

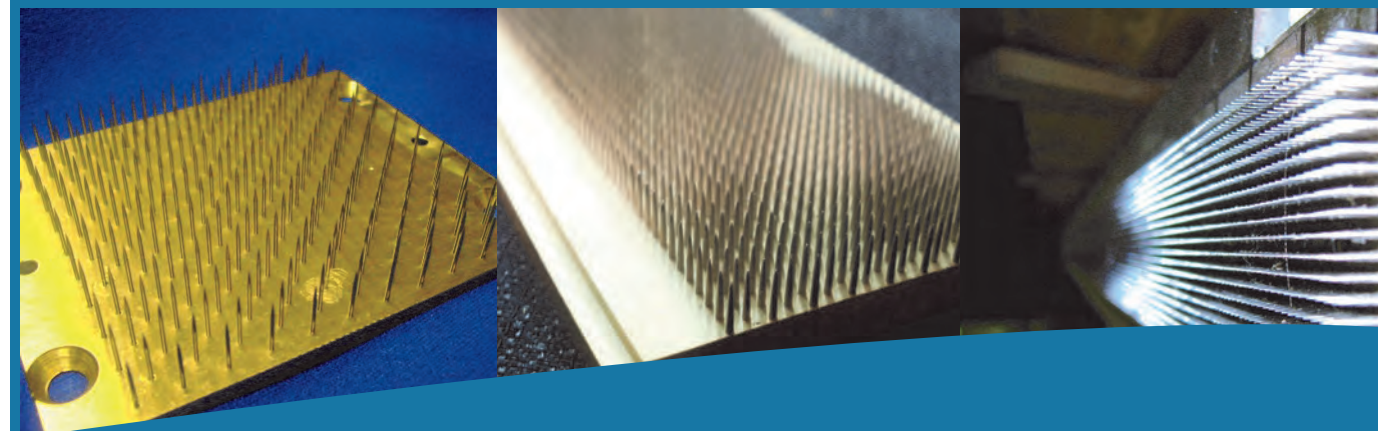
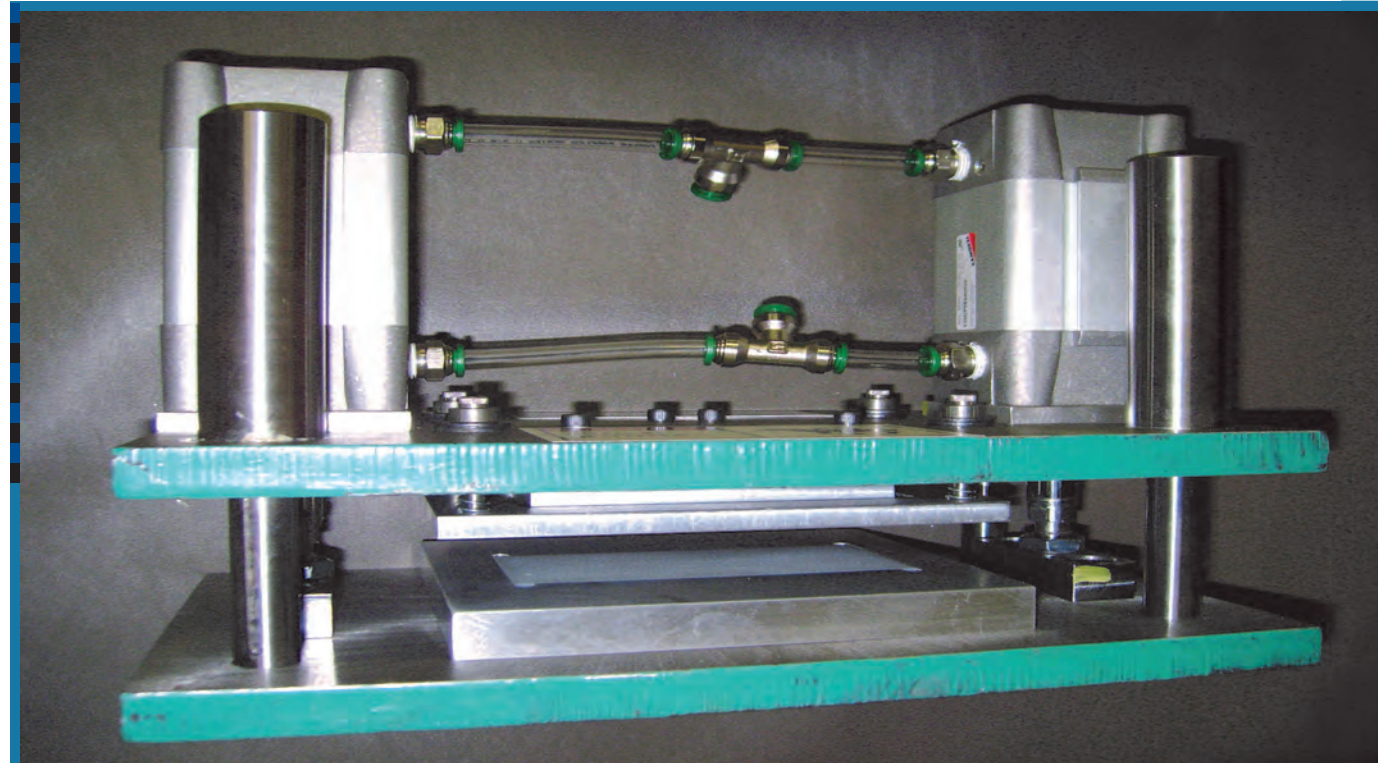
PUNCH NEEDLE PERFORATING  
FOR A WIDE RANGE OF INDUSTRIES -

