

## Radical new thinking in lineal optimization that can rescue your bottom line in months

**Profits shrinking?** Escalating vinyl prices are a major contributor. Today, the value of vinyl lineals going through a saw in one shift can be 20 to 30 times the fully loaded cost for the operator.

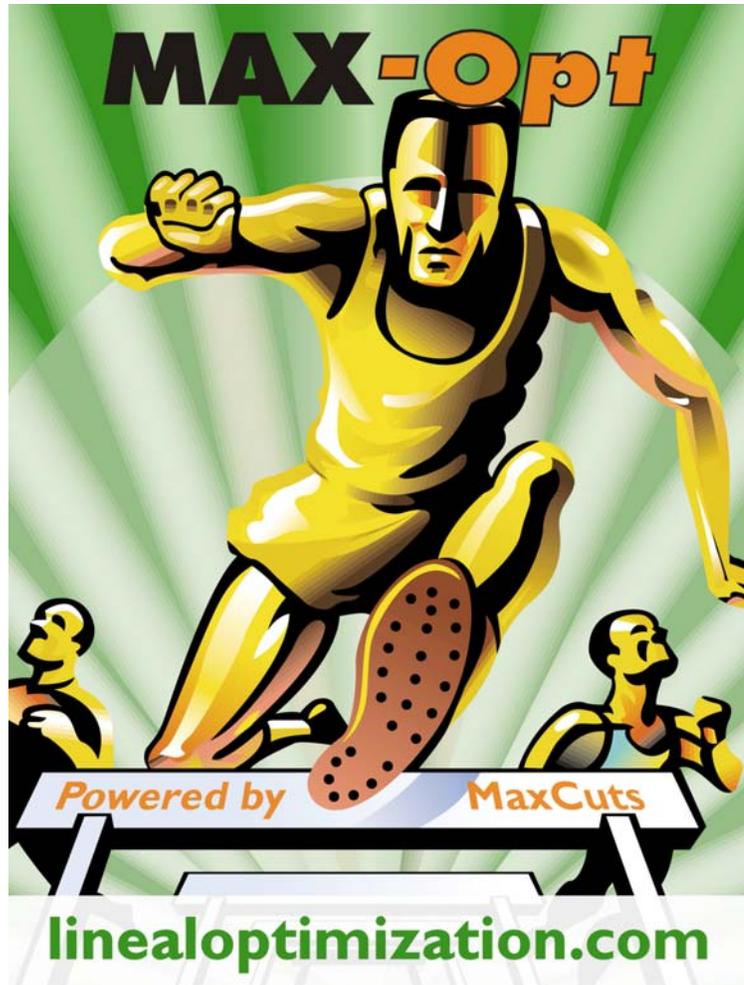
Where's the problem? Traditional optimizers lack methodology to control rising lineal costs. As a result, your current optimization tool is likely costing you six figures a year.

We've always had the best available optimizer in our FeneVision® fenestration integration system. But recently we discovered a new and revolutionary approach to lineal optimization. In use, it has proven to be the tool every window and door maker needs to rein in mounting lineal costs.

It's called MAX-Opt. FeneTech is excited to be the exclusive supplier.

### Three ways your current optimizer lets you down

1. **It does not allow you to simultaneously consider labor and material costs.** This restriction knocks your efficiency out of balance.
2. **It can only optimize within one batch,** not across two or more in a schedule. For example, it can't optimize high-cost low-volume lineals across multiple batches.
3. **It lacks flexibility.** It can't optimize by unique items or saws. It won't allow changing priorities at shift schedule release. Even if it could optimize costly items across batches, it can't optimize high and low volume items differently.



### MAX-Opt does that—and more.

MAX-Opt brings patent-pending new algorithms, and lots of good sense, to lineal optimization. Now window and door makers of all sizes can increase yields and reduce labor—often in the same schedule.

Every plant is different. Still, in the average window and door plant cutting \$3 million in lineals per year, you can expect savings of \$100,000 or more. And payback within a few months or less.

## MAX-Opt was developed especially for window and door manufacturers

Nearly all lineal optimizers were developed for high volume applications like lumber and steel mills. Few fenestration companies approach the same unit volumes.

MAX-Opt was developed by Geoff Roise of Lindsay Windows in Minnesota. For Geoff, forcing high-volume single-batch optimization on low-volume production makes no sense. A batch can only be optimized within itself—you can't optimize smaller batches with larger ones. Improving yield for low-count parts like wood grain is difficult. And you can only hope operators will save and use valuable leftover pieces in later batches.

## MAX-Opt

Geoff could see his company was throwing out money it could be keeping. He investigated every optimizer he could find. He tried many. None did what he knew was possible. So he put his math and programming aptitude to work.

The result? The patent-pending thinking in MAX-Opt.

### To save money, you need flexibility

Some schedules need to be optimized for material costs. Some for labor. And sometimes, you simply must get work through the plant fast. MAX-Opt enables you to:

- **Balance material and labor costs.** When materials cost more than labor, MAX-Opt works to reduce scrap by rearranging lineals, increasing cuts and other methods. When labor costs more than materials, MAX-Opt works to reduce cuts.
- **Group common parts across window types.** For instance, MAX-Opt will cut more pieces at a time if a saw allows.
- **Split parts if it increases yield.** Often, multiple parts are cut in one pass to reduce labor even if this decreases yield. Max-Opt evaluates cut by cut to determine if splitting parts can simultaneously increase yields.
- **Easier set-up of bill of materials.** MAX-Opt eliminates set up of special items strictly for equipment purposes.

With MAX-Opt, you can set parameters for individual units and costs. *Each part of a profile* can have its own rules and settings. You can group all low-volume high-cost materials within a schedule. You can look across one, two or 10 batches. You can even adjust for higher- and lower-volume seasons, weeks or days.

### The case is compelling, implementation quick

Reduce scrap. Reduce cuts. Cut faster without sacrificing yield. The bottom line? Overall yield improvements of three to five percent are readily achieved. On saws that can group (screen, frame and sash straight parts), you can reduce saw cuts by 25 percent or more.

Payback is quick, typically six to 10 weeks. Annual cost is based on the number of saws.

Implementation is also fast. If you already use FeneVision, expect to be running in two weeks for many saws. Once implemented, you can set MAX-Opt and forget it—or tweak parameters daily in the optimization command center.

But you don't need FeneVision to benefit. MAX-Opt works with other applications.

### For information on MAX-Opt

To learn more and determine your potential savings from the patent-pending new approach to lineal optimization in MAX-Opt, contact the sales team at FeneTech today.