



# Powerhaus Plate Processing System

**FOR FLAT BAR AND PLATE FABRICATION**



*The economic solution that adds real value to the automatic production of plate components that require punching, drilling, marking, and thermal cutting to any shape, contour or length...in one process.*

# *The Challenge...*

## **Yesterday's Fabrication**



Reducing manual labor and raw material costs is the ultimate challenge for plate fabricators. Manually fabricating plate is a labor intensive operation...three or more laborers creating one part. A typical burn table installation can occupy over 3000 square feet of shop floor space. And, handling heavy plate manually is a hazardous operation.



The steps involved in creating plate this way: loading... adjusting torches...igniting and burning...removing scrap...cutting scrap to removable length...manually removing parts from skeleton...removing remaining parts...removing the skeleton...gathering parts...layout and drill holes...deburring...stacking finish parts...is slow, expensive and eats away at your bottom line.



**REDUCE MANUAL  
LABOR BY 80%...  
THE PEDDINGHAUS WAY**



# *The Solution...*

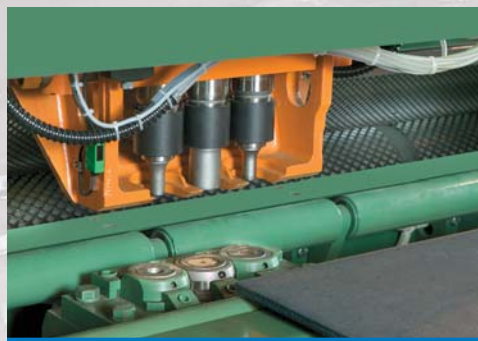
## **Peddinghaus Powerhaus**

Peddinghaus revolutionized plate fabricating by pioneering the automation of heavy plate processing decades ago by combining punching, drilling, thermal cutting and part marking into one operation...requiring only one operator with minimal intervention. Successful plate fabricators soon discovered a competitive edge in the marketplace.

The innovative Peddinghaus machine design delivers a finished piece in three steps: load...process...unload. Continuous processing via the patented roller feed drive and measuring system maximizes productivity while minimizing shop floor space and associated labor costs.

Continuous material flow, maximum material utilization, and consolidating multiple operations are vital when processing heavy plate. One machine does it all...at a fraction of your old plate production costs.

**SAVE SHOP FLOOR  
SPACE BY 60%...  
THE PEDDINGHAUS WAY**



**Peddinghaus  
has the right  
answer for  
every plate  
application  
question**

## **LOADING**

Take a 20' stock plate...load it on the conveyer outside the building...run the stock through the machine...load another stock length while completing first job...to achieve continuous operation.

## **CONTINUOUS OPERATION**

▶ *Cost Savings*  
**BENEFIT**

*Analyze your employee costs for multiple labor-intensive jobs, compounded by the handling of various sizes of plate by crane, and you will discover the true hidden costs that affect your bottom line.*



*1/4" to 3" (6 to 75 mm)...the Powerhaus seamlessly processes it all.*

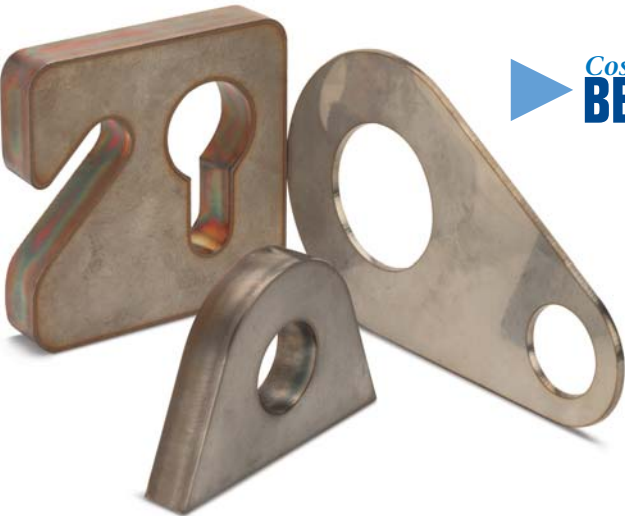
**TRUE ONE-PASS PROCESS**

**P o w e r h a u s . . . T h e**

**Cost  
effective  
hole  
production  
with CNC  
accuracy  
and  
repeatability**



*The powerful Siemens 840DI – with global serviceability and acceptance – is the acknowledged leader in CNC electronic technology. Around the corner or around the world, Peddinghaus and Siemens team up for performance.*



## CARBIDE DRILLING

A powerful 38 hp Siemens motor provides 1800 rpm hole making capability – at a fraction of older drilling methods. With Peddinghaus' *Smart Spindle* technology, any three programmable spindles can be selected, eliminating lost time for tool changes.

