Advantages of the PipeChek/Marlen Opti 200
Bone Reduction X-ray System

Yield Increase - 20,000 #/Hr Results In $50,000 Weekly Savings
The pipeline system is a closed system, meaning everything coming in goes out, including the moisture (purge), whereas a conveyor based system loses the purge to the floor. This coupled with the fact that under vacuum a rehydration process occurs resulting in a 1.5 to 3% increase in overall, finished product yield.

High Throughput
With three different pumps available (Opti-200, 280, and 340), Marlen has the capacity of pumping large whole muscle at a rate up to 27,000lbs per hour.

Better X-ray Image – Optimized Bone Detection
By using the Marlen pump with full vacuum pump technology, air pockets in the product flow are eliminated. This allows the Safeline X-ray unit to create a more vivid image of bones enabling superior detection. The system is a closed system so it does not matter if there are loose bones in the product. Since the product is pushed downstream by the gentle action of the Twin Piston pump whatever is in the pipeline will get pushed downstream through the X-ray units thus eliminating the possibility of the X-ray missing loose bones, something that can be an issue with conveyor belt systems.
Ability To Have Two X-ray Units In Series – Enhance Bone Reduction
For those customers who want the ultimate in bone reduction the Marlen/Safeline X-ray system allows you to put two X-ray units in series being fed by one Marlen pump. The proprietary software developed for this system allows each unit to detect independently of each other and still have the advantages of the Marlen controlled reject system without compromising reject timing.

Minimal Damage To Product
The Marlen Patented Twin Piston Design is one of the most gentle pumps on the market for those customers who want to retain the integrity of whole muscle. In typical operations there is damage is less than 10% to the product.

No Shattering Of Bones
The Marlen pump has one of the largest pumping chambers on the market. Each Sleeve can hold approximately 23-24 lbs of product allowing for very little damage to the product. The large pumping chamber also assures that there is virtually no shattering of the bones that may be in your product. (When the purpose is to reduce the number of bones in your product one does not want a pump that could possible create smaller bones due to the design)

Better Reject Control – Reliably Remove Target With Minimal Reject Volume
Proprietary software specifically developed for the X-ray and Marlen pump accurately rejects detected bones based on flow location determined by the Opti-pump. This provides the ability to dramatically reduce the overall amount of reject. If the product flow is stopped during the reject cycle, the system will pick up where it was stopped and finish the reject cycle once pump is re-started hitting the reject target just as if it was never stopped.

Net Weight/Portioning Capability
With the ability to maintain continuous steady flow of product and our proprietary software the Marlen pump can provide net weight portioning capabilities and still have the advantage of X-raying the product just prior to packaging. The integration software between the Marlen pump and Safeline X-ray is able to track target rejects based on flow location and accurately remove the target while maintaining portion control.

Rejected Product Distribution
Since the Marlen pump is a pressure sensitive pump the Marlen/Safeline system is a closed system, the rejected product can be piped to an inspection table thus eliminating conveyors or small totes that have to be emptied by hand. Product quality is not compromised.

Ease Of Cleaning
The Safeline/Marlen system is designed for quick and easy disassembly, cleaning and reassembly. With the X-ray units mounted on a V-Rail Frame the equipment can be separated easily for cleanup and reconnected with minimal tools.