- Aerotec - Aerospace Pressure Tapes  
Reflective Barrier Insulation
- Geotec - Horticulture  
Agriculture  
Horticulture  
Landscaping  
Weed-blocker  
Drainage control
- Buildtec - Reflective Insulation  
House Wrap  
Moisture Control  
Soundproofing  
Mold proofing
- Hometec - Industrial Wallpaper  
Carpeting  
Fabrics  
Acoustics  
Astroturf
- Indutech - Nonwovens, Films and Foils, Thermoplastics
- Meditec - Bandages  
Gauze  
Band-Aid  
Absorbents  
Breathable wound dressings
- Packtec - Breathable packaging  
Tapes  
Pressure Sensitive Tapes  
Laminates  
Shrink Films  
Extrusion
- Foodtec - Decreased Cooking Time  
Packaging  
Surface Texturing



**Stewarts of America, Inc.**  
"On the sharp End of Pinpoint Technology"

2825 Kemet Way  
Simpsonville  
South Carolina, 29681  
USA  
Tel: 1-864-967-7085  
Fax: 1-864-967-4361  
Em: Sales@StewartsofAmerica.com  
WB: www.StewartsofAmerica.com



**PUNCH NEEDLE PERFORATING**  
for  
Hot needle and Cold needle  
Nano / Micro- / Macro-Perforation and Embossing



**Stewarts of America, Inc.**  
"On the sharp End of Pinpoint Technology"



Hot and Cold Needle Punch Perforating





# Punch Needle Perforating and Embossing

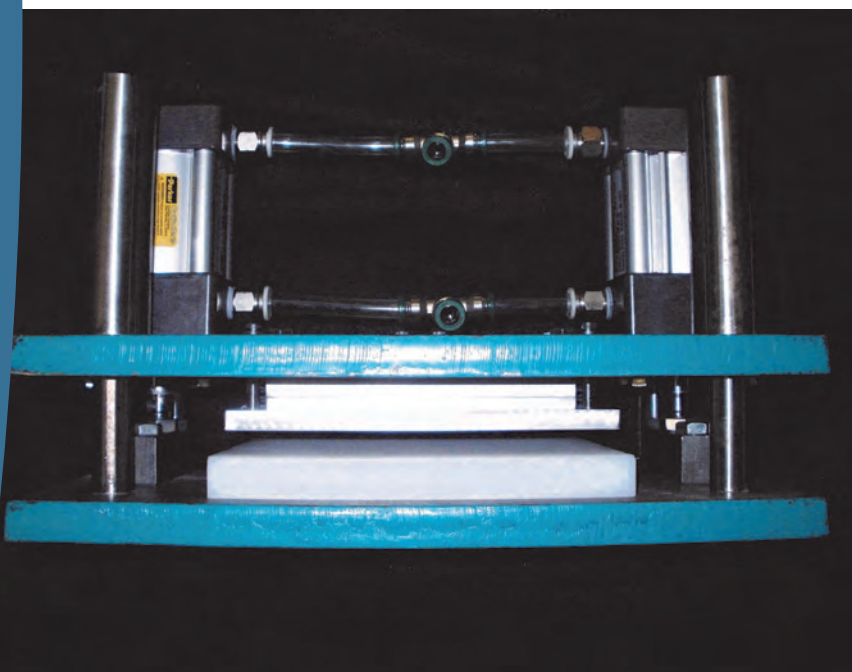
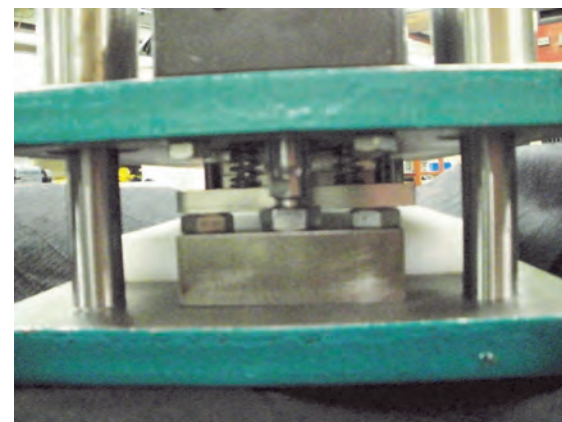
## CUSTOM MADE NEEDLE PUNCH TOOLING AND MACHINERY THE HOLE SOLUTION

