Custom gear inc edited

Business

Nerve accepted on these orders, they helped pay the overhead. It was found that the large orders caused many of the small orders to wait for a long time before being processed. As a result some deliveries of small orders were late. This report will “ rite on the major problems that arises from the Custom Gear operation, the potential solutions, theories that can be applied in the case study and lastly but not least the conclusion. Rhea root cause lies within the company’s policy.

The company allowed the customer to change their design even after the production process has already started.

This has contributed to the delay of the production. Other than that, the operation layout Nas designed ineffectively and inefficiently leading to an increase in their lead-time. Several major problems are identified from the root cause such as lack of processing policy flow, lack of order policy, and ineffective and inefficient layout as well as increase rate of return due to defective product. 2. 1 Lack of Processing Policy Flow Lack of processing policy become a burden to Custom Gear where it allow the customer to changes their design even after the production process started.

When he customer change the whole blue print, the production of that product will have to stop and wait for new design and raw materials to be clarified and arrived which delay the whole production process. Customer Order In Send Copy to Controller Purchase Raw Material Raw Materials Arrive Review the Raw Material By Production Supervisor Milling Machine Drilling Finishing & Grinding Centre Shipping & Finished Goods Storage Shipping Dock Figure 2. 0: Operation Process Flow Rhea process in Figure 2. 0 started

when a customer wishes to order a gear, the order is taken by sales manager and marketing vice president dames Lord).

The customer Nil specifies the type of gear, quality and raw materials desired by submitting a blue print. Once the order are received, 1 copy is sent to the production supervisor CEO Irvine), and 1 copy is sent to the controller (Sam Smith).

The controller will purchase the order for the raw materials required. These materials often take from 1 to 2 Knees to arrive, depending on the supplier and the type of material ordered. After receiving the raw materials, the supervisor reviews the order received before the starting the milling machine. The raw material, a gear blank, is sent to the Milling

Nor Centre. In the Milling Work Centre the teeth are cut into the edge of the gear according to the customers specifications. Tater that, the gear blanks are sent to the Drilling Works Centre, where one or more holes may be drilled in the gear.

Then the gear will sent to the Grinding Centre which the gear will do the finishing by put on the gear teeth and the surface of the gear. Next, the gear may be sent to Heat Treating if this operation is required by the customer. After the batch of gears is completed, they are inspected by the next available worker and shipped to the customer.

Process Flow Change in Design & Repurchase Raw Material Production Process Order in & Purchase Raw Material Figure 2. 1: Process Flow by week Since the Custom Gear and no policy on last minute changes, sometimes

customers engineer makes their last minute change in the design, which stop the production and wait for new raw materials or for the design to be clarified (Figure 2.

0). Since Custom Gear lack of operation policy, the lead time from ordering the raw material to finishing the end products increase from 4 weeks to 6 weeks (Figure 2. 1) which then increase the expenditure costs. . 2 Lack of Order Size Policy Custom Gear also took a variety of order size starting from 1 unit order size up to 1000 units in the x-axis; Figure 2. 2.

When the order size is 1 unit, the number of orders 1 unit is 80 orders but the total sales of that order is only $3200 dollar compare with the order size is 1000 units but the number that order 1000 units is 1 order but the total sales is $16800 dollar difference. Therefore, another problem arise " here the large quantities orders causes many of the small quantities orders to wait for a long time before being processed.

As a result some deliveries of small quantity orders were late. The reason might be the production want to chase the large quantity order due to the high sales when produce that product compare with the small order quantity. Figure 2.

2: The relationship between the order size match with the numbers of order and total value of sales in March 2012. 2. 3 Ineffective and Inefficient Layout Figure 2. 3, shows the ineffective and inefficient layout where after the gear are finish at the Milling Work Centre the gear then have to go through a long Journey to get into the next process which is Drilling Work Centre.

Similarly if the customer request for Heat Treating, the gears have to pass through the Grinding Centre in order to go into the next step which is storage and shipping area.

Due to the ineffective and Inefficient layout several issues might taking into the consideration such as slow in the production process, a lot of time are consume in transferring gear, the safety of the workers, missing some of the gears units while transferring the gear to the next stage and etc.

Figure 2. 3: Custom Gear Production Process Layout. 2. 4 Increase Rate of Return Due To Defective Product Rhea quality control or inspection on the gears before it release to the shipping area is or because the company experience 6% returning product due to the poor quality, 75% of the cases the returned orders have failed to undergo more than one operations or the operations have been inadequately done.

For example in one returned order, all the gears were missing a hole.