



## Permaboss Emboss Series

The Best in Embossing & Debossing Machines

## NGE 13 Embosser

One Unit to Emboss Them All

# Features



- Embossing, debossing
- Die-cutting
- 3D color flock embossing
- Hot-foil stamping
- Transfer-printing sublimation printing
- Screen printing (option 1 - 2 with colors)
- Multimedia embossing combined with embroidery printing
- Laser positioning device (4 beams)
- Fusing heat-sealing, drying and laminating

# Specs

Stroke adjustment for  
die-cutting, hot-foil stamping

Outstanding for  
commercial industrial applications

Self contained  
high-pressure hydraulic system

Win 8 touch-screen  
display with high speed CPU

13 tonne hydraulic press

Stainless steel  
revolving work table:  
42" by 60"

No air compressor required

Stainless steel  
heating plate:  
16" by 22"

220V 20 AMP



# Embossing Frequently Asked Questions

## *What Exactly is Embossing?*

Embossing is simply using some form of a male and female mould in combination with heat, time and pressure to shape a garment.

A backing determines the wash-ability of an embossed product. Naturally, better quality materials help make the embossing last longer.

Our Permaboss “BossBack™” backing material holds its shape and lasts the lifetime of the garment.

In our sample kit you will get a swatch of embossed t-shirt type material that you can test wash as often as you like!





## *What Materials Can I Emboss On?*

The fact is that with pneumatic/air operated machines you can only emboss natural fibres and some leather. The backing is one of the most important parts of the process. The backing determines the life of the embossing, but air operated machines have limited capabilities due to lack of pressure.

Compare 80-110 PSI for air VS 1400-3000 plus PSI for our Permaboss NGE hydraulic machines.

Permaboss NGE hydraulic embossing machines can emboss on any of the following:

Acetate, Acryl, Cotton, Fleece, Flock, Foil, Leather, Linen, Lycra, Melton, Neoprene Nylon, Polar Fleece, Paper, Plastic, Polyacryl, Polyamide, Polyester, Polypropylene, Polyurethane, Polyvinyl, Polyvinylchlorid, PVC, Rubber, Silk, Viscose, Wool... and a host of other unique materials.

If any other equipment manufacture makes this claim, get it in writing before you acquire the equipment!

## *Can I Emboss on Finished Goods?*

# Yes!

Permaboss NGE equipment is specifically made for this. Our machines allow for finished goods better than any other machine on the market in terms of room, clearance, function of the various embossing jigs that support your product, etc.

You can decorate finished goods such as T-shirts, sweats, jackets – with or without linings, and all leather products. Even ball caps can be embossed with ease.

# *I Heard that Backing Materials are the Downfall of Embossing is this True?*

Yes, once upon a time that WAS correct.

Until recently there were only three choices of backings, each with poor wash-ability, a tendency towards glue seepage, and none of them conducive to production due to the fact that the backing needed to be die cut or hand cut.

Non-woven materials, low volume produced glue fleece backings and homemade glue solutions would up giving this decoration form a poor reputation. With the old methods, the time required to emboss was always 45 seconds to a minute. This can scorch most cottons and fleeces, and coloured shirts wouldn't revert to their original colours.

Permaboss's "BossBack™" embossing backing is a unique, breathable material that tears away like embroidery backings do. It has many advantages over other backings:

- 🐉 On a microscopic level, BossBack™ is a thin bubble-like foam that fills cavities, rather than leaving raised ones hollow.
- 🐉 BossBack™ has incredible wash-ability and longevity.
- 🐉 Since BossBack™ only required 6-12 seconds in our embossing machines, you'll enjoy higher production speeds, therefore more profit.
- 🐉 Our NEW BossBack™ is now specifically formulated to be breathable. This is not the case with the older versions. This was important to us due to its frequent use in technical garments – like the dry-wicking, moisture management, synthetic materials in sportswear!
- 🐉 BossBack™ reduces your inventory costs by more than half! Previously embossing backing came in 3 thicknesses, plus one specifically for leather. Our backing works for both textiles and leather! Now with heat activated memory foam, our 2 thicknesses will work for any project. BossBack™ backing comes in 2 colour versions: choose light or dark, whichever is more suited to your embossing project.
- 🐉 BossBack™ is made here in North America. It's 100% NAFTA friendly and will not incur duty or shipping costs from overseas, making it more price competitive than ever!

