

**HALAL PRODUCT ASSURANCE SYSTEM DESIGN  
AT ONEIL CAKE AND BAKERY**

**FINAL PROJECT REPORT**

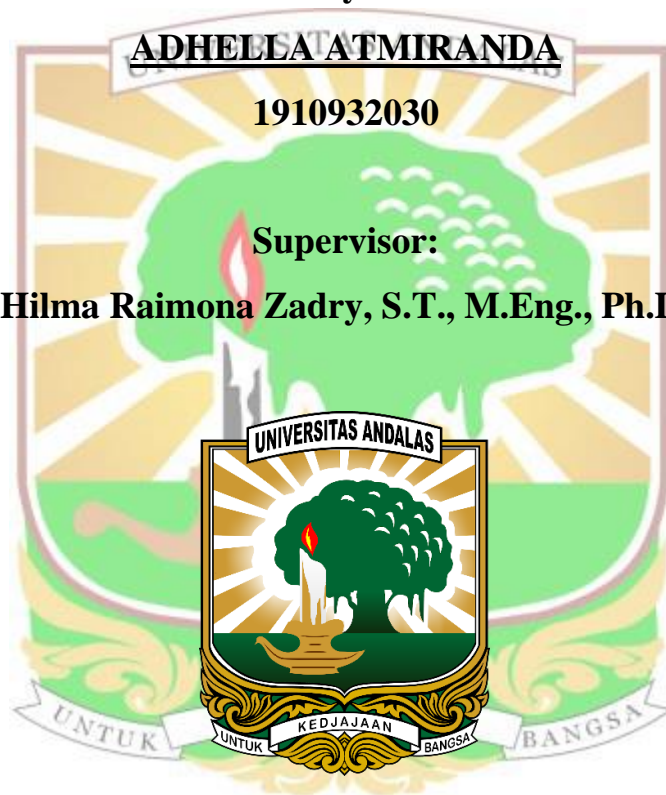
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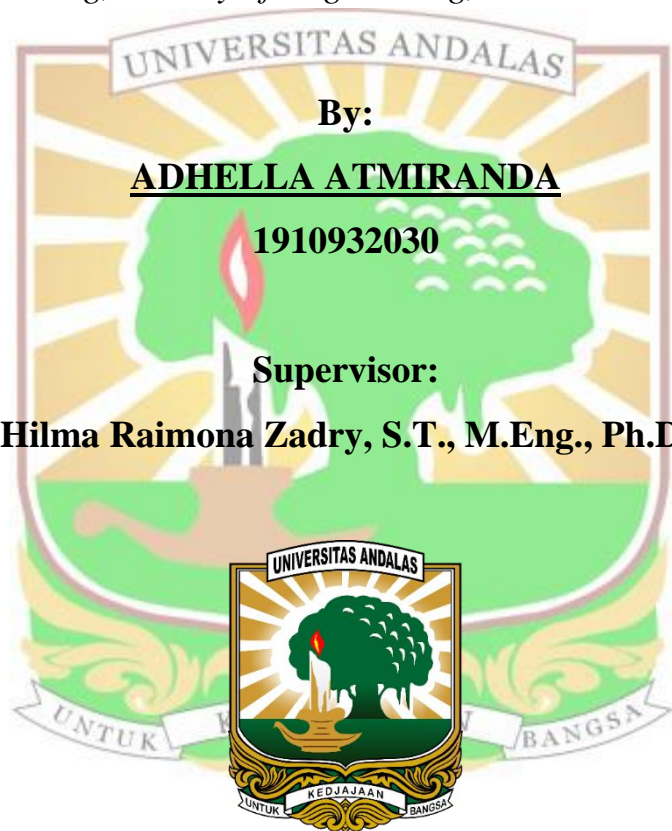


**DEPARTMENT OF INDUSTRIAL ENGINEERING  
FACULTY OF ENGINEERING  
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PADANG  
2024**

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*A final project report submitted to fulfill the requirements for the  
Bachelor's Degree Program in the Department of Industrial  
Engineering, Faculty of Engineering, Andalas University*



