

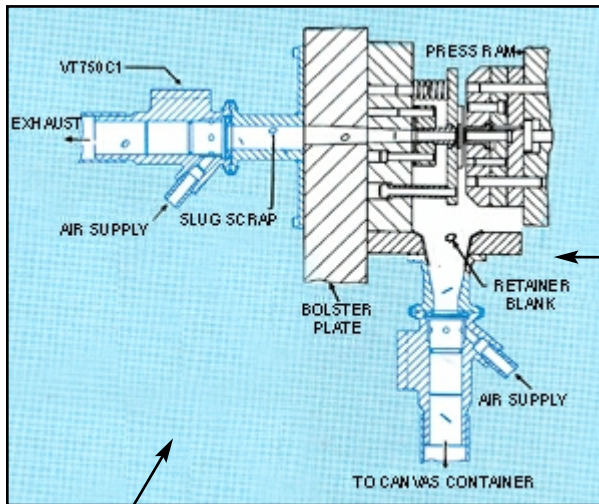
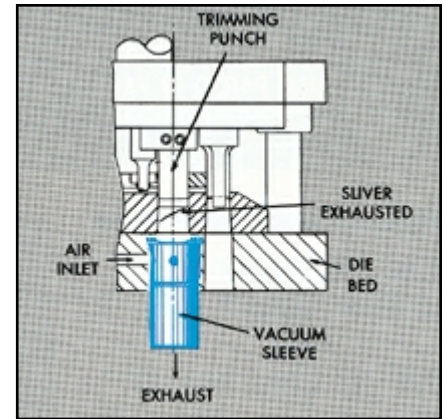
Applications

VERSITILE BAZOOKA VACUUM SLEEVES AND VACUUM TRANSDUCERS CAN BE INSTALLED MANY DIFFERENT WAYS TO CONTROL LOOSE SCARP AND PART REMOVAL


1 - VACUUM SLEEVE INSTALLATION PREVENTS LOOSE SHAVINGS FROM PULLING UP WITH PUNCH

PROBLEM: Shaving, measuring .640 long x .030 wide x .020 thick, is loose and pulls up with punches.

SOLUTION: A VS-750 Vacuum Sleeve, with an "A" diameter of .75, is installed beneath the die opening in the die bed. The vacuum not only prevents shavings from pulling up with the punch, but also carries them away from the die surface through vacuum source into a suitable container. **Since there is only one shaving station, a single Vacuum Sleeve is used instead of a Vacuum Transducer & Funnel Unit.**



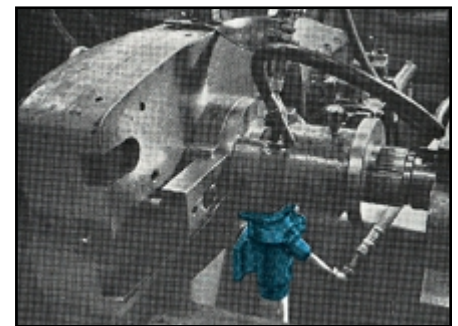
2 - VACUUM INCREASES USES OF HORIZONTAL PRESS SET-UP

PROBLEM No. 1: Fabricate miniature retainer  from .003 stainless steel and prevent nicking, bending, or marking of part. If run in a vertical press the retainer would have to be blown off causing marking or nicking.

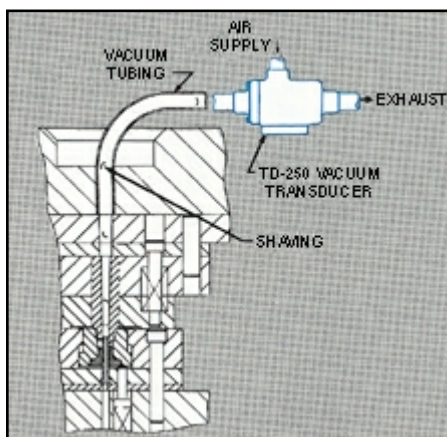
SOLUTION No.1: By using a horizontal press, the retainer blank falls free due to gravity helped by the BAZOOKA Vacuum Funnel Unit. Operating on very low pressure it creates just enough vacuum to cause a slight movement of atmospheric air downward into funnel unit. A canvas container is attached to exit end of funnel unit. **The above method produces unmarked flat retainer blanks.**

PROBLEM No. 2: An additional problem arises from the horizontal press. The center slug is pierced in a horizontal direction and must be prevented from falling back onto the die.

SOLUTION No.2: Removal of this slug is accomplished by the use of a Vacuum Transducer and Cap Unit. Installation is simple, as Cap Unit and Adapter are mounted to the bolster plate as shown in illustration. Unit prevents slug from interfering with running of strip stock.



A VT-750-C1 Vacuum Transducer and Cap Unit was selected instead of a Vacuum Sleeve in order to accommodate any number of different dies. Otherwise, individual Vacuum Sleeves would have to be installed in each die. The "A" dimension of .750 insure sufficient clearance for all slugs.