# *What are the Output Capabilities of an NGE Machine?*

Productivity range depends on the type of machine.

All of our machines require one operator. The rotary table rotates like a helicopter blade so that the operator stays stationary and can use both hands while the other side gets the decoration applied in the press.

Every embossing regardless of the model of machine takes the same number of seconds to decorate when using each material. So if you had a \$25,000 and a \$225,000 machine the embossing/debossing output is exactly the same. The difference only comes into play when you have a large or small rotary table or no rotary table at all. For example on the NGE 13 there is a huge work area for garments and bags and all kinds of items. You have lots of space and little setup time.

On the former NGE 7, the work area was almost 50% smaller, therefore the setup time became a factor. So much so that the NGE 3 without rotary, but with a large work area, is equal in output to the NGE 7. So that for that reason we now only offer the NGE 3 and 13 tonne models.

NGE 3 output is about 20-35% less than the NGE 13, but is also less than 50% of the price of the NGE 13! Output is based on the item, or object you want to decorate.

Sometimes you will have items that require a little extra setup time but only 1-2 seconds hit that doesn't give the operator enough time to effectively use the rotary table anyway.

The NGE 3 was a perfect replacement of the NGE 7 and offers great new features, being that it's APP-SMART™.

## *R.O.I. Return On Investment: How can I Profit from Embossing?*

Currently, embossing charges rival that of digitizing embroidery in the current market. The difference is not everyone and “his uncle” can do it or even knows where to get it done.

Depending upon the art, an embossing mould will cost you at least \$45. 90% of all left chest-embossing dies will cost you less than \$65 and you can generally get your hands on them within 48 hours.

Think of it this way - the higher the stitch count the more expensive the digitizing. So if you are doing a high stitch count design or a full back embossing, the setup cost is the same. Besides, the customer pays for this.

If your next sentence is that you don't charge for setup because your competition doesn't, you're in luck! Why? Because your competition most likely doesn't offer embossing, they probably don't know anything about Permaboss's die making abilities and they won't be competing with you until they make the exact same purchase!

The mould or die that is created is good for life. It is a one-time cost that your customer pays you for, plus your markup.

The cost of the backing (if required, certain materials will hold the embossing perfectly without backings due to the pressure we use) is about \$7.50 per square yard... a yard that yields about 32 left chest impressions.

The cost to emboss an image will be: equipment + operator + electricity + \$0.23 per piece. In other words, the going rate for a left sleeve or left chest embossing is \$3.00-\$5.00 depending on quantity. Let's be ultra conservative and take a 144 piece order and give it away at \$2.99 a hit. That represents 144 pieces x 12 seconds per piece... about 30 minutes of work.

144 pieces at \$2.99 each is \$430.56 per hour minus your backing cost (\$33.12) minus your employee cost (\$12/hr)... and you still net \$385.44 for 30 minutes of work or \$770.88 per hour!

That's already far more than the NGE7 costs per month!



# *What is the Market Demand?*

The most beautiful feature about embossing is that you'll be entering a near virgin market.

Embossing today is at the same stage that embroidery was 10-15 years ago. Those who venture into the embossing market now have a wide-open, relatively competition-free market compared to the saturated industry of embroidery houses and screen printers today.

Simply look in your yellow pages if you need a reminder. FYI, that's more than 16,000 embroidery companies and 21,000 screeners... that only counts those who are in the yellow pages!

You can count on your printing of embroidery quote being shopped and compared which means prices are forced lower – less profit for all! With embossing, even if there was a way for us to penetrate even 50% of the decoration and embroidery market, the embossing market would still have virtually no direct competition for at least the next 5-7 year window.

The downside is that customers will not call your phone off the hook right away. You still need to make them aware of these great new possibilities in apparel design. In other words, you'll have to promote embossing in your area to other embroidery and screen printers who will want to use it... but those who do not want to buy their own machine!

It's simple, actually. You promote embossing by showing your samples to customers and helping them introduce the idea of multimedia, subtle, elegant tone on tone decorating. You can do it by mailing samples to ASI reps. You do it by donating embossed items to charities. You do it by creating awareness and excitement.

It's like everything else you do, you need to promote it. The best part is that you will have little, if any, competition as it is relatively new to most customers; virtually no direct competition means that the profit margins are still intact.

