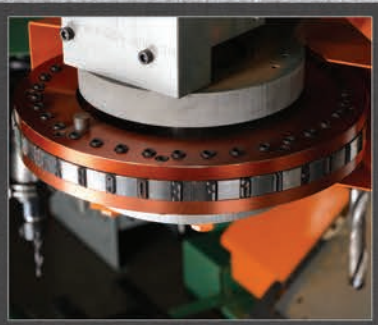
Peddinghaus HSFDB-C

HIGH SPEED BEVEL PLATE PROCESSOR



Dear Industry Partner,

Anton Peddinghaus

Welcome to the World of Peddinghaus – The World of "BETTER".

In the world of Peddinghaus we aim to be better. Take a look at any of our 5,000+ installations throughout the globe. These fabricators experience reduced costs and higher production using our equipment. Why? Because with Peddinghaus they receive better technology, better service, and better quality than anyone else can provide. These things aren't easy to do, and not every company can guarantee what Peddinghaus does. I am proud that I can say these things because at Peddinghaus we work harder than anyone to give our customers the best. Whether they are located in Mexico City, Mumbai, or Melbourne; they all receive the very same service, spare parts, and support that is second to none.

Welcome to Partnerships – From Software to Service to Sales.

At Peddinghaus we maintain strong partnerships with industry leaders to ensure your success. Whether this is our relationship with leading software providers (such as Shop Data Systems, Sigmanest, Steel Office, AceCad, Tekla, FabTrol, Design Data, and more) or our partnership with regional sales and support organizations - our goal is to work together to serve you better.

Welcome to the HSFDB-C – More than Just a Machine.

If you're using a burn table you have already experienced how much labor, floor space, and cost is involved with processing plate using old-fashioned technology. That is why Peddinghaus has redefined plate processing with the all-in-one HSFDB series of CNC plate processors. Born from the technology of the original HSFDB product line, the HSFDB-C boasts new features such as bevel cutting, SignoMat stamping, and an expansive 12-station tool changer. Structural fabricators, manufacturers and service centers the world over have learned quickly that this concept is the answer to the problems that older plasma cutting technologies present.

In today's world how do you compete when steel can be bought and sold at close to the same price as your competitors? You must minimize the cost to fabricate! The HSFDB-C can process parts at unbelievable speeds, averaging 1 ton per hour of plate up to 25 mm thick, and an impressive 2 tons per hour of plate thicker than 25 mm. Combine this with a single operator and half the floor space of standard burn table technology and witness true return on investment.

Welcome to Peddinghaus Service – Unmatched Global Support.

At Peddinghaus service is priority number 1. Peddinghaus' global team of customer support representatives are on duty, on call, all the time at our very own 24-hour customer support center. Combined with state-of-the-art remote diagnostic software, readily available local field support professionals, and the industry leading warranty - customer support from Peddinghaus is only a call or a click away.

Welcome to Peddinghaus – A Tradition of Innovation, a Reputation for Excellence.

My great-grandfather and grandfather perfected Ironworkers during their time with Peddinghaus; then it was my father's turn to pioneer the TDK drill line. In today's world I am proud that we at Peddinghaus continue to offer new solutions for our customers such as the HSFDB-C. This is only possible through constant innovation, and continuing investment in research and development. I invite you to see why Peddinghaus technology is the chosen provider for steel fabricators the world over.

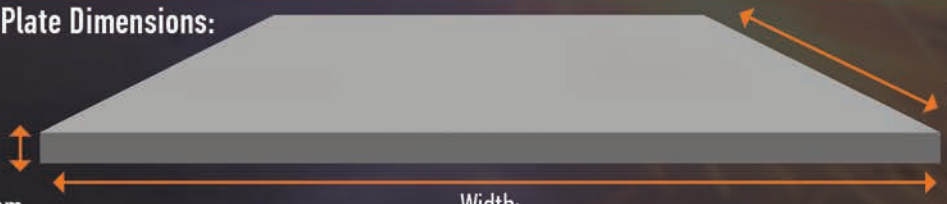
Please visit www.peddinghaus.com for a "video test drive" and additional technical details on the HSFDB-C. Or, plan a visit to the Peddinghaus manufacturing campus at our headquarters in Bradley, IL USA. See the depth of our organization, and our commitment to your success with world class customer support.

