



n the competitive world of modern manufacturing, being open to change and new processes is critical to ongoing success and sustainability. So, if you continue to do things the way you've always done them, there's a good chance you are missing opportunities for business improvement and profitability.

Case in point: If you are dependent on a metal service center for your sheet metal blanks, you are losing money. If you build your own product – whether it be office furniture, lockers, refrigerators, ice machines, pontoon boats, trailers, and the list goes on – bringing your blanking operations in-house can pay off in a big way. To figure out if you're a candidate for your own coil cut-to-length (CTL) line, it's good to understand some basic guidelines.

#### **CTL** criteria

Too often, CTL lines are chalked up to being a tool reserved for service centers. The reality, however, is that plenty of lines are incredibly well suited for fabricators. Before considering the investment, there are a few factors to consider, including the material

#### **Potential Cost Saving Estimates**

Tons	Toll Rate/Ton	Monthly	Annually
500	\$20	\$10,000	\$120,000
	\$30	\$15,000	\$180,000
	\$40	\$20,000	\$240,000
	<sup>\$</sup> 50	\$25,000	\$200,000
1000	\$20	\$20,000	\$240,000
	\$30	\$30,000	\$360,000
	\$40	\$40,000	\$480,000
	<sup>\$</sup> 50	\$50,000	\$600,000
2000	\$20	\$40,000	\$480,000
	\$30	\$60,000	\$720,000
	\$40	\$80,000	\$960,000
	<sup>\$</sup> 50	\$100,000	\$1,200,000

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The cost savings of bringing cut-to-length operations in-house can be significant.

quantity and type to process, the size of necessary blanks and the downstream operations that are employed.

Material quantity and type: If you're processing more than 5 million lbs. of steel or 3 million lbs. of aluminum, you've just checked off your first CTL line qualifier box. A basic rule of thumb has been that buying your own coil versus sheets can save you anywhere from 0.03 to 0.8 cents per lb. However, as of late, the steel market has been more volatile with prices going up 20 to 30 percent

across the board since Q3 of 2017 with projections for further increases.

Because of the volatility in pricing, CTL line users can gain ROI even more quickly, especially when processing specialized materials, such as highly polished, prepainted or non-marking applications.

For customers of Coe Press
Equipment, a company that
manufactures coil handling and servo
roll feed equipment, each CTL line
installation has been paid off within
2.5 years. >



Blank sizes: If you're processing a variety of sizes or non-standard sizes (something other than 4 ft. by 8 ft., 5 ft. by 10 ft., or 6 ft. by 12 ft.), blanking inhouse becomes even more attractive. In these situations, when standard-size sheet material is the norm, sheets must be sheared to size to fit various specific job requirements.

In these situations, the fabricator can pay a premium to the service center for a non-standard cut or pay for the wasted material that is cut off of the standard-size sheet. With a CTL line, however, material can be cut to the specific sizes and quantities users need when they need them, greatly reducing or eliminating scrap. After a user "rebooks" the balance of his master coil, it's available for specific, upcoming jobs requirements. This can reduce scrap from 5 to 20 percent and becomes particularly important when handling high-cost materials like stainless steel or aluminum.

Downstream operations: If you perform downstream operations using turret >

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presses, lasers, press brakes, towers, integrated systems or panel bending, as just a few examples – especially if you are processing 3.5 million-plus lbs. of blanks per year – then having an in-house CTL line can help you make money.

When combined with these operations, a CTL line can provide either semi-automated or fully operated operations, which result in a smoother overall process, especially when compared to a standalone blanking line. As one example, users can strategically place a CTL line closer to the forming process, which can automatically load blanks for the next

process for a leaner, more streamlined, operation.

### Line facts

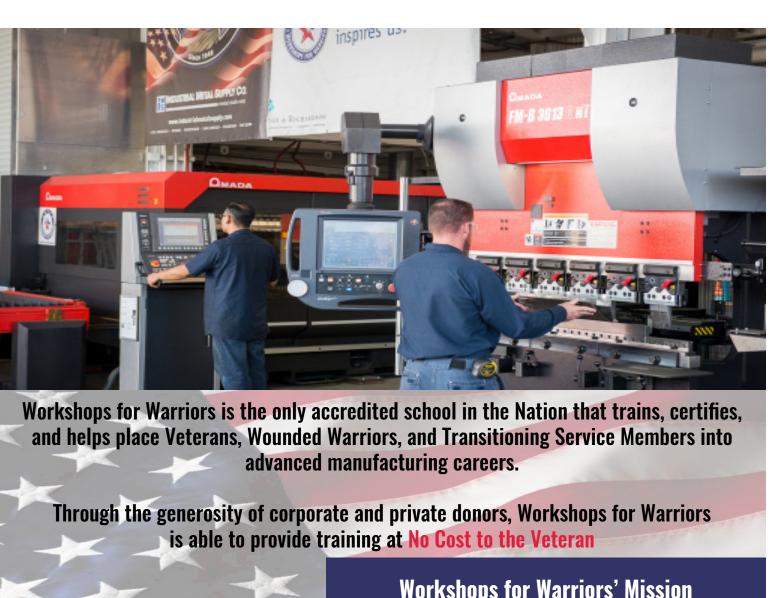
Think you don't have the floorspace or can't afford the investment of a cut-to-length line? Before you answer that question, here are the facts about owning a coil blanking line:

