



Anchor Lamina Inc.



Lamina Hydraulics

Portable Hydraulic Die Setter & Drilling & Tapping Equipment



Lamina Hydraulics has moved into the new millenium with upgraded, user friendly electronic technology. These products are more efficient, quieter and easy to use.

Drilling Equipment – Product offering includes: Heavy-duty, portable hydraulic power unit and a choice of six drill heads which work interchangeably with the power unit.

Die Setting Equipment – Product offering includes: Heavy-duty, portable hydraulic Die Setter with retractable hose reels, a choice of hydraulic cylinders, and a set of cribbing rings and pads.



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Industries Served:

- **Metal Stamping**
- **Nuclear Power**
- **Ship Building**
- **Mining**
- **Construction**
- **Oil Pipelines**
- **Oil Rigging**

For over 30 years Lamina is the name in portable hydraulic drilling equipment.

The Lamina Portable Heavy-Duty Drill is versatile enough to go almost anywhere, providing continuous heavy duty drilling and tapping, even in the most cramped quarters. The compact drill delivers remarkable power in openings as narrow as 9-1/4 inches. Furthermore, the drill's magnetic base attaches to the drilling surface at almost any angle, including vertically and horizontally.

The Experienced Edge Lamina has long been recognized as a leader in portable hydraulic drill technology. For over 30 years Lamina has provided a cross-section of American industry with a durable, high-power portable drill. Our team of engineers have combined power and portability in a single drill, allowing it to effectively function in a broad spectrum of applications.

Now with the addition of electronics the unit exceeds former expectations and offers more efficiency, automatic hose reels, more safety features and lower noise level.

The Portable Heavy-Duty Electronic/Hydraulic Die Setter is the most recent addition to the Lamina Hydraulic Equipment line. This unit has truly proved itself since it was first offered in 1998.

Owners of the Lamina Die Setter are pleased with its low maintenance, dependability and high load capabilities. The electronics help maintain precise levels when raising and lowering the most-off center weight distribution.

This compact Die Setter features the highest quality retractable hose reels to keep the unit tidy and protect the hydraulic hoses.

Lamina Hydraulic Equipment features rugged steel construction. It is built to last...and take rough handling. With the lifting bales these units are portable enough to be placed almost anywhere they are needed.





Hydraulic Power Unit

Compact cart is easily moved right to the job site. 44½" long x 24½" x wide x 54½" high, mounted on casters, equipped with 15' of hydraulic pressure hoses, with quick snap connectors. Electrical control to NEMA standards, complete with start and stop controls, with remote pendant speed control. Main electrical panel includes 1, 12V 60 Amp, Deep cycle battery with rectifier charger operating from voltage listed in table below, three phase, AC. Complete with oil, hoses and connectors. Remote speed control is standard.

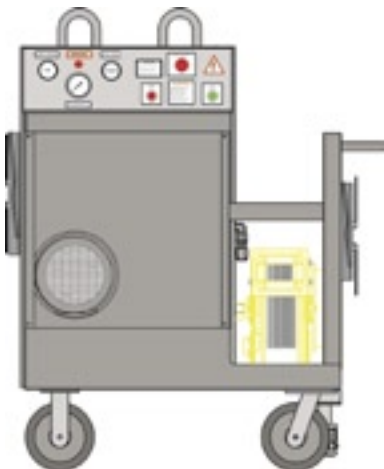
• **New Features:**

- Hydraulic Hose Reel
- Control Console with E-Stop
- Control Power Indicator Light
- Audio Alert
- Electronic Circuitry Digital Oil Level Display
- Unitized Construction
- 15' of hydraulic hoses on Power Unit
- 7-1/2' of hydraulic hoses on Drill head
- 30' of electrical cable to cart
- 30' of control cable to pendant box
- 6' of cable on drill head to pendant box
- 12 gallons per minute (GPM)
- 1550 - 1600 PSI
- Oil required: Mobil DTE-13 (15 gallons) (ISO 32)
- Back-up Battery Gel Cell 60 amp Deep Cycle–F.A.A. approved
- Foot Brake
- Lifting Bale



Our standard remote speed regulator can change speeds (GPM) remotely and conveniently by merely pushing a button on the pendant control.

There is no loss of magnetic force if service power fails; 12-volt battery automatically supplies current for magnet.



New Profile!

Automatic battery charger maintains top level charge in battery (audio alert when not charging).