Carl G. (Anton) Peddinghaus | Chief Executive Officer | Peddinghaus Corporation

Ideal for Processing Structural Steel in an Array of Applications Including:

- Steel Construction
- Service Centers
- Agricultural Equipment
- Farm Implement Manufacturing
- Automotive Conveyor
- Assembly Line Fabrication
- Solar Panel Fabrication
- Trailer Manufacturing
- Conveyor Manufacturing
- Earth Moving Equipment Fabrication
- And Many More

Acceptable Plate Dimensions:



Length:
Min. 900 mm
(Max length dependent on max weight of 15,500 kg.)

Thickness:
6 mm* - 100 mm

Width:
150 mm - 2500 mm**

**Minimum thickness for stamping is 14 mm*

***1800 mm and 3200 mm models available upon request*

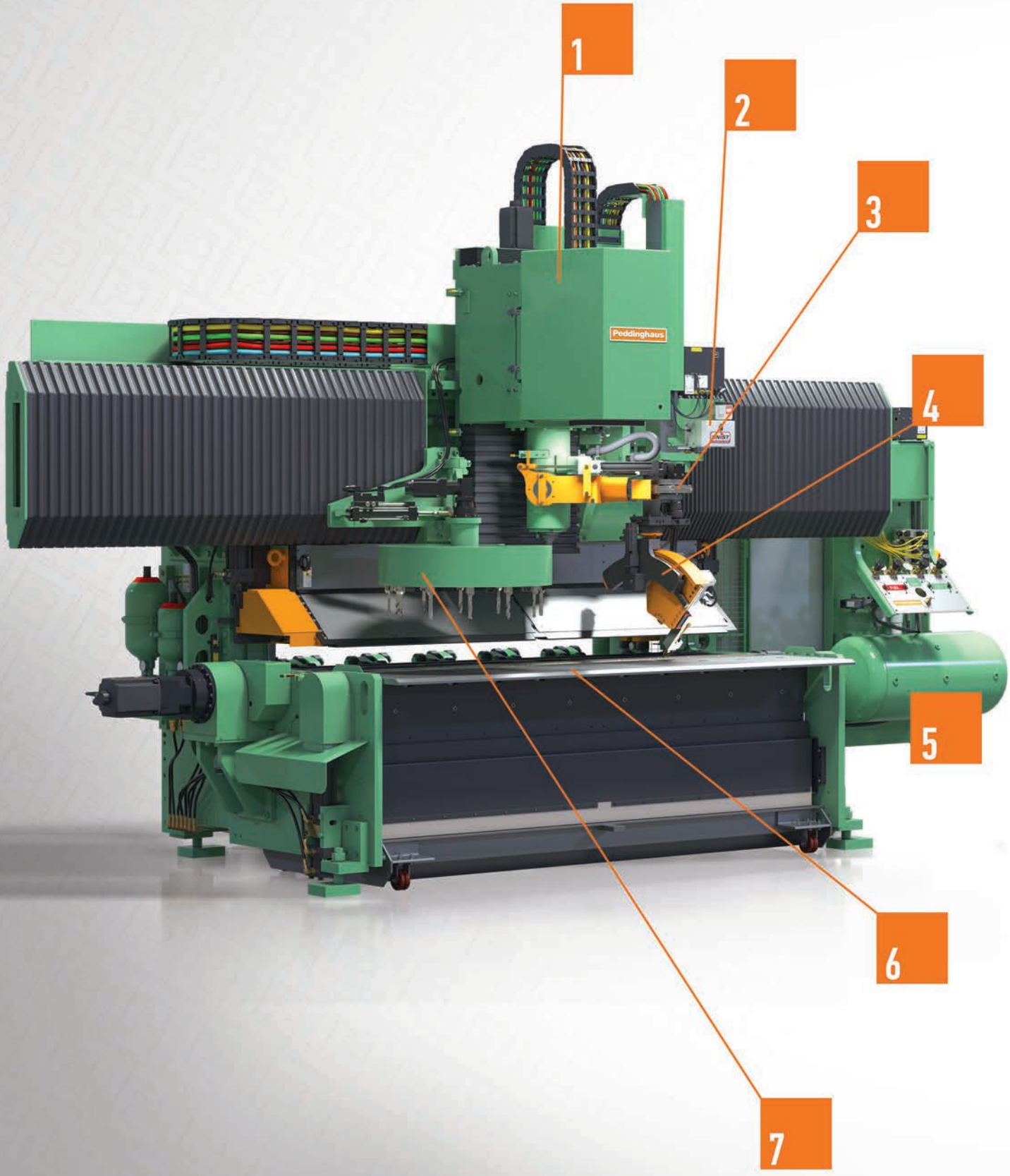
Spindle Specifications

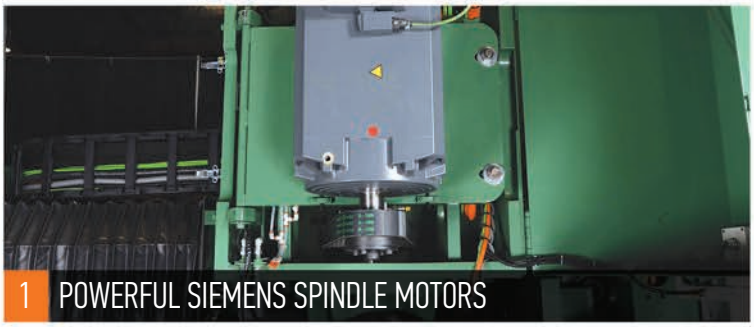
Maximum Drill Size	75 mm
Minimum Drill Size	6 mm