## HIGH SPEED



### Cost Savings BENEFIT

*Estimate the value that high-speed hole production will have on meeting your important job deadlines.*



## PUNCHING

A 125 (112M) ton hydraulic punch, complete with the Peddinghaus triple tool can punch up to three hole diameters in a single process. In a single part...a round, shaped, or slotted hole can be produced automatically.

## TRIPLE TOOL



### Cost Savings BENEFIT

*Economical hole production via shaped punching provides true hole making versatility for pennies per hole.*



**Peddinghaus  
pioneered  
continuous  
plate  
processing**

# THERMAL CUTTING

Choose plasma or oxy-fuel to cut any shape contour, or length in one operation. The operator selects the best thermal cutting method for any particular job providing a cost-effective solution when parting plate or flat stock.

► **Cost Savings  
BENEFIT**

Calculate your costs when you employ a programmer, an operator, and a laborer on a typical burning table application, when the Powerhaus does all thermal cutting with one operator.

Whether plasma or oxy-fuel cutting, Peddinghaus' seamless processing increases your machine torch "Arc Time." By definition, *Arc Time is the actual time when the torch is lit and employed in the actual thermal cutting process.*

By increasing *Arc Time*, the Peddinghaus process delivers more finished parts per man-hour for your customer's project. Yesterday's fabrication technology – such as burning tables – requires torch adjustments and extensive material handling, adding unnecessary costs, which subtracts from your profit margin.



**h Speed Plate Pr**

# Proven machine productivity from the leader in heavy plate production

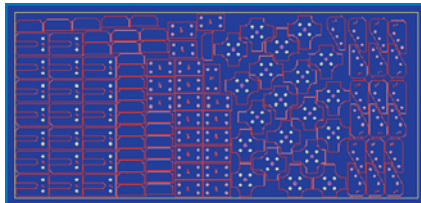
## CHAIN CUTTING

By using plasma or oxy-fuel chain cutting, the torch runs continuously saving consumables and delivering more parts.



## NESTING SOFTWARE

Powerful nesting software provides integration of *common cut lines* and *chain cutting* which not only minimizes scrap and operator intervention, but also optimizes machine functions...adding speed to the entire process.

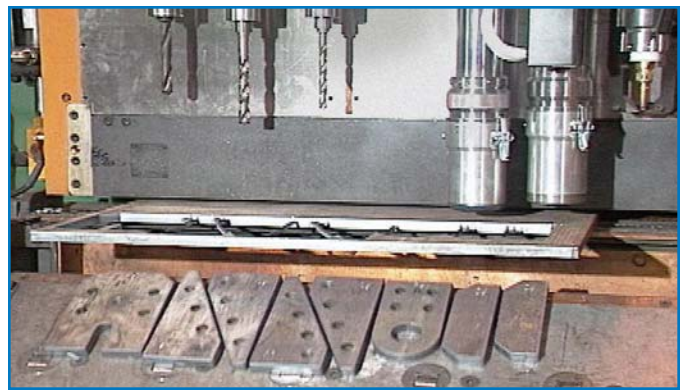


## UNLOADING

Upon completion of the cycle, parts automatically drop from the table into a container, speeding accurate parts delivery to your customer's project.

## AUTOMATIC

**Cost Savings BENEFIT** From start to finish, one operator can perform the function of three, in 1/10th of your shop space.



## SERVICE TRAINING

Founded in 1903, Peddinghaus is the leader in customer service, with more experienced telephone and field service technicians than any competitive firm. Classroom and on-site training assure our customers of *hit-the-floor-running* installations. Utilizing today's electronic internet technology, Peddinghaus users are never more than a dial up away from assistance.