Oil is always radiator-cooled before returning to tank.

By-pass valve prevents tap breakage when unusual load conditions are present, and permits bottoming tap within recommended range of each head.

In addition, by using a simple jumper plug, the unit may be used in any number of applications requiring a hydraulic power unit.

Part Number	Voltage	Shipping Weight	Crate Dimensions
HPU220	220	990#	46"H x 27"W x 46"L
HPU380	380	990#	46"H x 27"W x 46"L
HPU440	440	990#	46"H x 27"W x 46"L
HPU575	575	990#	46"H x 27"W x 46"L
HPU600	600	990#	46"H x 27"W x 46"L
HPUCE380*	380	1070#	46"H x 27"W x 46"L

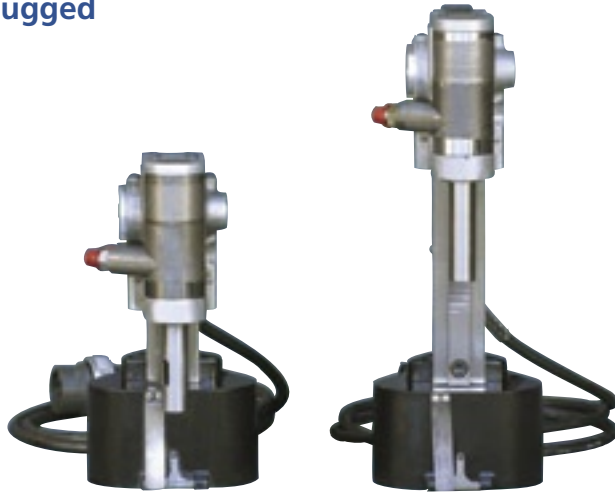
*For export, meets with CE standards.





Drill Heads A10048SH & A10048H

- Compact – smaller head available in two column lengths
- Drills up to 13/16" in solid steel without pilot hole
- Drills up as well as down
- Fits in tight spaces
- Rugged



A10048SH
#1 Stub Taper

A10048H
#1 Morse Taper

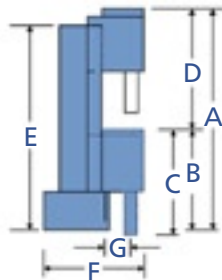
- Drill Capacity–1020 Steel 13/16"
- Tap Capacity–1020 Steel 3/4"–10
- Motor Horsepower 5.21
- Maximum Torque 525 in. lbs.
- Variable R.P.M. to 625
- Feed Method Hand
- Tool Shank A10048SH #1 Stub
- Tool Shank A10048H #1 Morse
- Magnet Capacity 1200 lbs.
- Magnet size 4-7/8"

- Weight A10048SH 22 lbs.
- Shipping Weight A10048SH 28 lbs.
- Crate Dimensions A10048SH:
 - Height 9-1/4"
 - Width 9-1/4"
 - Length 10-3/4"

- Weight A10048H 26 lbs.
- Shipping Weight A10048H 33 lbs.
- Crate Dimensions A10048H:
 - Height 9-1/4"
 - Width 9-1/4"
 - Length 15"

- Serial Number Prefix CH

Drilling or tapping cannot begin until the magnet is turned on.







	A10048SH	A10048H
A	10-5/8"	15-1/2"
B	7-1/2"	7-1/2"
C	7-1/8"	7-1/8"
Stroke D	3-1/8"	8"
Height E	9-1/4"	13-3/4"
Depth F	7"	7"
G	1.036"	1.036"
Width	4-7/8"	4-7/8"

Drill heads can be fixtured for special applications.

Fixturing can allow step drilling larger diameters.