Maximum Spindle Speed	2250 RPM
Spindle Horsepower	36 kW
Tool Change Capacity	12

Plasma Specifications

XPR 300 Edge Start Max Thickness	63 mm
XPR 300 Edge Start Min Thickness	6 mm
XPR 300 Piercing Max Thickness	32 mm
XPR 300 Piercing Min Thickness	6 mm
HPR 400 Edge Start Max Thickness	82 mm
HPR 400 Edge Start Min Thickness	6 mm
HPR 400 Piercing Max Thickness	50 mm
HPR 400 Piercing Min Thickness	6 mm

Another Industry First From Peddinghaus



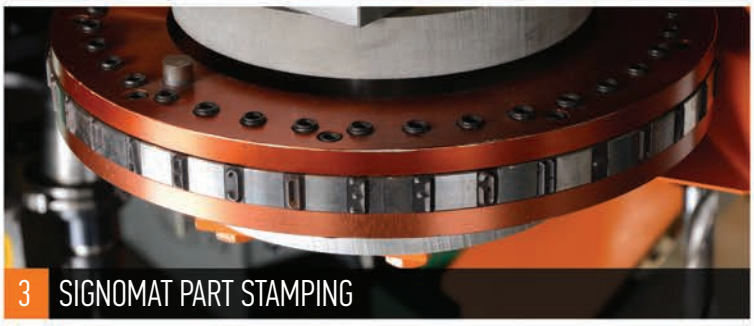


1 POWERFUL SIEMENS SPINDLE MOTORS

- High speed 36 kW Siemens intelligent spindle motor
- Spindle speeds of up to 2250 RPM
- Maximum spindle size of 75 mm

2 MINIMUM QUANTITIY LUBRICATION

- 97% air, 3% eco-friendly vegetable oil-based lubricant
- Eliminates flood coolant mess
- No need to clean parts before additional fabrication processes (welding, painting, etc.)