Cost: Typically, the first statement we hear from a potential customer is that they'd like one, but they can't afford it. While it's true that there is a required capital equipment expenditure, most fabricators don't require a megamillion-dollar blanking line like those used in service centers. For potential >

### **BENEFITS**

Outside Cost Savings	Eliminate \$20-\$50/ton in processing fees	
Transportation Savings	Eliminate \$1.50-\$2.00/mile in trucking fees	
Inventory Reduction	Reduce WIP and carrying costs	
Streamline Processes	Apply JIT to blanking operations	
Improve Quality	Easily detect and contain material defects	
Reduce Scrap	Optimize material usage by blanking to size	
Optimize Floorspace	Use floorspace for value-added operations	

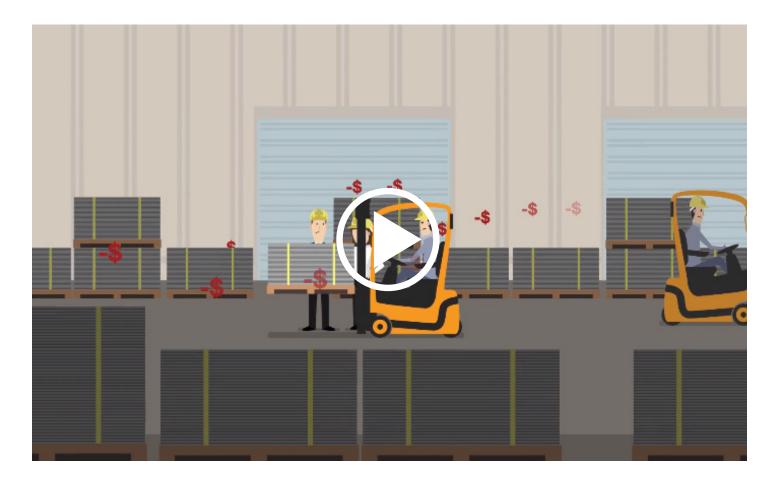
Benefits of bringing cut-to-length operations in-house go far beyond cost savings.





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Watch the video to learn how fabricators can save and even make money by in-house blanking with a Coe CTLMaster cut-to-length line.

customers vetting the investment, Coe can calculate a possible ROI based on the type of material and quantity of blanks.

Floorspace: For some fabricators, available floor space is hard to fine. But, for many, the large area dedicated to blank storage inventory should suffice. And, Coe's CTL lines have a small footprint. While a service center line may require 15,000 to 20,000 sq. ft. a

Coe CTL line can fit within a footprint of 500 to 4,500 sq. ft. This means that the space currently dedicated to blank storage could easily accommodate the blanking line and the coil stock.

Coil fright: Just because a fabricator doesn't have experience processing coil stock, doesn't mean they should be intimidated by it. In addition to training from the Coe service team, Coe CTL lines come with a Work Roll Advisor >

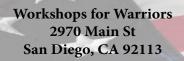
#### **How to Get Involved**

Through the generosity of corporate and private donations, Workshops for Warriors is able to provide training at no cost to the Veteran. 83% of all donations go straight to training programs. Visit wfwusa.org/donate and learn more about how you can support our programs and our Veterans. Or text now:

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If you are an employer in need of advanced manufacturing talent, WFW graduates 120 students per year who work all across the Nation. Visit wfwusa.org and click the "For Employers" tab for more information.



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# The Impact

## **Workshops for Warriors addresses two challenges:**

- 1. The need for lifelong employment among Veterans transitioning from the service.
- 2. The limited pipeline of skilled workers in the advanced manufacturing industry.

"We are rebuilding America's advanced manufacturing workforce, one Veteran at a time."



