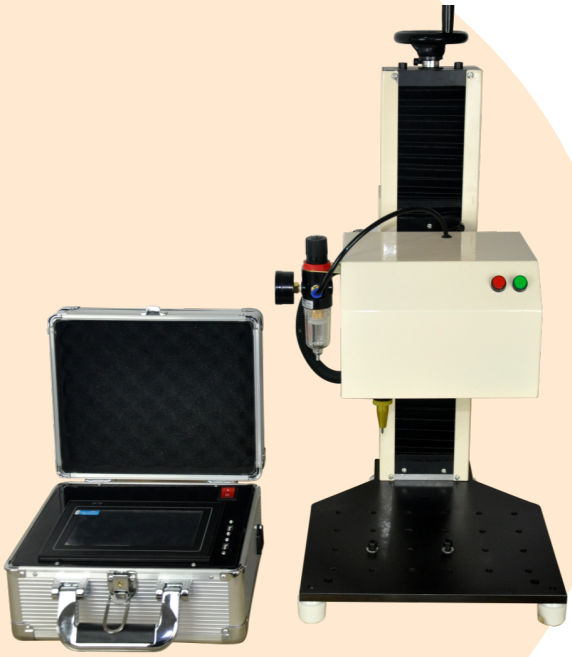
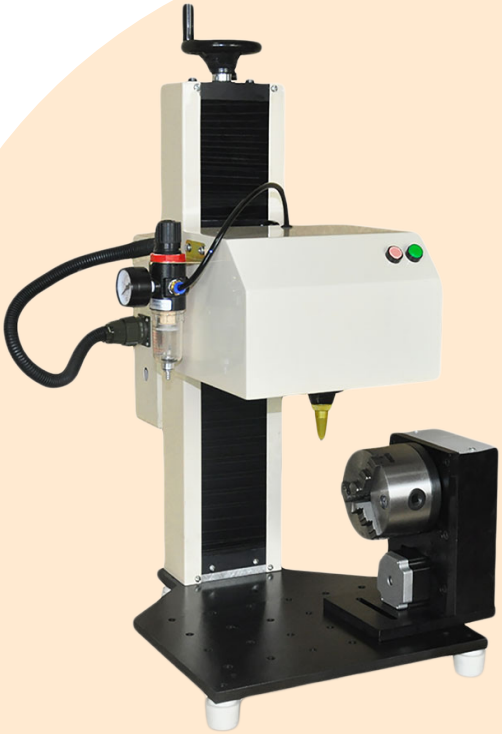
HeatSign
The Science of Marking





Pneumatic Dot Peen Marking Machine

HS-DC Touchscreen. HS-DP PC via USB. 4 areas to 300 × 200. Add -R for rotary

Clamp the part and press start. Shop air strikes the mark into the metal — up to 1 mm in softer material, less in hard — in areas up to 300 × 200 mm.

Why Benchtop Pneumatic — and Why Batches Belong on a Bench

One part marked by hand is fine. Five hundred is a different job. When the same mark has to land in the same place on every part, all shift, you want the part clamped and the machine doing the moving.

The part comes to the machine

Clamp it once and the mark lands in the same spot every time. Good repeat accuracy — part after part, operator after operator.

Air hits harder

Shop air drives the pin 240 times a second. On softer metal that reaches 1 mm; on hard steel it is shallower — but deeper than an electric marker gets on the same part.

Round parts, not just flat

Add the rotary axis and the part turns while the pin marks. Text and codes wrap evenly around pipes, rings, and shafts.

What matters on the job	HeatSign Benchtop Pneumatic	Handheld Marker	Laser Marking
How deep the mark goes	**Up to 1 mm in soft metal, less in hard**	Shallower — carried by hand	Surface only
Survives paint, blasting, heat	**Yes**	**Yes**	Limited — a coat can bury it
Every part marked the same	**Yes** — clamped, high repeat precision	Depends who holds it	**Yes**
Round parts — pipes, rings, shafts	**Yes** — with the rotary axis	**No** — flat only	**Yes** — with a rotary
Big layouts	**Yes —** up to 300 × 200 mm	Smaller areas	Set by the lens
Very fine detail, tiny codes	**No** — struck dots are not delicate	**No**	**Yes**
Needs compressed air	**Yes** — 0.2–0.8 MPa	**No**	**No**
Fumes or extraction	**None**	**None**	Some
Where the part has to be	**On the table — up to 300 mm tall**	Anywhere — you carry the tool	Under the lens