### NEEDLE PUNCH PERFORATING MACHINE:

- Max Width:** 4600mm
- Max Depth:** 2300mm
- Max Height:** 300mm
- Max pin pop:** 5000ppin2 / 775ppcm2

### COATINGS

A wide range of coatings are available on the various types of pinned tooling. From Teflon based Non-stick coatings, to diamond coatings that extend pin life even further than normal.



### HOT PUNCH PERFORATING

- Use the most accurate pins, manufactured to world class precision
- Pins are heat treated and polished for long life.
- Pins are typically High Carbon Steel, but Stainless and other metals also optional.
- Wide range of pin diameters and geometries are available
- Custom pin patterns are available
- Utilize a bi-metallic bronze/steel steel that optimizes thermal transfer between pins.
- Integrated heating systems with precision heat control
- Multi position punches can be made for quick change stations
- Quick change tooling optional
- Reliable production operation
- Can be automated to be timed with your existing lines

### COLD PUNCH PERFORATING

- Use the most accurate pins, manufactured to world class precision
- Pins are heat treated and polished for long life.
- Pins are typically High Carbon Steel, but Stainless and other metals also optional.
- Wide range of pin diameters and geometries are available
- Custom pin patterns are available
- Multi position punches can be made for quick change stations
- Quick change tooling optional
- Reliable production operation
- Can be automated to be timed with your existing lines

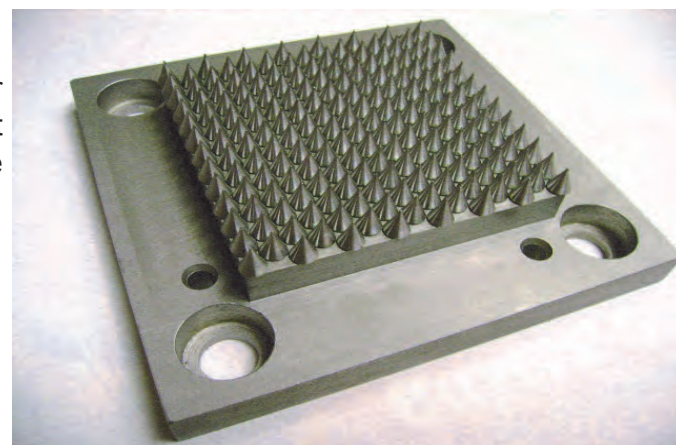
### PINNED PUNCH TOOLING

- Punches can be made with or without heating systems
- Use the most accurate pins, manufactured to world class precision
- Pins are heat treated and polished for long life.
- Pins are typically High Carbon Steel, but Stainless and other metals also optional.
- Wide range of pin diameters and geometries are available

### PUNCH EMBOSSING TOOLING

A number of different materials can be used as pressure rollers.

- Flat tipped pins to make a wide array of diameters
- Pins can be ground flat or ball nose pins can be used



### FLEXIBLE INTEGRATION

Stewart's of America pinned tooling for perforating and embossing can be a great value add, and is easily integrated into the following standard equipment:

- Extrusion Lines
- Bonding Lines
- Thermoforming Lines
- Slitter / Re-winders
- Simple Unwinds and Rewinds
- Laminators
- Printing Presses
- Bag/Pouch Making Machines
- Post Gusseting Equipment
- and more.....



Flexible Perforating Solutions for your converting needs



### CUSTOM SOLUTIONS

Stewart's of America have the ability to design and manufacture a custom perforating solution for your specific application. Stewart's of America's engineers are well versed in a wide range of materials and the effects that perforation has on these materials. From Non-wovens to Films and Foils, Stewart's of America are your partners for the *Hole Solution*.



### WEB SOLUTIONS

Visit our comprehensive website for a insight of other innovative Pinned Product solutions Stewart's of America offers the Industry. Sign up for our e-newsletter, or download informative brochures at [www.StewartsofAmerica.com](http://www.StewartsofAmerica.com)



### GLOBAL SOLUTIONS

Stewart's of America has agents and offices worldwide. We ship to over 50 countries . Our equipment is designed with the global market in mind, utilizing electronic components that are available internationally, with the support of our Stewart's of America trained knowledgeable local agents.