



Perforating and Pricking for hose, tube & pipe



Perforating and Pricking solutions for  
Hose, Tube & Pipe applications

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

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## WHY PRICK A HOSE?

Pinned rollers are specialized mechanical tools used to prick or perforate the outer layer (skin) of high-pressure hoses. These rollers are equipped with sharp, evenly spaced pins that create controlled perforations along the hose surface. The primary purpose of pricking is to allow trapped gases or air between the hose layers to escape during the vulcanization or curing process, preventing defects such as blistering or delamination.

**Pin Configuration:** Typically mounted on rotating rollers, with pins made from hardened steel or other durable materials.

**Controlled Penetration:** Designed to pierce only the outer layer without damaging the inner hose structure.

**Adjustable Pressure:** Allows for varying force depending on hose thickness and material.

### Applications:

Used in the manufacturing and finishing stages of high-pressure hoses. Common in industries such as hydraulic systems, automotive, and industrial fluid transfer.

### Benefits:

Enhances hose quality and performance.  
Reduces manufacturing defects.  
Improves adhesion between hose layers.

## WHY PERFORATE A HOSE?

Perforating a hose for controlled liquid release is a **deliberate design choice** used in applications where you want the fluid to **exit the hose at specific points**, not just the end.

### Irrigation Systems (e.g., Soaker Hoses)

Tiny holes along the hose allow **water to seep out slowly and evenly** along its length.

Ideal for gardens, lawns, agriculture – saves water and delivers moisture right to the roots.

### Cooling Systems

Perforated hoses can **spray or mist liquid** (like water or coolant) onto hot surfaces or machinery. Used in **industrial settings** or even **greenhouses** for temperature control.

### Dust Suppression

In mining, demolition, or construction, perforated hoses spray water to **reduce airborne dust**.

### Chemical Distribution

In controlled environments, perforated hoses can **distribute chemicals** (e.g., pesticides, disinfectants) evenly over a surface.

### Firefighting & Decontamination

Special hoses are perforated to **release water or foam across a wide area**—like in aircraft hangars or chemical cleanup zones.



# DIY rolls, Hand tools or Industrial Grade Machines

CUSTOM MADE FOR JUST ABOUT ANY APPLICATION



Pricking and Perforating solutions for Hose, Pipe and Tube

## FLAT OR CONCAVE ROLLS

- Standard flat or concave rolls are in stock
- Pinned rolls can be custom made to requirements
- These pinned rollers can be used by themselves or gang mounted on a roller

## HAND HELD TOOLING

- Short or long handles
- Rolls can be interchangeable
- Handles can be made from different materials such as wood, plastic or metal

## INDUSTRIAL PRODUCTION MACHINERY

- Benchtop
- Roll around
- Integrated into existing machinery lines
- Undriven, hand driven or electrically driven options



## CUSTOM SOLUTIONS

Stewarts of America have the ability to design and manufacture a custom roller solution for your specific application. Stewart's of America's engineers are well versed in a wide range of materials for hose, pipe and tube.

Stewarts of America are your partners for the *Hole Solution*.



## WEB SOLUTIONS

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Product solutions

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[www.StewartsofAmerica.com](http://www.StewartsofAmerica.com)



## GLOBAL SOLUTIONS

Stewarts 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.