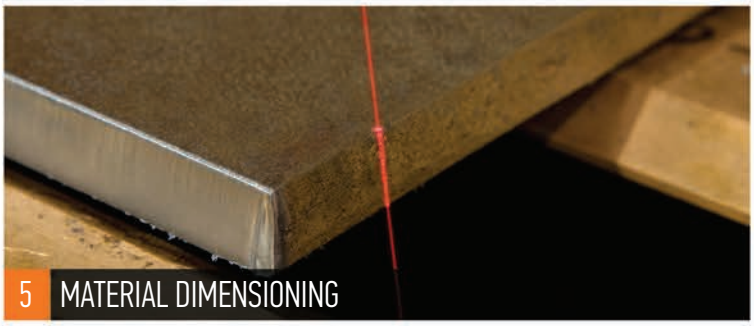


3 SIGNOMAT PART STAMPING

- 36-station (number/letter) part marking press
- Rotates 360° to achieve proper orientation of characters in relation to part nest positioning

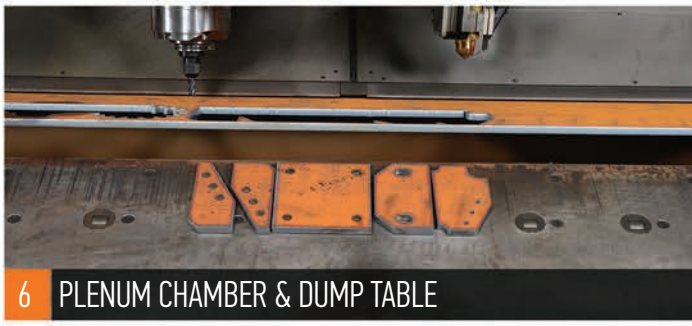
4 PLASMA/OXY-FUEL BEVEL CUTTING

- Optional bevel cutting assembly for both plasma and oxy-fuel torches
- High speed plasma: 300 or 400 amp plasma systems are available



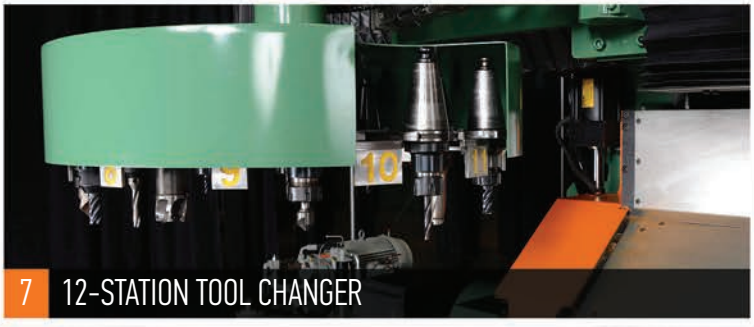
5 MATERIAL DIMENSIONING

- Plate edge dimensions are detected by a contemporary laser probe system
- Plate thickness is determined by a transducer which is mechanically linked to the vertical clamping and drive mechanism



6 PLENUM CHAMBER & DUMP TABLE

- Dump table mechanism
- Parts up to 450 kg can be unloaded with ease
- Copper lined plenum chamber is integrated for easy removal/containment of machine byproduct
- Parts handling options available



7 12-STATION TOOL CHANGER

- Rotary tool changer capable of holding up to twelve tools
- Eliminates the need to manually change tooling during production
- Tool selected upon program command

8 ADVANCED PEDDINGHAUS CONTROL

- State-of-the-art Siemens electronics
- Robust and intuitive user interface
- Modern remote assistance and web cam technology for real-time troubleshooting
- Siemens 10 year spare parts guarantee

Pedalinghaus

Profitable Plate Production

High Speed Plate Processing

Powerful drilling technology, unmatched material handling efficiency, and superior design make the HSFDB-C the competitive edge of fabricators all over the globe. A high torque Siemens 36 kW spindle motor is employed on the HSFDB-C to endure the most rugged drilling applications. High speed drilling of up to 2250 RPM and feed rates of nearly 760 mm/min provides opportunities where traditional high speed tooling falls short.

Process Up To 100 mm Thick Plate

Whether it's the speed of plasma, or the economy of oxy-fuel, thermal cutting is available in all forms on the HSFDB-C heavy plate processor. Plate beveling technology on the HSFDB-C is designed so that both the plasma and oxy-fuel cutting torch of the machine can utilize beveling capabilities with the application of a single cutting assembly. With oxy-fuel, plate up to 100 mm thick and 2500 mm wide can be processed with more ease than ever before. The HSFDB-C gives your shop the capacity to expand into untapped heavy structural markets.

