

A process represents a specific activity that incurs costs during the manufacture of a product. It can be any activity that modifies a material (product, part, purchase item or raw material). For example, the following process steps are used to manufacture Part XYZ:

1. Receiving raw material STEEL
2. Stamping raw material STEEL
3. Inspecting product XYZ
4. Shipping product XYZ

These process steps are illustrated in the following diagram:

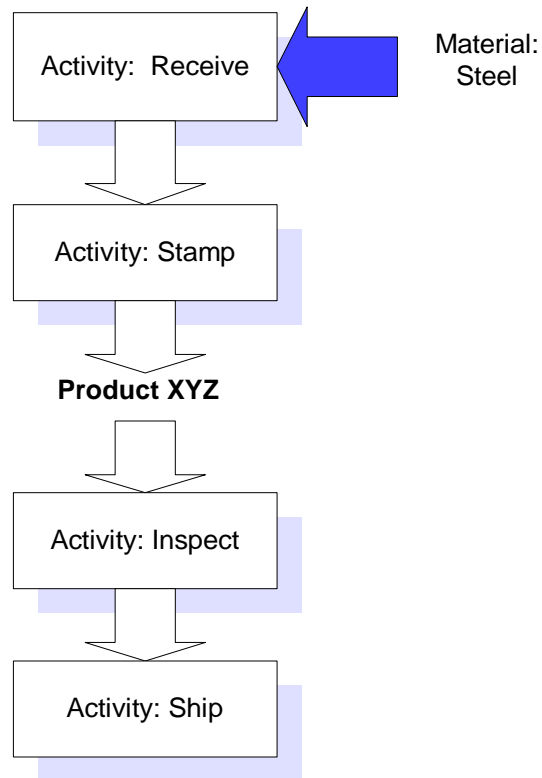


Figure 1-3. Product Routing

The overhead or administrative cost can be calculated for each process step using the formula displayed below:

$$\frac{\$ \text{ COST}}{\text{COST DRIVER}} \times \frac{\text{COST DRIVERS}}{\text{PART}} = \frac{\$ \text{ COST}}{\text{PART}}$$

COST DRIVER RATE X *COST DRIVER USAGE* = *UNIT COST*

Figure 1-4. Using Cost Drivers

The overhead and administrative costs that are associated with a quote are based on this formula. A cost driver rate (i.e., \$100 per hour) is applied to a cost driver usage, associated with a process (i.e., Stamping Process XYZ at a run rate of 400 pieces / hour uses 0.0025 machine hours per part) to determine a total cost absorption for each process step (i.e., \$100 x 0.0025 = \$0.25 per part). The total absorption cost (per part) for each process is based on the associated Product Cost Driver.