ABSTRACT

Bandung is a bustling and crowded city, ranging from vehicles to large and majestic city buildings - magnificent. The construction of facilities to support the progress of the city requires a very long process and time with equipment that helps the process of working many kinds of work equipment used for the construction of a building or luxury house between the wheelbarrow is very important to transport material in the process of developing infrastructure, with a simple form and a simple and not difficult use system and makes it easy for workers to use it. Even so, many obstacles are often experienced by users. One of them is a wheel mechanism system on a cart that is often jammed or damaged due to being exposed to building materials and a cart that is not strong enough to support the load carried by the cart. With the problem there is a need to solve the problem to repair this wheelbarrow. Here the author uses analysis through system aspects by replacing the observation method and SWOT to analyze and improve the system and application to the forms that will be applied later. To add to the aesthetics of the cart to be more attractive, it is given a modern and unique shape with new materials such as iron carbon. And to solve the problem on the mechanism of the cart users, the system that will be used will refer to the shear system and control system. The concept of this system will then be realized by making prototypes so that the system can be seen and can be calculated how efficient and whether the concept can solve this problem or even reverse it

keywords: development, material, system, mechanism, control.