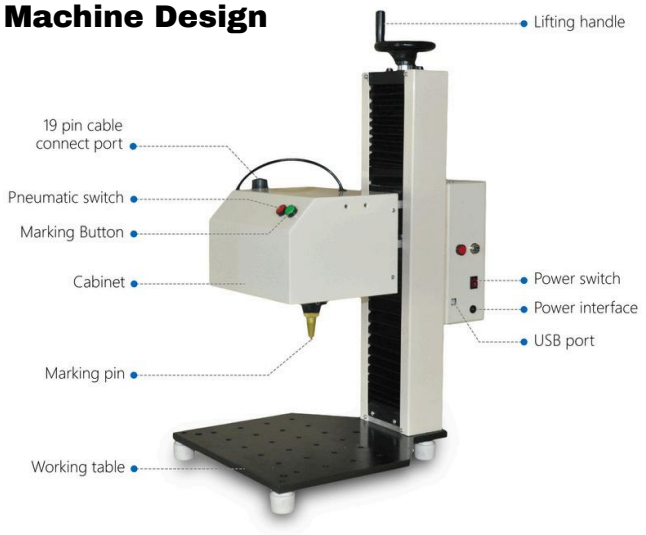
Where it fits:

Small and medium metal parts you can lift onto a bench, up to 60 HRC hardness and 300 mm tall. You will need a shop air line （air compressor）can stable out put compressed air Power. It does make noise — the pin strikes the metal.

The Machine

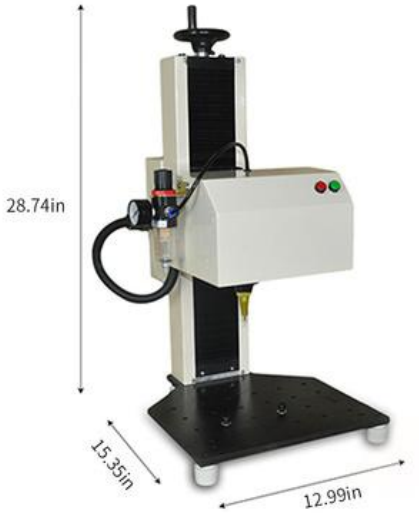
A self-contained marking station. The X-Y gantry carries the pin over the part while the part stays clamped and still.

Machine Design



Marking Head · Marking Pin · Work Table · USB ports · Buttons

DIMENSIONS (mm)



12.99 W × 15.3 D × 28.74 H inches

WHAT IT NEEDS before it can mark

Shop air

0.2–1 MPa. A compressor is required. Most workshops already have a line that works.

A normal outlet

AC 100–240 V, 125 W. Less than a desk lamp, and it works on any grid.

The part held still

Clamp or fixture it. It give bad marking results if the part is moving during marking

WHAT IT GIVES YOU

Four marking areas
120×80 up to 300×200 mm — a small tag, or a long data plate in one pass.

1–3 characters a second
At 3 mm character height. A tag is done before you reach for the next one.

Touchscreen or PC
Run it standalone, or drive it from your own Windows PC over USB.

Handles hard metal
Steel, stainless, aluminum, brass, copper, titanium, cast iron — up to 60 HRC Hardness.

Varous Marking contents
Text, VIN, serials, dates, logos, Data Matrix, and text curved round a circle.

Cheap to keep running
125 W and tungsten pins. No ink, no gas, no lamp to replace.

MARKING AREA	MARKING DEPTH	REPEAT ACCURACY	MAX PART HEIGHT
120×80 → 300×200 mm · four sizes	up to 1 mm · soft metal; less on hard	≈ 0.05 mm	300 mm

Configure in 3 Steps

Marking area, controller, work table. Those three choices are the whole decision — and all three are set at the factory.

1 Choose your marking area

MOST PICKED

120 × 80
HS-DC01 / HS-DP01

Tags, small plates, valve bodies, most part numbers.

150 × 120
HS-DC02 / HS-DP02

Bigger nameplates. Room for several lines plus a logo..

200 × 150
HS-DC03 / HS-DP03

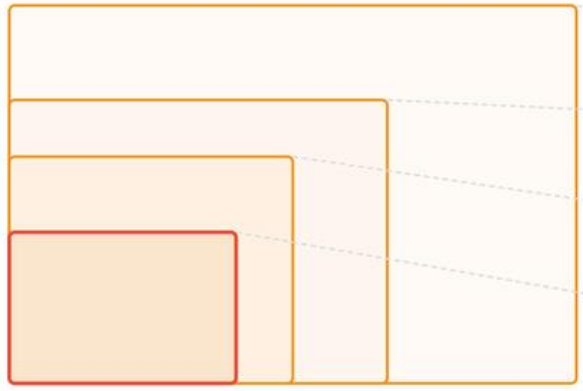
Full data plates that carry a lot of text.

300 × 200
HS-DC04 / HS-DP04

Full data plates that carry a lot of text.