Accuracy and Repeatability

Inconsistencies in cut quality are a problem of the past with the HSFDB-C. Manual methods of plate processing allow significant room for error, especially when running large amounts of plate with the same nested part. The HSFDB-C's ability to measure and produce perfectly accurate parts faster than manual measurement processes means better plate utilization, lower costs per ton and a faster return on investment.

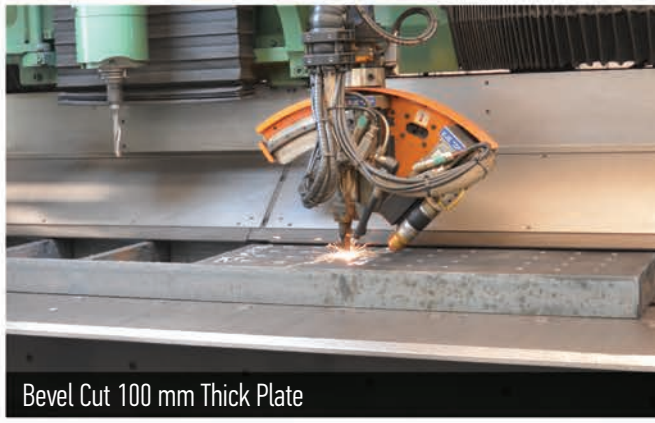
Versatile Operations

Equipped with the ability to drill, mill, tap, countersink, deburr, plasma cut, oxy-fuel cut, bevel cut and mark using the latest in tooling technology, the HSFDB-C is efficient in all heavy plate fabrication processes. These features allow fabricators with complex plate applications to take advantage of cost savings offered by a more compact, more versatile and more productive option for processing plate.

Benefitting Downstream Processes

This CNC plate processing design by Peddinghaus drives material to the operating area of the machine as opposed to bringing the operating area of the machine to material, like traditional burntable systems. The HSFDB-C provides constant material output for welders and fitters, allowing them to focus on assembling the end-product, topping out the fabrication process.

Accelerate Processing



Bevel Cut 100 mm Thick Plate

Increase Accuracy

Maximize Employee Productivity

Modular Designs

The Peddinghaus Way

Speed and Versatility Combined

The streamlined flow of finished parts from stock plate to final assembly is just as critical as drilling, cutting or other ancillary operations. Eliminate unnecessary manual handling with a Peddinghaus plate processing system. This provides unmatched efficiency in all aspects of operations.

The Side Unloading System

The Side Unloader parts conveyor is designed to allow finished parts (up to 454 kg) to drop directly onto a hardened steel conveyor, delivering them to an ergonomic unloading height at the operator station. The Side Unloader conveyor option transfers parts while the machine is in continuous operation.

The Side Unloader integrated with two 1.8 M roller transfer modules facilitates the automated removal of both short and long parts. Smaller parts are unloaded directly onto the side unloader and delivered to the operator station. This option also comes equipped with a retract system allowing for easy access to the operating area and scrap cart beneath the machine.

The Front End Unloading System

The Front End Unloader conveyor system is comprised of two roller transfer modules, each 1.8 M in length, and a front end unloading belt. This is designed to streamline the handling of finished parts by conveying them from the operating area to a convenient unloading area. This option comes equipped with a retract system allowing for easy access to the operating area and scrap cart beneath the machine.

Minimize Footprint

Peddinghaus' Roller Feed design makes it easy to place infeed conveyors outdoors. In addition to saving shop space, this innovative method eliminates unnecessary crane handling that inhibits other operations inside of the shop. Easily unload delivery trucks outside, and load the conveyor without slowing down other parts of production.

