Like all manufacturing industries, the meat and poultry industry strives for maximum operating efficiency and productivity. Among other things, this requires that production lines be operated at speeds that optimize quality and volume for the labor input expended. However, unlike other industries, U.S. Department of Agriculture (USDA) inspectors continuously inspect meat and poultry plant operations. Inspectors monitor compliance with regulations developed to assure the wholesomeness and quality of the food supply, which includes line speeds.

**Regulatory Oversight**

Federal meat and poultry inspectors work in packing plants during every moment of production operations. They are fully empowered to enforce a broad and comprehensive array of regulations, including rules about how fast production lines may operate.

In contrast to often-negative images in the media of production lines moving at lightning speeds or at speeds that fluctuate widely, line speeds in meat and poultry plants are carefully calculated by plant and company staff and depend on a variety of factors. Principal among these is the type of animal being processed (line speeds for hogs, cattle, and poultry all differ significantly) and the design capability of the specific production operation.

Other factors plants must consider include the staffing available, both of employees and USDA Inspectors, in the plant, equipment capacities, line layout, work space size and line configuration. All of these things, and more, must balance correctly to generate operating speeds that will produce the desired results. In addition, all considerations must ultimately fall within the line speed parameters specified by the USDA’s Food Safety and Inspection Service (FSIS) regulations. Given the complexity of individual facilities and the applicable regulations, line speeds vary significantly from plant to plant. Line speeds may also vary seasonally, or depending on the price of livestock and other related concerns. All such considerations must adhere to USDA regulations.

Section 310.1 of the Federal Meat Inspection Act, and Subpart K of the Poultry Products Inspection Act, detail a number of specific requirements, including the maximum line speeds at which plants can operate depending on the type of animal being processed.

The regulations specifically provide that:

“The inspector in charge shall have the authority to require the establishment to reduce slaughter line speeds where, in his judgment, the inspection procedure cannot be adequately performed at the current line speed because of the particular deficiencies in carcass preparation and presentation by the plant at the higher speed or because health condition of the particular animal indicates a need for more extensive inspection.”

Accordingly, the USDA inspector-in-charge exercises authority over line speed settings and monitors speeds to assure compliance by the plant.

**Production Concerns**

More importantly, the critical question in meat plant operations is not how fast a line operates, but how the line is staffed to ensure workers and inspectors can accomplish the tasks effectively. If two operators and two inspectors are required to perform a function at a certain speed, and the speed is increased, the staffing typically will also have to be increased. Staffing is determined by job design and work content requirements for each production function. Jobs, and therefore line staffing, will or may differ considerably from one operation to another for a host of reasons. Today’s meat and poultry companies devote significant and continuous efforts to improve job design, and create jobs that balance all of the competing needs to achieve optimal productivity and quality products.

It requires hundreds (perhaps thousands) of well-placed cutting, sawing and related tasks to properly complete the dressing, boning and processing of meat carcasses. If line speeds are set at other than functionally optimal levels (i.e. too fast), these tasks will not be performed properly and the result will be a costly de-valuing of the final products. “Miscuts” in the meat industry are expensive mistakes as the range of prices and values differs substantially among the various end products. Accordingly, any operating
methods that result in miscuts must be rectified immediately. Clearly, no benefit exists for plant management to operate production lines at speeds that will not permit all work to be performed at high levels of skill and competence. Line speeds are one of several factors that must be appropriately balanced if consistent production of uniformly high quality products is to be achieved. And the production of high quality products is essential if a meat processor intends to compete in today’s marketplace.

The myth of excessive line speeds in the meat and poultry industry has existed for a long time. This myth is intrinsically appealing to those who do not fully understand the economics and production requirements of modern meat plant operations. In reality, meat and poultry companies benefit, and generate maximum profits, by producing and selling food that is safe, wholesome and of consistently high quality. Companies also benefit by protecting workers from the stress of performing jobs at rates that are beyond their capabilities. These facts encourage meat and poultry companies to operate within line speed regulations and at speeds that will help ensure maximum safety for both employees and the products.

Summary

Line speeds and line staffing in meat and poultry plants are determined by the integration of multiple factors and must satisfy a number of work and product objectives. In addition, unlike other industries, line speeds in these plants are subject to USDA regulations, and are closely monitored to assure compliance. The notion that line speeds are “excessive,” or “too fast,” is typically a subjective judgment, which is not based on the actual factors involved.

Production lines are expected to continue as a primary means of operation in the meat and poultry industry. These lines are an effective production methodology to complete the various operations required in today’s meat plants.

The maintenance of appropriate balance between operating speed and staffing (for each job) on the line will remain a required element for all meat industry production. And, compliance with USDA line speed criteria will remain equally necessary.

Helpful Links

American Meat Institute
http://www.meatami.com
http://www.workersafety.org