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feature that helps new users automate setups. This feature takes the guesswork out of setting up a straightener.

As an example, roll depth setting, typically accomplished through trial and error, is automatically calculated with the advisor feature and, depending on the machine configuration, automatically set. The feature also allows users to plug in material specifications – thickness, width and yield strength – and the recommended straightener roll depth settings are automatically calculated.

As for ancillary equipment that's required for handling coil stock, most fabricators already have what's needed, such as a big fork truck for unloading master coil stocks along with fork trucks equipped with sheet lifters for moving finished goods. If not, a fabricator can always use an overhead crane system capable of handling 8,000-lb. to 50,000-lb. coils.

In terms of purchasing material, often times, it's recommended to simply continue working with the service center that is supplying sheet metal >



For fabricators with limited available space, Coe's cut-to-length lines can fit within a footprint of 500 to 4,500 sq. ft.

Too often, cut-to-length lines are chalked up as a tool reserved for service centers. The reality, however, is that there are plenty of lines that are incredibly well suited for fabricators.



**AVERAGE AGE** 

of most print mags years old

The new wave of manufacturing employees is not yet set in their purchasing habits and are more open to considering new products and brands than those who still rely on print magazines.

\*Techgen Media publications reach all decision makers, at the very highest and most influential levels.

blanks as they also sell coil stock. But, even better, if volumes are high enough (10 million lbs. or more), then eliminating the middleman is an ideal option. By negotiating your own deal at the mill level, you can gain additional price protection as well as saving the 10 to 25 percent markup that service centers add to raw material costs before they even do any processing.

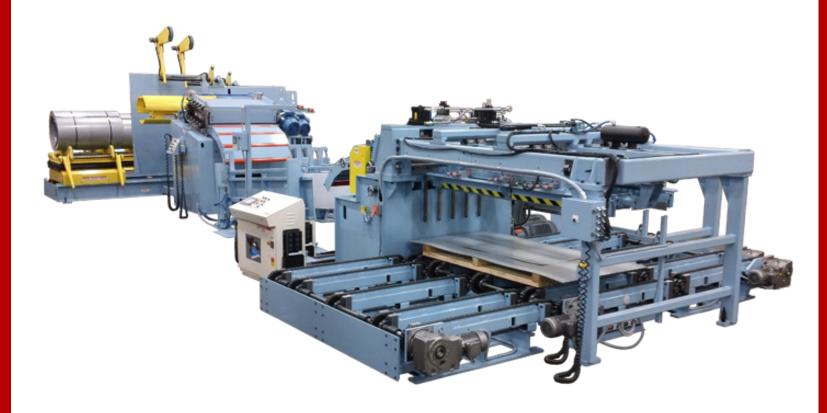
Quality: From an equipment standpoint, all Coe CTL lines feature the company's precision straightener technology, developed specifically to process advanced, high-tensile materials. Even for fabricators not processing advanced materials, the equipment offers the ability to produce leveler-quality blanks and sheets with length and squareness precision typically only achieved by a much more expensive leveler, allowing the handling of the most demanding applications. These straighteners feature either nine or 11 rolls, which are always backed up to provide the rigidity and stability required.

In addition, when there is less material handling involved, quality improves. With a CTL line, material is handled less, old lifts of half used sheets don't have to be dealt with and, therefore, jobs can be tracked and nested more efficiently. And, should there be any defect in the blanks, it's easier to identify that upstream in the process before it impacts downstream operations.

### **Next steps**

If your production requirements fit these parameters, then the time has come to talk to a CTL line supplier. Whether working with Coe or another OEM, be sure that the process starts out by discussing pain points – drop, scrap, delivery and so on – and results in the development of a solution that fits your needs. Then, we can quickly calculate your potential ROI.

With Coe equipment, new installations quickly become a value stream for customers. By blanking in-house, incremental costs associated with purchasing blanks, such as material handling, packaging and shipping, are > If you're processing more than 5 million lbs. of steel or 3 million lbs. of aluminum, you've just checked off your first cut-to-length qualifier box.



This Coe cut-to-length line includes a ServoMaster roll feed, dual threading table, power straightener, coil reel and coil car, hydraulic production shear and a single station drop stacker.

eliminated. Savings for one customer, as an example, went as high as \$70,000 per month. And an ROI of \$2.1 million was achieved within nine months.

We all get comfortable with the status quo. But, if you're a fabricator looking for ways to build a more profitable organization, bringing a coil blanking

line in-house may provide the easy answer to a new revenue stream, improved operational control and better quality.

**COE PRESS EQUIPMENT** 

