

**STATISTICAL PROCESS CONTROL (SPC) UNTUK  
PENGENDALIAN KUALITAS PRODUK *PEELED CUT  
DEVEINED INDIVIDUAL QUICK FROZEN (PCD IQF)*  
DI PT. INDO AMERICAN SEAFOODS**

**Oleh**

**Nurhalipah**

Teknologi Pangan

Politeknik Negeri Lampung

**ABSTRAK**

Udang merupakan salah satu sumber daya pada sektor perikanan yang menjadi komoditas ekspor dengan permintaan yang tinggi. Salah satu jenis udang yang dibudidayakan di Indonesia yaitu jenis udang vannamei. Udang jenis ini diolah pada PT Indo American Seafoods menjadi beberapa jenis produk salah satunya yaitu produk *Peeled Cut Deveined Individual Quick Frozen (PCD IQF)*. Produksi PCD IQF shrimp sebagian besar dilakukan secara manual oleh pekerja sehingga defect menjadi sesuatu yang tidak bisa dihindari. Penulisan Tugas Akhir ini bertujuan untuk mengendalikan kualitas produk PCD IQF Shrimp dengan metode *Statistical Process Control (SPC)*, mengetahui jenis-jenis serta penyebab *defect* pada proses pengolahan udang PCD IQF di PT Indo American Seafoods. Metode analisis SPC menggunakan alat bantu statistika berupa diagram pareto, peta kendali, dan *fishbone*. Hasil observasi menunjukkan bahwa jenis-jenis *defect* yang terjadi pada produk PCD IQF yaitu *curl, clumping, improperly deveined, improperly peel, broken/damaged, broken soaking, stained meat, pinkish, swimmeret, neck meat, scars on the meat, insufficient cut, uncut, improperly cut, odor, broken tail, dehydration, excessive cut* dan *scars*. Berdasarkan hasil diagram pareto diketahui bahwa tingkat cacat tertinggi adalah *curl* dengan total *defect* sebesar 45,11%. Sedangkan hasil analisis data menggunakan peta kendali didapatkan bahwa pengendalian kualitas produk PCD IQF di PT Indo American Seafoods belum terkendali. Berdasarkan hasil analisis *fishbone diagram* diketahui faktor penyebab *defect* produk PCD IQF berasal dari material, method, man, machine dan equipment. Tindakan perbaikan yang dapat dilakukan untuk meminimalisir defect pada produk udang PCD IQF yaitu dengan cara membuat SOP penyusunan udang pada mesin pembekuan, meningkatkan pengawasan terhadap pekerja, serta menyediakan pisau yang siap pakai untuk setiap pekerja pengupasan

Kata kunci: *Defect, statistical process control, PCD IQF*

**STATISTICAL PROCESS CONTROL (SPC) FOR QUALITY  
CONTROL OF PEELED CUT DEVEINED INDIVIDUAL  
QUICK FROZEN (PCD IQF) PRODUCTS  
AT PT. INDO AMERICAN SEAFOODS**

**By**

**Nurhalipah**

Food Technology

Lampung State Polytechnic

**ABSTRACT**

Shrimp is one of the resources in the fisheries sector which is an export commodity with high demand. One type of shrimp cultivated in Indonesia is vannamei shrimp. This type of shrimp is processed at PT Indo American Seafoods into several types of products, one of which is Peeled Cut Deveined Individual Quick Frozen (PCD IQF) products. The production of PCD IQF shrimp is mostly done manually by workers so that defects become something that cannot be avoided. The writing of this Final Project aims to control the quality of PCD IQF Shrimp products with the Statistical Process Control (SPC) method, determine the types and causes of defects in the PCD IQF shrimp processing at PT Indo American Seafoods. The SPC analysis method uses statistical tools in the form of pareto diagrams, control chart, and fishbone. The results showed that the types of defects that occur in PCD IQF products are curl, clumping, improperly deveined, improperly peeled, broken/damaged, broken soaking, stained meat, pinkish, swimmeret, neck meat, scars on the meat, insufficient cut, uncut, improperly cut, odor, broken tail, dehydration, excessive cut and scars. Based on the results of the Pareto diagram, it is known that the highest defect is curl with a total defect of 45.11%. While the results of data analysis using control chart found that the quality control of PCD IQF products at PT Indo American Seafoods has not been controlled. Based on the results of the fishbone diagram analysis, it is known that the factors causing PCD IQF product defects come from material, method, man, machine and equipment. Corrective actions that can be taken to minimize defects in PCD IQF shrimp products are by making SOP for the preparation of shrimp on the tunnel freezer, increasing supervision of workers, and providing the same specifications of knives for each workers in peeling area.

Keywords: Defect, PCD IQF, statistical process control.