Drills, Taps & Adaptors for Lamina Drill Head A10048SH

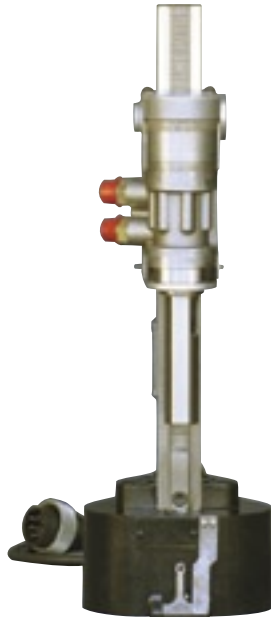
	IMPERIAL				METRIC				
	Drill Number	Flute Dia.	Flute Length	Overall Length	Drill Number	Flute Dia.	Flute Length	Overall Length	
 Lamina Drills #1 Stub Taper	HDD-312	.260"	1.15"	3.12"	MD-6.75	6.75	50.80	95.25	 HDE-1 EXTENSION #1 Stub to #1 Stub
	HDD-375	.316"	1.62"	3.12"	MD-8.5	8.5	57.15	95.25	
	HDD-500	.432"	1.56"	3.12"	MD-10.2	10.2	66.55	107.95	
	HDD-625	.541"	2.00"	3.56"	MD-14.0	14.0	73.15	114.30	
	HDD-750	.666"	2.38"	3.94"	MD-17.5	17.5	73.15	114.30	
 Lamina Taps #1 Stub Taper	Tap Number	Thread Dia.	Threads per Inch	Thread Length	Tap Number	Thread Dia.	Thread Pitch	Thread Length	 HDA-3-1 ADAPTER #3morse to #1 Stub
	HDT-312	5/16"	18"	1.38"	T-M8	8	1.25	35.05	
	HDT-375	3/8"	16"	1.62"	T-M10	10	1.50	41.15	
	HDT-500	1/2"	13"	1.62"	T-M12	12	1.75	41.30	
	HDT-625	5/8"	11"	1.88"	T-M16	16	2.0	47.75	
	HDT-750	3/4"	10"	1.88"	T-M20	20	2.5	47.75	





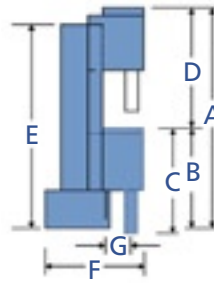
Drill Head B10065H

Drilling or tapping cannot begin until the magnet is turned on.



Drill heads can be fixtured for special applications.

Fixturing can allow this unit to step drill larger diameters.

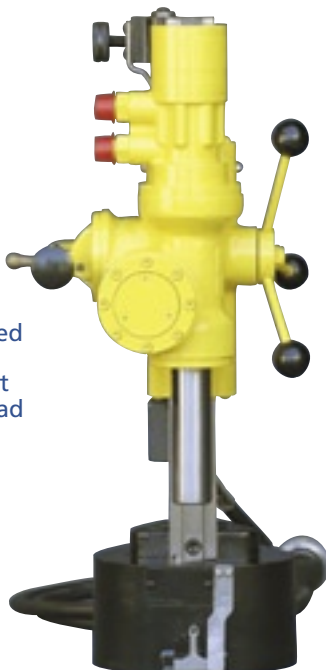


A	21-1/2"
B	10-1/16"
C	11"
Stroke D	11-7/16"
Height E	20-3/4"
Depth F	9"
G	1.78"
Width	6-1/2"

- Drill Capacity 1"
- Tap Capacity 1"-8
- Motor Horsepower 6.64
- Maximum Torque 1000 in. lbs.
- Variable R.P.M. to 420
- Feed Method Hand
- Tool Shank #3 Morse
- Magnet Capacity 2300 lbs.
- Magnet Size 6-1/2"
- Weight 44 lbs.
- Shipping Weight 68 lbs.
- Crate Dimensions:
 - Height 12"
 - Width 11"
 - Length 22-1/2"
- Serial Number Prefix B

Drill Head B10065P

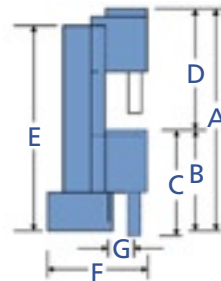
Drilling or tapping cannot begin until the magnet is turned on.



Automatic power-feed heads have limit switches that prevent operation of drill head if magnetic base becomes dislodged.

Drill heads can be fixtured for special applications.

Fixturing can allow this unit to step drill larger diameters.