The biggest bonus is that because your Permaboss embossing machine will offer 18 different decorations on 79+ materials you can sell to your customers and clients more than once per year.

Screen printers and embroiders can really only sell limited wearables. Very few companies buy wearables every month. They do, however, have a needed for debossed cd cases, business card holders, hand tags, portfolios, briefcases and a host of other business promotional products. Don't forget about those high-profit leather garments that screen printers can't touch or embroidery houses are afraid of!

## *Is Embossing Easy to Learn?*

All embossing techniques can be learned within a single day. Two days would allow you and your tech to get into production runs, making samples for marketing and enjoying a confidence in your ability that is sky high!

Any operator can be embossing successfully within 15 minutes of hooking up one of our machines. Our Permaboss embossing machines all feature touch screens with images rather than text so there's no language or literacy issues to deal with.

These machines also have more than 20 pre-set embossing programs, simply choose the material pre-set and you can start embossing that material right away.

It is so EASY and SAFE that we actually had one of our staff member's 14 year old son making samples for our trade shows and marketing kits. He was able to emboss 300+ pieces with 2-colour screen-printing in less than 4 hours. That's 75 pieces per hour!

If a 14 year old can do production work that casually and successfully then we are confident that any business person can accomplish this... with even better results.

## *Where do I get the Molds/Dies?*

Permaboss.com can provide all the services you require.

We'll also provide you with information on where to get dies from other sources so you can compare service and price differences for yourself.

Depending upon where you live in the world, we will even source a local die maker for you.

Costs of dies are now even cheaper than before and there really is no reason you should have to depend on outside services. In fact, if you are spending more than \$700 a month on dies, you should consider bringing it in-house!

Technology has made it easier for companies like yours to have the option of creating their own moulds in-house, on the spot, in only a few hours. It is as simple as taking your colour image, converting it to grey scale, then allowing the engraver to take over. The darker the grey the deeper the engraving – it's that simple.

With many embossers using between 3-15 moulds per week, imagine all that added revenue you could be enjoying on top of your embossing service! Plus, your customers will feel a greater sense of confidence, depending on you alone rather than an unknown outsource.

## ***I Always Thought the Dies were Cost Prohibitive?***

In actual fact, this was ALWAYS a myth.

Since we launched the process 15 years ago, the die prices have only come down. It's a flow through cost that the client pays for anyway.

The average cost of a left chest die is about \$25 and is available to you overnight through many highly skilled, reliable sources, besides ourselves.

Remember this isn't just the same old embroidery that's available in nearly every town 10 times over. You'll have a captive market since you are among the first in your area to offer embossing.

Offering dies is actually a profit center. Hundreds of our machine users charge their customers an average of \$100 wholesale and \$150 end user for ownership of the same \$25 left chest die that we are talking about. In fact many of our clients charge more! Why? Because they can!

They know the value of the decoration, they give the best service, quality, and delivery, plus they have confidence to ask for what the market will bear and what they feel is a fair price for their service - end of story.

This is a proven, successful, and accepted decoration/sales process.

## ***How Much Space is Required?***

To help you to picture the size of our embossing machines, the NGE 3 machine is about the size of the smallest floor freezer; the NGE13 is like one of those larger double door refrigerators.

To achieve an ideal work flow pattern the NGE 3 machine's work space needs to be about 3' deep x 4' wide ( x 1.3 meters).

Our larger NGE 13 machine needs a 10' x 10x (3 x 3 meters) space for optimum performance.

## *Is Embossing Equipment Reliable?*

Yes! Derived from other disciplines similar to tool and die making, our embossing equipment is incredibly reliable. Permaboss presses are 100% designed by Austrians, made in Canada, and sold world wide.

We offer a LIFETIME WARRANTY on the frame and heaters specifically.

All NGE models MEET and EXCEED all international electrical and occupational health and safety standards. That is not a fraudulent UL sticker on our machines!

In the event of a failure, many components are available from a local distributor or from Permaboss.com within 24 hours.

92% of all technical issues related to a Permaboss machine can be resolved in 10 minutes or less.

Our machines employ the latest in technology, so every machine has an internet connection and/or USB port. You can add our software updates simply by taking the supplied USB key from the machine, plugging it into your PC, saving the file we send onto it, then plug the USB key back into the machine.

Voila! It's done and it's that easy!