How the four areas compare

True relative proportion. Not actual size — marking areas, not machine sizes.



300 × 200 mm
HS-DC04 / HS-DP04 · the largest

200 × 150 mm
HS-DC03 / HS-DP03 · data plates

150 × 120 mm
HS-DC02 / HS-DP02 · nameplates

120 × 80 mm
HS-DC01 / HS-DP01 · STANDARD

A bigger area still marks small parts.
A smaller one cannot grow later.

2 Choose your controller

TOUCH SCREEN

HS-DC · Zero One K3

- No PC needed. The machine runs on its own, on the shop floor.
- Type it and go. Fastest way to change a batch number between jobs.

Pick this if operators work at the machine and type jobs in by hand.

USB /PC CONTROLLERL

HS-Dp · Zero One K3

- Lay out logos and load part lists from a file, on your PCI screen.
- Easier for round parts. We recommend PC whenever you add the rotary.

Pick this if your numbers come from a file — or you are buying the rotary.

Configure in 3 Steps

3 Choose your work table

FLAT WORKTABLE

standard

- Plates, tags, housings — anything with a flat face to mark
- Takes parts up to 300 mm tall under the marking head.

Pick this if the face you mark is flat, or close to it.

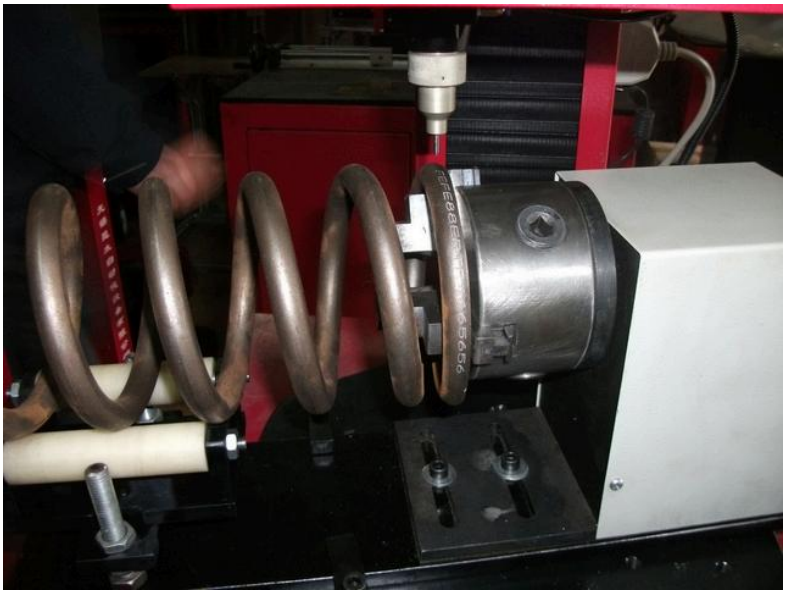
ROTARY AXIS

-R · D100, to 80 mm dia.

- The part turns, the pin marks. Text wraps evenly right round.
- Pipes, rings, shafts, small valves up to 80 mm diameter.

Pick this if your part is round and the mark must follow the curve.

All three are built in at the factory. A touchscreen machine cannot be driven from a PC later, and the marking area is not an upgrade. Tell us the job and we will tell you which build fits.



What You Can Mark

A pin dents metal. That is the whole rule. If your part is metal, softer than 60 HRC, and small enough to lift onto the table — it marks.

MATERIALS — YES

Carbon steel · Stainless steel · Aluminum · Brass · Copper · Cast iron · Titanium · Forgings & castings · Rusty or rough surfaces · Painted metal · Hard plastics

MATERIALS — NO

~~Glass~~ · ~~Ceramic~~ · ~~Anything over 60 HRC~~ · ~~Wood, leather, paper~~ · ~~Soft or brittle plastics~~ · ~~Parts over 300 mm tall~~ · ~~**Parts too big to lift**~~

How deep, on what?

The pin strikes with the same force every time. How far it sinks is up to the metal.

Aluminium Brass · Copper	Mild steel Cast iron	Stainless steel Titanium	Hardened steel up to 60 HRC
deepest marks	*deep*	*medium*	*shallowest*

DEEPER ——— SHALLOWER

1 mm is what softer metal gives you — it is not a setting. Hard steel takes a shallower mark, and it is just as permanent: still struck into the surface, still readable after paint, rust, and blasting. Send us your material and we will tell you the depth to expect on it.

Car VIN plates & nameplates

Deep VIN, engine, and chassis marks that meet the standards.

Touchscreen + Flat
200 × 150

Batch tags & asset plates

Auto-numbered tags, marked as fast as you can load them.