A	26-1/4"
B	15-3/8"
C	15"
Stroke D	10-7/8"
Height E	21"
Depth F	10-3/4"
G	1.50"
Width	9-3/8"

- Drill Capacity 1"
- Tap Capacity 1"-8
- Motor Horsepower 6.64
- Maximum Torque 1000 in. lbs.
- Variable R.P.M. to 420
- Feed Method Power (.005 per rev.)
- Optional Power Feed .0025 per rev.
- Tool Shank #3 Morse
- Magnet Capacity 2300 lbs.
- Magnet Size 6-1/2"
- Weight 54 lbs.
- Shipping Weight 75 lbs.
- Crate Dimensions:
 - Height 12"
 - Width 11"
 - Length 11-1/2"
- Serial Number Prefix CB





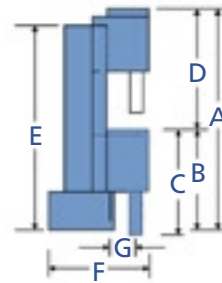
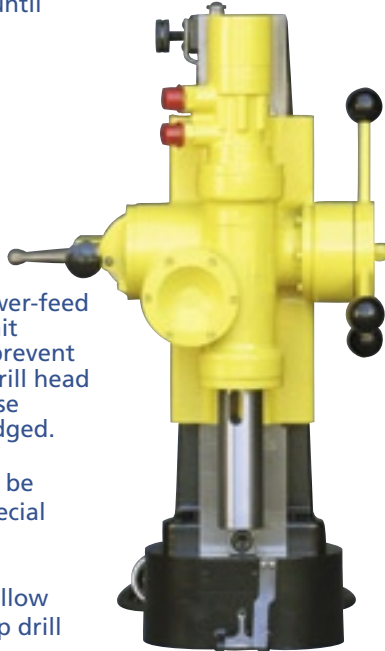
Drill Head B15075P

Drilling or tapping cannot begin until the magnet is turned on.

Automatic power-feed heads have limit switches that prevent operation of drill head if magnetic base becomes dislodged.

Drill heads can be fixtured for special applications.

Fixturing can allow this unit to step drill larger diameters.



A	30-1/2"
B	19-3/8"
C	18-3/4"
Stroke D	11-1/8"
Height E	24"
Depth F	17"
G	2.250"
Width	14"

- Drill Capacity 1-1/2"
- Tap Capacity 1-1/4"-7
- Motor Horsepower 6.66
- Maximum Torque 1400 in.lbs.
- Variable R.P.M. to 300
- Feed Method Power (.0075 per rev.)
- Optional Power Feed .0037 per rev.
- Tool Shank #4 Morse
- Magnet Capacity 3200 lbs.
- Magnet Size 7-1/2"
- Weight 108 lbs.
- Shipping Weight 140 lbs.
- Crate Dimensions:

Height	14-3/4"
Width	14-3/4"
Length	25-1/2"
- Serial Number Prefix E

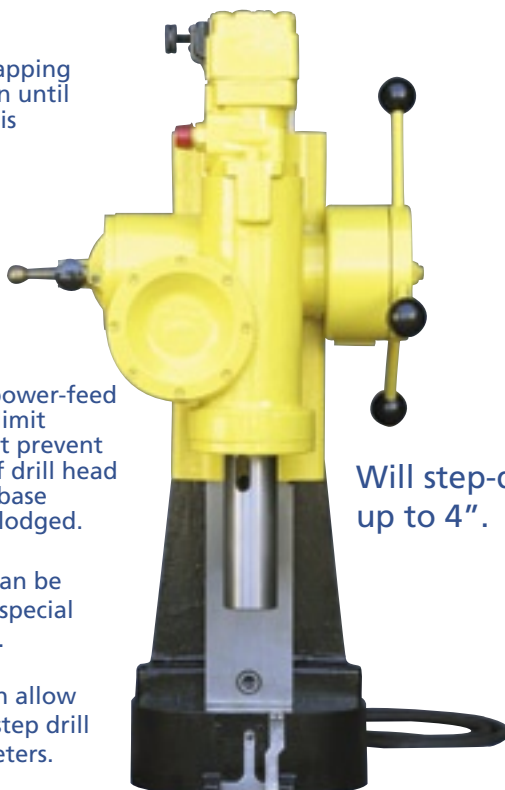
Drill Head H15010P

Drilling or tapping cannot begin until the magnet is turned on.

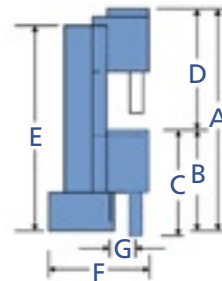
Automatic power-feed heads have limit switches that prevent operation of drill head if magnetic base becomes dislodged.

Drill heads can be fixtured for special applications.

Fixturing can allow this unit to step drill larger diameters.



Will step-drill up to 4".



