

Squaring Shear Productivity Analysis



The most basic question asked by a customer studying the purchase of a conveyor / stacker is "Will it save time and money?" The following study will answer that question.

For the purpose of simplicity, let us assume a burdened labor cost of \$60.00 per hour.

It is obvious that to reduce the cost per hour in a shearing operation, the area to start is the labor on the discharge or out feed operation of the shear.

In many shearing operations today, one person (or more) is behind the shear. While in operation, they catch the blank after it is sheared, puts it in a stack, and removes the scrap. Using the Met-Fab Conveyor / Stacker System, this is all done automatically, thereby eliminating the person (or people) behind the shear for stacking and scrap separator purposes. Removal of this person would effectively save \$60.00 per hour.

Another method of operation is where the shear operator shears several blanks of the same size, then goes behind the shear, gathers and stacks the sheared blanks, and separates the trim cuts. A time study of this type of operation showed the following breakdown:

- In feed - 30%
- Actual shearing time - 5%
- **Out feed and Stacking - 65%**

Using our established of \$60.00 per hour, the breakdown is:

- In feeding 18 min. - \$18.00
- Shearing 3 min. - \$3.00
- **Out feed 39 min. - \$39.00**

Based on the time study, the shear is only operating 35% of the time. **Clearly, the addition of a Met-Fab Conveyor / Stacker System would eliminate the shear down time and increase production significantly.**

The replacement of the shear operator's helper with a Met-Fab Conveyor / Stacker System is desirable because the Conveyor / Stacker System increases safety, increases production, and reduces production cost.