Touchscreen + Flat
120 × 80

Pipes, rings & shafts

Round parts up to 80 mm across, with the mark following the curve.

PC + Rotary
150 × 120

Machined & fabricated parts

Part, lot, and heat numbers for traceability through the shop.

PC + Flat
120 × 80

Coated & blasted parts

Serials struck before finishing, still readable after it.

PC + Flat
120 × 80

Valves & fittings

Serial and batch marks on valve bodies, flanges, and fittings.

Touchscreen + Flat
120 × 80

marking content — YES

Text & numbers · vin · Serial numbers · Logo outline · Dates · Data Matrix · Circular text

marking content — NO

~~Barcodes~~ · ~~QR codes~~ · ~~Photos & greyscale~~ · ~~Micro detail~~

What Ships With Your Machine

It arrives ready to bolt down and connect. Add your air line and you can mark the same day.

1

The USB Cable

USB cable to connect the machine to your computer

×1

2

Tungsten carbide pins

The only real consumable. Easy to swap when one wears.

×3 or more

3

Rotary Chuck

Fitted as standard. The rotary axis replaces it if you ordered one.

Optional Parts

4

Air fitting

Connects the machine to your shop air line at 0.2–0.8MPa.

×1

5

Touchscreen controller

Built in on HS-DC. HS-DP ships with the USB cable instead.

by model

6

Power cord

AC 100–240 V. Tell us your country and we fit the right plug.

×1

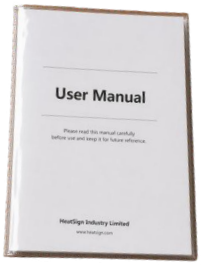
7

USB drive

Marking software plus step-by-step training videos.

x1

8



User manual

Setup, software manual in English.

×1

Also in every box, at no cost: a 12-month warranty and lifetime online support. Send us your material and we will send back marking settings that already work on it. Production takes about 5~7 working days.

Specifications

Orange cells are the only places the two controllers differ. Everything else is the same machine.

Feature	HS-DC — Touchscreen	HS-DP — PC via USB
Type How the mark is made.	Pneumatic benchtop dot peen — air power drives a pin into the metal	
Controller & software Where you type the job in.	**Built-in touchscreen** **Zero One K3**	**Your Windows PC over USB** **ThorX6**
Marking area The biggest mark that fits in one go.	**120×80 / 150×120 / 200×150 / 300×200 mm (models 01–04)**	
Marking depth How far the pin sinks in. Set by the material, not by the machine.	**Up to 1 mm on softer metal such as aluminium or brass.** **Harder metal takes a shallower — but equally permanent — mark.**	
Marking speed How fast characters appear.	**1–3 characters/s at 3 mm character height**	
Max hardness The hardest metal it will still dent.	**60 HRC**	
Max part height How tall a part fits under the head.	**300 mm**	
Air requirement You supply this.	0.2–0.8 MPa — an air compressor is required	
Marking pin What you buy again later.	Hard-alloy tungsten	
Marking content What you can put on the part.	Text, numbers, logos, VIN, serial numbers, dates, Data Matrix, circular text	
Power Works on any grid.	AC 100–240 V / 50–60 Hz · 125 W	
Machine size W × D × H	2.99 W × 15.3 D × 28.74 H · inches (just for 01 model)	
Working conditions Where it can live.	0–40 °C / 0–90% humidity, non-condensing	
Options Ordered with the machine.	Rotary axis D100 (round parts up to 80 mm across) · fixture holder	
Warranty What we cover.	12 months, with lifetime online support	

Not sure how to choose? Tell us the material, the part size, the biggest mark you need, and whether the part is round. We will pick the area, the controller, and the table for you — and say so if a dot peen machine is the wrong tool for the job.

HS-DC / HS-DP SERIES · PNEUMATIC DOT PEEN

Your Marking Partner

Tell us your material, your part size, and what you need to mark. We will tell you which marking area you need, which controller suits your team, and whether your round parts fit the rotary.

✔ Free expert advice ✔ Right machine for your job ✔ Clear quote, no pressure

Proven Results
Marking metal since 2016

Built to Last
Carbide pins, 12-month warranty.

Setup Support
Training videos, and an engineer.

Direct & Fair
Buy direct. Fair price, reseller terms.

TRUSTED BY SHOPS IN 40+ COUNTRIES

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HeatSign
The Science of Marking

CONTACT HEATSIGN

☎ Tel	+86-85170177
Cell / WhatsApp	+86-15061477073
Email	info@heatsign.com
Web	www heatsign.com
Address	Room 903, Building D1, No.999 GaoLang East Road, Binhu District, Wuxi City, Jiangsu, China

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