3 - UPWARD SHAVE OPERATION MADE POSSIBLE BY USE OF VACUUM

PROBLEM: Due to the design of the part a trimming operation has to be done upward, otherwise, secondary operation would be required. It is important to keep this shaving (.190 x .020) from falling back onto the surface of the die.

SOLUTION: A TD260 Vacuum Transducer was selected as the "A" diameter (.260) provides sufficient clearance. The installation is simple, as the tubing is used to connect the die opening to the Vacuum Transducer. By having vacuum in the die opening, the loose shavings pass upward through tubing, Vacuum Transducer and exhaust hose into scrap container.

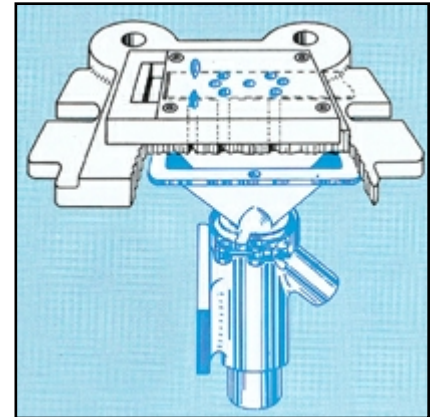
Applications

VERSITILE BAZOOKA VACUUM SLEEVES AND VACUUM TRANSDUCERS CAN BE INSTALLED MANY DIFFERENT WAYS TO CONTROL LOOSE SCRAP AND PART REMOVAL

4 - ONE VACUUM TRANSDUCER AND FUNNEL UNIT REMOVES TWO NOTCHINGS AND SEVEN PIERCING SLUGS

PROBLEM: It was necessary to remove loose slugs from two notchings and seven piercings. By preventing this scrap from pulling up with the punches, you eliminate trouble from scrap accumulation and reduce down time while increasing production and die life.

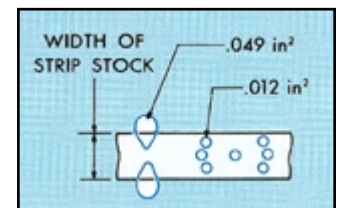
SOLUTION: Since it would have been impractical to place individual Vacuum Sleeves under each die opening, a Funnel Unit was installed (as illustrated). This unit removes scrap from all nine openings and exhausts it into a container.



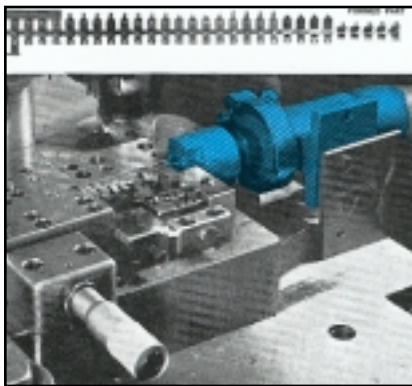
MEHTOD FOR SIZING UNIT:

To properly select a unit, you must consider all openings which allow air to flow into the Funnel Unit. The Vacuum Unit must be capable of maintaining sufficient vacuum into the Funnel. **To size the unit, add up the total area of all these openings and select a vacuum unit with an "A" Diam. that is equivalent to this area.**

In reference to the application shown, this total area equals .182 square inches. This area is equivalent to approx. 1/2 inch diameter hole. Therefore, the unit required for this particular application is a VT500F1, Vacuum Transducer and Funnel Unit.



5 - VACUUM UNIT REMOVES FINISHED PART FROM THE SURFACE OF THE DIE



PROBLEM: Photograph shows the fabricating of a small formed part in a progressive die. The problem is to remove the finished part at the final cut-off station. The normal procedure is to use compressed air to blow this part into a container. Quite often this is inadequate as the parts could fly in various directions and often do not leave the die area. These parts would then interfere with the strip stock causing downtime or rejected parts.

SOLUTION: Use a standard Vacuum Transducer and Cap Unit and a simple adapter designed to locate the flow of vacuum as near as possible to this finished part. The flow of atmospheric air picks up each part as it is cut off, and removes it from the die area. It passes through the adapter & Vacuum Transducer into a suitable container.

6 - TWO REMOTE FUNNEL UNITS REMOVE FOUR PIECES OF SCRAP THROUGH FLEXIBLE TUBING

PROBLEM: At one station, a ring is split into two halves and vacuum is needed to prevent the ring portions from falling back onto the die surface. At a second station, there is a horizontal piercing which must be removed to insure continuous running of the press.

SOLUTION: Two funnel type units were mounted below the press at some convenient spot. A plate having two tubes was then mounted to the top flange of the Funnel. Flexible Tubing was then used to bring the vacuum from the Funnel Unit into the area where scrap was located. This is shown in detail in photograph.

The important thing to note in this application is that the vacuum units themselves can be mounted away from the area where the vacuum is required, and flexible or metal tubing can be used to bring vacuum into inaccessible areas.