# The Powerhaus by Peddinghaus

- ▶ **Structural Steel Fabricators**
- ▶ **Steel Service Centers**
- ▶ **Industrial Machinery Manufacturers**
- ▶ **Bridge Fabricators**
- ▶ **Road Machinery Builders**
- ▶ **Ship and Barge Builders**
- ▶ **Truck and Trailer Manufacturers**
- ▶ **Petrochemical**
- ▶ **Communication Towers**
- ▶ **Energy and Utility Manufacturers**
- ▶ **Railroad and Rail Car Manufacturers**
- ▶ **Agricultural Applications**
- ▶ **Mine Construction**
- ▶ **And Many, Many More**



## Peddinghaus Corporation

300 North Washington Avenue  
Bradley, Illinois 60915  
Phone 815-937-3800  
Fax 815-937-4003  
www.peddinghaus.com

## Peddinghaus Corporation U.K. Ltd.

Unit 6  
Queensway Link Industrial Estate  
Stafford Park 17  
Telford, Shropshire TF3 3DN UK  
Phone 01952-200377  
Fax 01952-292877

## Paul F. Peddinghaus GmbH

Hasslinghauser Strasse 156  
Postfach 1820  
58285 Gevelsberg  
Germany  
Phone 0 23 32/72 - 0  
Fax 0 23 32/72 - 208

ISO 9001:2000 Certified



## Peddinghaus FPDB 1800 Plate Machine Specifications

Material Capacities		
Thickness	Minimum	1/4" (6mm)
	Maximum	3" (75mm)
Width	Minimum	6" (150mm) (actual machine closes to 1.75")
	Maximum	72" (1800mm) (actual machine opens to 74.25")
Stock Length	Minimum	48" (1219mm) (required to switch from entry to exit encoder)
	Maximum	20 ft. (6.1 Meters)
General Drill Specifications		
Max. Drill Size	2" (51mm)	
Power Per Spindle	38 HP (28kw)	
Three Spindle Speeds:	Slow Spindle	120-1100 RPM
	Medium Spindle	150-1325 RPM
	Fast Spindle	200-1800 RPM
Single Spindle Speed	120-1100 RPM	
Rapid Advance & Retract	240 IPM (6 MPM)	
Drill Feed Rate	1-20 IPM (25-508 mm/min)	
Drill Holder Options	No. 4 Morse Taper; Graflex Size 6; Komet #63	
General Punch Specifications		
Capacity throughout entire stroke	125 Tons (113 Metric Tons)	
Max. Material Thickness	1" (25mm)	
Full Stroke of Press Ram	4-1/4" (108mm)	
Max. Hole Size with 292 Punch	1-3/4" (45mm)	
Max. Hole Size with 272 Punch	1-1/4" (32mm)	
Stripper Type	Positive Hydraulic	
Punch Stroke Control	Automatically Adjustable to Plate Thickness	
Machine Specifications		
Machine Control	Siemens Model 840 Di	

## Peddinghaus FPDB 2500 Plate Machine Specifications

Material Capacities		
Thickness	Minimum	1/4" (6mm)
	Maximum	3" (75mm)
Width	Minimum	6" (150mm) (actual machine closes to 1.75")
	Maximum	96" (2500mm) (actual machine opens to 100")
Stock Length	Minimum	48" (1219mm) (required to switch from entry to exit encoder)
	Maximum	20 ft. (6.1 Meters)
General Drill Specifications		
Max. Drill Size	2" (51mm)	
Power Per Spindle	38 HP (28kw)	
Three Spindle Speeds:	Slow Spindle	120-1100 RPM
	Medium Spindle	150-1325 RPM
	Fast Spindle	200-1800 RPM
Single Spindle Speed	120-1100 RPM	
Rapid Advance & Retract	240 IPM (6 MPM)	
Drill Feed Rate	1-20 IPM (25-508 mm/min)	
Drill Holder Options	No. 4 Morse Taper; Graflex Size 6; Komet #63	
General Punch Specifications		
Capacity throughout entire stroke	125 Tons (113 Metric Tons)	
Max. Material Thickness	1" (25mm)	
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