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## ABSTRACT

Economic activities are needed to meet the community's needs along with the times and the increasing economic growth. Micro, Small, and Medium Enterprises (MSMEs) are the most strategic sectors of the National economy and involve many people's lives, so MSMEs are the primary source of the national economy. Micro business growth is used as a source of growth in employment and income opportunities. MSMEs have a strategic role in the government's efforts to reduce poverty and respond by absorbing much labor. Currently, the entire food industry in Indonesia must have a halal certificate. This is based on Law No. 33 of 2014 concerning the Halal Assurance Product. If MSMEs do not have halal certificate, processed food and beverage products can be withdrawn from circulation by the government. Oneil Cake and Bakery is one of the MSMEs engaged in the food industry. Oneil Cake and Bakery still does not have a halal certificate and needs a Halal Product Assurance System. Therefore, this research helps Oneil Cake and Bakery design the Halal Product Assurance System to obtain a halal certificate. The halal product assurance system was designed based on the template provided by BPJPH. Then, critical points were identified on the chocolate steamed brownie products, which include materials and production process. SOP, work instructions, and forms were designed to detail the operational steps and things that need to be done to ensure product halalness more specifically. The halal product assurance system manual includes five principles, namely commitment and responsibility, materials, halal product processes, products, and monitoring and evaluation. Critical points in materials are flour, margarine, cooking oil, chocolate, cocoa powder, milk powder, baking powder, emulsifier, chocolate paste, sugar, and chocochips. Critical points in the production process are batter mixing, steaming, cooling, topping, packaging, and product delivery. The SOPs that have been designed total 21 documents, including work instructions and forms. This document is for purchasing raw materials, production processes, and marketing and sales.

**Keywords:** Halal, Halal Product Assurance System, Micro Small Medium Enterprise (MSME), Operating Process Chart (OPC), Standard Operating Procedure (SOP)

## ABSTRAK

Kegiatan ekonomi sangat dibutuhkan untuk memenuhi kebutuhan masyarakat seiring dengan perkembangan zaman dan pertumbuhan ekonomi yang semakin meningkat. Usaha Mikro, Kecil, dan Menengah (UMKM) merupakan sektor yang paling strategis dalam perekonomian Nasional dan menyangkut hajat hidup orang banyak sehingga UMKM menjadi sumber utama perekonomian nasional. Pertumbuhan usaha mikro dijadikan sebagai sumber pertumbuhan kesempatan kerja dan pendapatan. UMKM memiliki peran strategis dalam upaya pemerintah untuk mengurangi kemiskinan dengan penyerapan banyak tenaga kerja. Saat ini, seluruh industri makanan di Indonesia harus memiliki sertifikat halal. Hal ini didasarkan pada UU No. 33 Tahun 2014 tentang Jaminan Produk Halal. Jika UMKM tidak memiliki sertifikasi halal, maka produk makanan dan minuman olahannya dapat ditarik dari peredaran oleh pemerintah. Oneil Cake and Bakery merupakan salah satu UMKM yang bergerak di bidang industri makanan. Oneil Cake and Bakery masih belum memiliki sertifikat halal dan belum memiliki sistem jaminan produk halal. Oleh karena itu, penelitian ini bertujuan untuk membantu Oneil Cake and Bakery dalam merancang Sistem Jaminan Produk Halal untuk mendapatkan sertifikat halal. Sistem jaminan produk halal dirancang berdasarkan template yang disediakan oleh BPJPH. Selanjutnya, titik-titik kritis diidentifikasi pada produk brownies coklat kukus yang meliputi bahan dan proses produksi. SOP beserta instruksi kerja dan formulir dirancang untuk merinci langkah-langkah operasional dan hal-hal yang perlu dilakukan untuk memastikan kehalalan produk secara lebih spesifik. Manual sistem jaminan produk halal yang dibuat mencakup lima prinsip, yaitu komitmen dan tanggung jawab, bahan, proses produk halal, produk, serta monitoring dan evaluasi. Titik kritis dalam bahan adalah tepung terigu, margarin, minyak goreng, coklat, coklat bubuk, susu bubuk, baking powder, pengembang, pasta cokelat, gula, dan chocochips. Titik kritis pada proses produksi adalah pencampuran adonan, pengukusan, pendinginan, pemberian topping, pengemasan, dan pengiriman produk. SOP yang telah dirancang berjumlah 21 dokumen beserta instruksi kerja dan formulir. Dokumen ini dibuat untuk kegiatan pembelian bahan baku, proses produksi, dan penjualan dan pemasaran.

**Kata Kunci:** Halal, SOP (Standar Operasional Prosedur), SJPH (Sistem Jaminan Produk Halal), Peta Proses Operasi, UMKM (Usaha Mikro, Kecil dan Menengah)