

## CONSTANTS

Constants are the key to making catalogs that are site independent. By simply varying a machine constant the cutting time for ALL parts can be immediately modified. Even though the part time is never dealt with separately its time can be dynamically calculated from its Area/Rate\_cutting.

How do we do this?

1. Lets say you cut ~60 sheets per day (1-1/2 lifts) and a day has 7.5 hours
2. Then  $\text{Rate\_cutting} = (60 \times 32) / 7.5 = .256 \text{ sqft/hr}$
3. The cutting time in the catalog is entered as a function of area instead of absolute time so that the estimator is able to apply a part with actual width and height to automatically receive cutting time. Thus behind the scenes when a part 24x36 is required within the context of a product the following happens:

- a.  $24 \times 36 / 144 = 6 \text{ sqft. of part area}$
- b.  $6 \text{ sqft} / .256 \text{ sqft/hour} = .0234 \text{ hours (1.4 minutes)}$

The screenshot shows the 'Math Stuff' application window. The 'Constants' tab is active. On the left, a tree view shows the hierarchy: SYSTEM, Time cycles, Time rates, and User. Under 'Time rates', several constants are listed, including 'Rate\_cutting'. On the right, the details for 'Rate\_cutting' are displayed: Name: Rate\_cutting, Description: Sqft. cutting/hr, and Value: 256. The 'Value' field is highlighted in yellow. At the bottom, there are buttons for 'Done', 'Print', and 'Help'.

Name	Description	Value
Rate_cutting	Sqft. cutting/hr	256