A	41-3/4"
B	23-9/16"
C	25"
Stroke D	18-3/16"
Height E	33-3/8"
Depth F	21"
G	2.536"
Width	17-5/8"

- Drill Capacity 2"
- Tap Capacity 2"-6
- Motor Horsepower 8.30 std./9.48 opt.
- Standard Maximum Torque 3397 in. lbs.
- Optional Maximum Torque 5159 in. lbs.
- Variable R.P.M. to 154
- Optional R.P.M. to 115
- Feed Method Power (.010) per rev.
- Optional Power Feed .005 per rev.
- Tool Shank #5 Morse
- Magnet Capacity 6000 lbs.
- Magnet size 10"
- Weight 255 lbs.
- Shipping weight 315 lbs.
- Crate Dimensions:

Height	24"
Width	17"
Length	36"
- Serial No. Prefix D





The Go Anywhere, Do-It-All Die Setting Solution

One compact, low-profile, wheeled cabinet contains everything you need for all the punch spotting, die setting, and die separation jobs in your shop.



Electronic Die Setter Model Number: EDS-40T-PUP

- Heavy-duty hydraulic power handles the heaviest dies with state-of-the-art electronic PLC control for precision and accuracy.
- Handy self-retracting hose reels and control pendant keep every jobsite neat, and protect hoses and cables from damage.
- Three different cylinder sizes are available, along with strong, lightweight cribbing blocks to extend their strokes to handle your biggest jobs.
- Completely portable with large casters and built-in lifting bails, the Lamina Electronic Die Setter is the Go-Anywhere, Do-It-All Die Setting Solution you've been looking for.





Hydraulic Cylinders



These versatile cylinders come in three stock sizes, 4", 6" and 9" (closed). They cover a stroke range of 1-3/8" to 6" to serve a large variety of applications. Each cylinder features a convenient carrying handle for ease of set-up and storage. Lamina cylinders incorporate pilot operated safety valves with double hoses and hose guards. Call today to discuss your specific application needs.

Part Number	Capacity per Cylinder	Total Capacity per 4 Cylinders	Closed Shut Height	Stroke	Outside Diameter
ASSY-40T-4	20,000#	80,000#	3-7/8"	1-1/2"	4-3/4"
ASSY-40T-6	20,000#	80,000#	5-7/8"	3-1/4"	4-3/4"
ASSY-40T-9	20,000#	80,000#	8-7/8"	6-1/4"	4-3/4"
DS-210	Universal Seal Kit for above Lamina Hydraulic Cylinders				

Cribbing Rings & Pads

For stable load support use Lamina Cribbing Rings and Pads to safely increase the stroke of your Lamina Hydraulic Cylinders. Lamina recommends always using Hydraulic Cylinders with Cribbing Rings and Pads in conjunction with safety blocks when operating the Lamina Die Setter. These cribbing devices can be used with most 4-3/4" diameter cylinders with cylinder rods up to 2" in diameter.



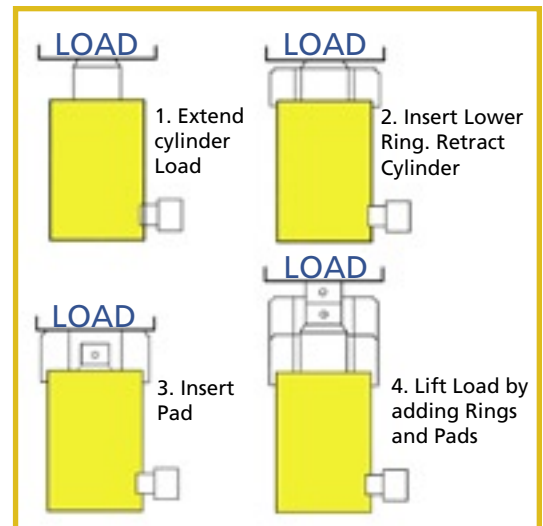
EDS108 Includes four lower rings and 1 "T" handle
Height: 1-1/2"

EDS109 Includes four upper rings
Height: 1-1/8"

EDS110 Includes four pads
Height: 1-1/8"

1. Extend the cylinder and insert the bottom supporting ring using the "T" handle.
2. Retract the cylinder and insert a pad, again, using the "T" handle.
3. Extend the cylinder again, with the pad increasing the cylinder stroke.
4. Repeat the above process until the desired die separation is attended.

Not more than one Lower Ring, two Upper Rings and three Pads should be used with any one hydraulic cylinder.



