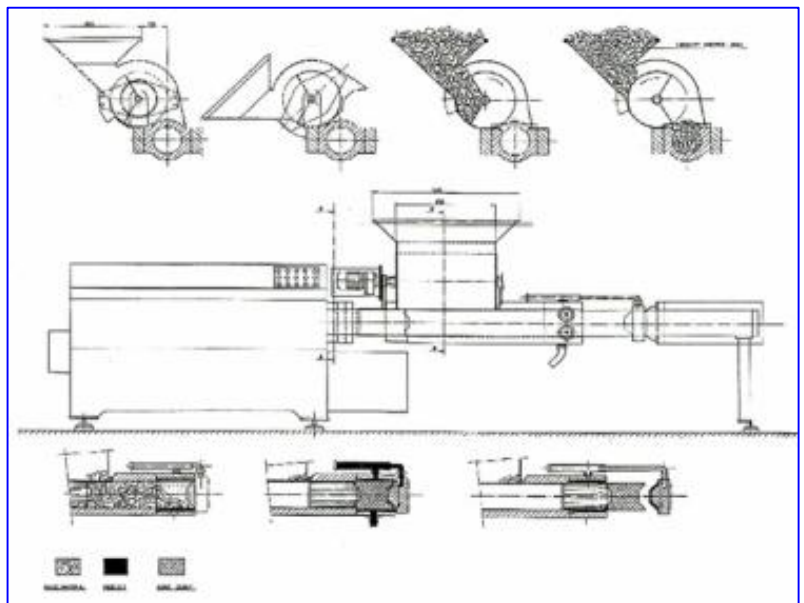


The Belt Separator

The product outlet from the Hydrau Separator is connected directly to the third and final part of the System, the belt separator.

The belt separator has a filterscreen with holes of 1.3 to 3 mm for desinewing, and removing the boneparticles out of the product from the Hydrau Separator. The resultant product is equal to raw minced meat. The product outlet from the Hydrau Separator is connected directly to the third and final part of the system, the Belt Separator. The filters of the Hydrau Separator have holes between 4 and 8 mm, which minimize temperature rise and gives good structured quality meat, but allow small bone particles to pass. The Belt Separator removes these bone particles and sinew from the meat using the following principle. The meat with bone particles are fed between the belt and drum. This drum has filter holes through which the meat is forced by the belt, leaving the bone particles and sinew on the surface. The bone particles and sinew are then removed by a scraper.

Because there are only a few bone particles to be removed, the belt tension and subsequent pressure on the meat is minimal. This results in minimal temperature rise and avoids structural damage to the meat.



The operating principle of The Hydrau Separator