Making a pencil transfer *(Rubbing)*

Due to the rapidly changing cylinder head industry, you may be asked to send a rubbing of your exhaust ports.

Place a sheet of paper over port(s).
Use tape to hold paper in place.

Holding the pencil’s face flat against the paper, define the ports, bolt pattern and sealing surface.

Make sure the transfer is accurate and the paper did not slip during the process.

If you are faxing or scanning, please include a scale along with your contact information as the fax machine will shrink the image.

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**Materials:** All flanges are available in Cold Rolled Steel or 304 Stainless Steel by special order.

**Thickness:** Standard thickness is 3/8”. Most flanges can be special ordered 1/2” thick.

**Port Size = Tube Size:** Sizes shown for port in flange indicates the size tube that can be formed to slip into the flange. Most of our flanges are designed to allow the tube to slip through the flange.

**Port Shapes:**
- Round ports are machined .020”-.030” over advertised size.
- Other shapes are as much as .070” over nominal tube size to allow for easier tube shaping.

- **SAP - “Same As Port” -** Flange closely matches port shape in cylinder head.
- **Round** - For stock round ports or oversized tube applications
- **D-Port** - Typically flat floor and sides with radius on roof of port.
- **Oval** - Two sides half round. Horizontal and vertical oval.
- **Square** - Nearly equal height and width with varied corner radius.
- **Square Oval** - Made popular by the 18° Chevy, has radiused roof and floor.
- **Rectangle** - Longer or taller than wide or high.
- **Counterbored** - To accommodate oversized tubing some flanges have a .150” deep machined step.

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**About Our CNC Machined Flanges**

counterbored

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