Lamina Hydraulic Equipment Rental Program

Lamina offers a number of different programs to make it easier to purchase, rent to own our hydraulic equipment.

Rental Program

The Lamina Rental Program is for customers who require the use of its equipment for a short period of time without the commitment of a capital expense. The rental charge is 10% of the current list price per week, with a minimum rental period of two weeks. Billing for the first two weeks rental begins when the equipment is shipped and will continue on a weekly basis until the equipment is returned.

Freight charges are the responsibility of the customer. Lamina will ship "Collect", and the equipment must be shipped back "Prepaid". The shipping and receiving location is Anchor Lamina Inc. 3650 South Derenzy Road, Bellaire, Michigan 49615. The rented equipment must be returned to the Bellaire location. Any product returned to our Farmington Hills office will be refused. Lamina Farmington Hills office has no loading or unloading facilities.

Damages resulting from abuse of the equipment will be the responsibility of the customer. All components must be returned with the rented equipment. All rental equipment must be returned in the original crating in reusable condition or a charge of \$1000.00 will be invoiced to cover the replacement of new crating.

Contact the Lamina Inside Sales Group at 800-652-6462 for the availability.

From time to time, Lamina sells rental equipment. The rental equipment includes a warranty of 90 days. Contact the Lamina Inside Sales Group at 800-652-6462 for availability.

Rental Credit Program

The Lamina Rental Credit Program is for customers who returned the rental equipment a decided to purchase new equipment. Lamina will apply 50% of the rental fee, up to and including the fourth week of rental, toward the purchase of new equipment. Lamina will reduce the selling price of the new unit by the credit amount. The credit is offered on the same model that is rented and the offer is valid for 30 days after the completion of the rental.

Rent-To-Own Program

The Lamina Rent-to-Own Program is for customers who want to rent rather than purchase capital equipment. If you rent the equipment for 12 consecutive weeks, you own it. A full six month warranty applies.

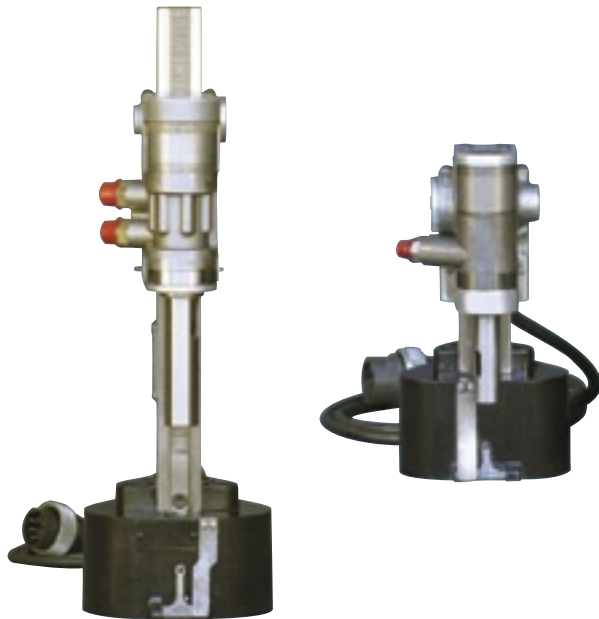
Bring new life to your existing Lamina hydraulic equipment!

Perhaps your power unit isn't running as efficiently as it once did. We can fix that! Your drill head isn't moving up and down the shaft as smoothly as it should? We can make it like new!

Talk to one of our inside sales representatives and find out how easily we can bring new life to your used Lamina equipment.

Lamina can bring your equipment up to date, add lifting bales to your power unit and even a new coat of paint.

Call us today! Toll Free 800-652-6462, Local 248-489-9122, Fax 248-553-6842, E-mail sales@lamina.com



Lamina stocks a complete inventory of replacement parts for all of our hydraulic equipment at our Bellaire, Michigan factory.

A knowledgeable technician can answer all of your questions concerning power units, drill heads and die setters.

Lamina also specializes in the manufacture of round and flat products for the Metal Stamping and Plastic Injection Mold industries.

Our claim to fame is our bronze plating process which combines the lubricity of bronze with the strength of steel.

We welcome the opportunity to quote on special components. Please send us your prints.

Committed to Quality & Customer Satisfaction

Anchor Lamina is committed to be the “customer focused” world-class supplier of choice to the metal-working and plastics forming industry.

We will help our customers to compete globally by providing innovative and value added products and services.

Anchor Lamina Contacts

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