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## DESIGN STANDARD OPERATING PROCEDURE ESD (ELECTROSTATIC DISCHARGE) APPLICATION IN DEPT. PEGATRON AT PT.SAT NUSAPERSADA TBK

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### Abstract

This internship aims to overcome the problems at PT Sat Nusapersada in the need for employees to follow ESD procedures in the manufacturing industry because of their lack of education in ESD procedures. Internship activities are carried out during the period 15 March 2021 till 15 September 2021. The method used in the implementation of this internship is observation, design, and implementation. This internship resulted in a documented internal application for the company. The outputs submitted to the company include data on company assets, employee liabilities, and company profiles. The supporting documents include a questionnaire on the use of internal applications within the company.

The SOP application for ESD is designed using HTML and CSS programming languages. This application is designed starting from an easy-to-use interface and the availability of the material in the form of videos, PDFs, and PowerPoint. This application design has been successful and can display the appropriate design. This application has also been used in several areas within the Pegatron department at PT Sat Nusapersada as an application to make it easier to find information about ESD.

**Keywords:** *Website application, HTML, CSS, ESD*

### Introduction

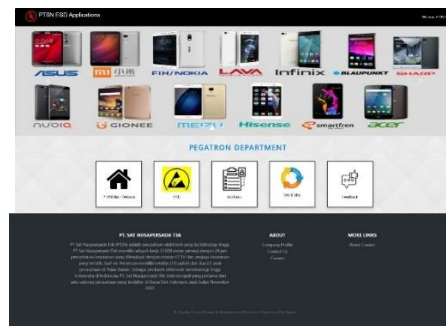
PT Sat Nusapersada Tbk started off as a supplier of printed circuit boards (PCBs), assembling mechanical parts, and assembling electronic components. In response to the increased demands and expansion of the company's customers, the corporation expanded its business scope by becoming a supplier of printed circuit boards, electronic components, and mechanical assemblies. A major department within PTSN produces machines that enable them to make different types of products. One of these departments is Pegatron, which manufactures routers. Of course, the process of making these products requires a variety of machines from small to large. In order for them to run properly, of course, they are tested beforehand to ensure that there will be no damage to the product during the testing. One of them is grounding the machine to prevent leakage of current that can damage it or ESD for short.

Therefore, we need a system that can increase knowledge of ESD so that in the production process there are no errors that can cause losses to the company. So the S.O.P (Standard Operating Procedure) application was designed for ESD.

## Method

The author uses data collection by conducting interviews with the main engineer of PT Sat Nusapersada Tbk. The author started working on this practical work from March 15, 2021 to September 15, 2021 at PT Sat Nusapersada Tbk. The author works on an ESD application SOP project. The author chooses the ESD SOP application because there are still many ESD standards in the work environment that can be improved so that the ESD Safe work environment and employees can understand what a good ESD procedure looks like. As part of the project, the author will create a simple HTML-based display site. The display site will then contain a special page devoted to ESD standards, which has been chosen by the author because it includes material that is related to company secrets.

## Discussion



Picture 1

### Home Web Design

This home design produced the result shown above. Displays images, menus, and footers on this display. The picture shows a carousel that has been designed with the aim of displaying the latest news about the company. It has an icon / button that links to the application based on the title of the icon. The top right of the navbar displays the name of the computer or laptop used by the company's employees to access the application. In the footer section, there is a brief description of the company, as well as a description of the creators of the ESD application.



Picture 2

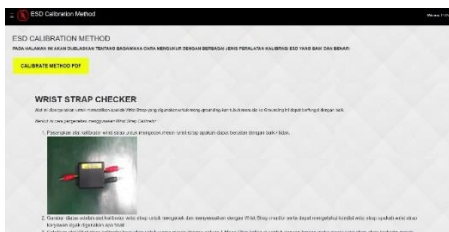
### Main Website Design

In the Main Website view, Home provides access to the company's main website which contains information such as company profiles and news from the company.



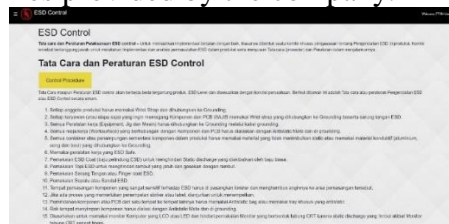
Picture 3  
ESD Web Design

Users will see a new window filled with various information about ESD along with YouTube links that can help them learn through video as complementary material.



Picture 4  
ESD Calibrate Method Web Design

On the ESD Calibrate Method display, it explains how to use the ESD calibration tool found in the company, as well as the established procedures so employees can understand how to use and check the calibration tools provided in the PDF, PPT, and WI files provided by the company.



Picture 5  
ESD Control Web Design

It explains how to control ESD in the ESD Protected Area (EPA) so that employees follow a range of regulations and ensure that the production environment is ESD safe. There is also material on ESD as a whole, so that readers can clearly understand why it is so important in manufacturing production.



Picture 6  
Job Desc Design

In the job description display, it is explained in detail the positions and responsibilities of employees for each position as well as a block diagram of the team's responsibilities for manufacturing production.



Picture 7  
Vision & Mission Web Design

In the vision and mission display, it is explained how the company PT Sat Nusapersada Tbk plans to accomplish the vision that will become the company's goal in the future.

### Conclusion

According to the results of the project that was designed, this application makes ESD procedures in manufacturing easier to understand, as well as easy to use for employees. Furthermore, this application also provides information about the company, such as Job Description, Vision & Mission, and Company Profile. In the company, the results of this project are already well used and can be updated whenever additional ESD procedures are needed.

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