Unmatched Efficiency

Side Unloading System

Front End Unloading System

Store Material Handling Outdoors

Peddinghaus Software

Linking Design to Fabrication

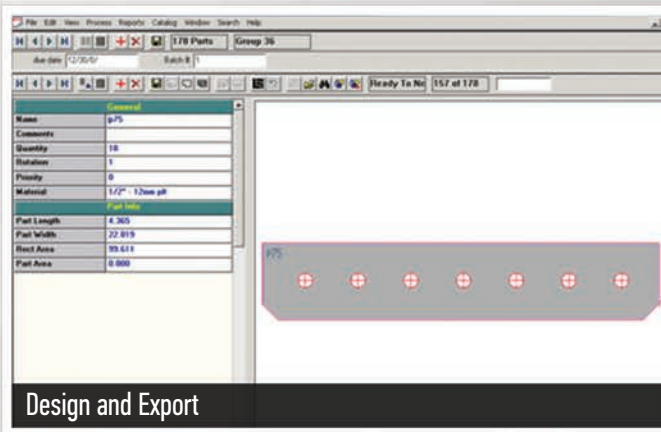
Nesting Software

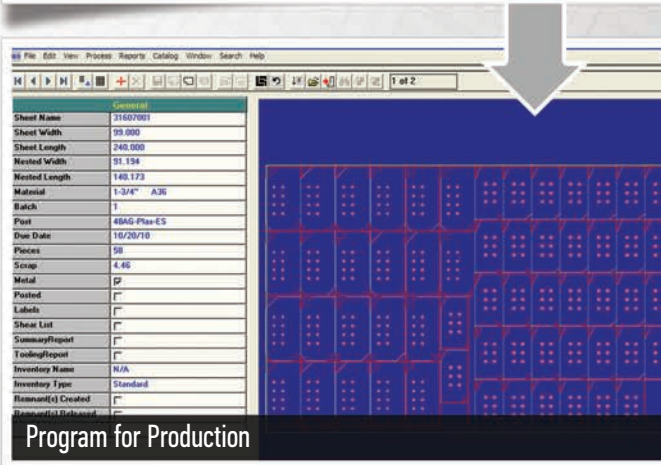
The HSFDB-C proudly operates with many of today's modern nesting software solutions. These solutions allow fabricators to automatically batch nest existing files, edit on the fly, or create parts at the control console. There are no limitations to your programming needs!

Using a wide array of software solutions, the Peddinghaus HSFDB-C is able to take full advantage of common cutline, chain cutting and edge start cutting techniques.

Software Features For Peddinghaus Plate Machines:

- Automatic Chain Cut Batch Nesting
- Automatic Common Line Batch Nesting
- Edge Start Nesting Technology Maximizes Machine Capability
- Automatically Process an Entire Plate with No Full Kerf Pierces
- Automated End Milling Programming and Support
- Automated Face Milling Programming and Support
- Automated Counterboring, Tapping, and Drilling Cycles
- Automatic Pilot Hole Creation - Maximizes Consumable Life
- Advanced Part-Within-Part Nesting
- CAD Module for On the Fly Part Modifications
- Integrated Tool and Drill Management
- Automated Lead-In and Lead-Out Programming with On the Fly Modifications
- Integrated Material Database
- Production Tracking and Progress Reporting
- Nesting Report Tools which Include Time Estimates and More
- Automatic Import and Tooling of Multiple Common File Types Including DSTV, DXF, etc.
- Automatic Tailstock Nesting
- Optional Inventory Management Module with Automatic Remnant Creation


Design and Export


Program for Production

Process

Fabricate

HSFDB-C User Testimonials

MANUFACTURAS METÁLICAS AJAX
Mexico City - Mexico

"Our Peddinghaus plate lines here at AJAX are very productive. The dual HSFDB-C's that we have are very unique in doing some things no other machines can do like beveling and countersinking. We love that!

The HSFDB-C technology in countersinking and beveling made a big difference in this project. We have to do countersinking in 100 mm plates and the plate lines are fabulous in that process."

- Jorge Martin Rodriguez, Managing Director

STRUCTURES CPI INC.
Saint-Nazaire, Québec - Canada

"The addition of the HSFDB-1800/C to our machine shop was a necessity. Considering the growing number of bridgework contracts and the structural steel projects getting more complex, we had to increase our capacity. Drilling, bevels, milling and tapping operations used to be done manually. Now, the parts are fully processed through ShopData Systems nesting software that controls the HSFDB-C. The maximum thickness capacity of the machine, up to 4 inches, was also a game changer. The HPR400XD Hypertherm plasma unit paired to the Peddinghaus beveling head is doing a great job through thick material at high cutting speeds."

- Alex Blackburn, Plant Engineer

SA STRUCTURAL
Edinburgh - Australia

"The HSFDB-2500/C has been a key factor in the growth of our company. The recent addition of the cross transfer roller module system to the existing line has resulted in increased productivity and output with the capability to pre-load material in advance, and reduce overall down-time of the machine. We are now able to consistently produce in-excess of 260 kg/hour across varying plate thicknesses. The benefit of the expanded HSFDB-2500/C has been the increased flexibility in scheduling, which is critical to an ever-changing manufacturing environment, allowing us to load and shuffle up to 30 hours of work on the machine at any time without impacting production."

- Michael Mangos, Managing Director

Peddinghaus
301 N. Washington Avenue
STRONGER THAN STEEL
Peddinghaus
Peddinghaus
VAN 1

The Best Support in the Industry

Peddinghaus strives to provide an unparalleled level of service for industry partners, no matter where in the world they are located. This is done by offering the only 24-hour technical support center in the industry and employing an expansive team of field service technicians throughout the globe.

24-hour Technical Support Center

Located in Bradley, Illinois - USA, Peddinghaus maintains a 24-hour technical support center to assist customers with any questions or concerns that may arise in the operation of Peddinghaus machinery. Service technicians leverage remote diagnostic software as well as web cameras in order to troubleshoot questions. Over 95% of telephone calls are resolved without the need for an on-site visit from a Peddinghaus technician.

Global Access to Spare Parts

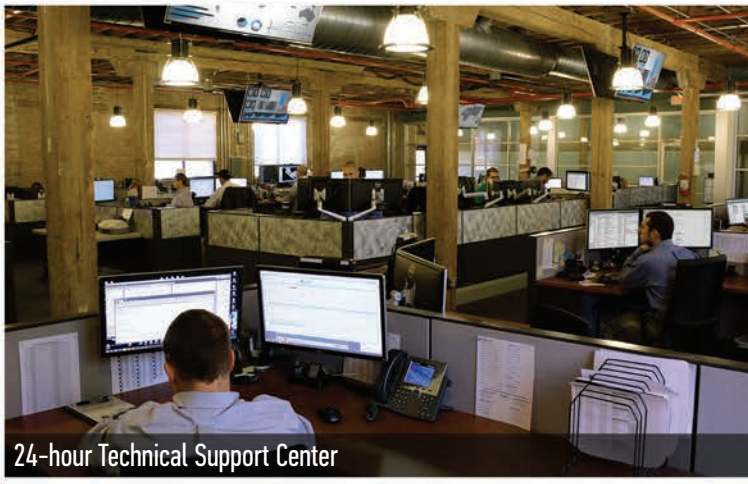
Peddinghaus maintains vast amounts of spare parts at their North American locations and are in close proximity to major ports and shipping hubs. For international partners, local spare parts storage is maintained at our sales and service offices around the globe. In addition, local dealer representatives and dedicated parts storage facilities have been established throughout the world to expedite part shipments. This means faster delivery of parts when they are needed.

Expansive Team of Field Service Technicians

For advanced issues, over 50 field service technicians are employed by Peddinghaus throughout the world. Technicians are conveniently located geographically and may be based out of an office near your installation. These technicians operate globally and are available for on-site assistance.

World Class Training for Maintenance Staff, Operators and Programmers

Peddinghaus offers training on-site, over the internet and at their corporate headquarters for maintenance staff, operators and programmers. Training at Peddinghaus' global headquarters is free of charge for those willing to make the trip and provides staff with direct access to the masters behind the machinery.


24-hour Technical Support Center

50+ Field Service Technicians

PeddiUniversity Training Center

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