

Uniloy is proud to introduce this month's web posting which features Uniloy Structural Foam Nozzle Assemblies. Uniloy not only supplies the complete nozzle assemblies engineered for your application but all the replacement parts.



***Foam Nozzle***



***Web Nozzle***

### **What Nozzles do:**

The nozzle assemblies are one of the most important parts of the machine. They are mounted to the melt manifold on the non-mold side of the stationary platen and are used to disperse plastic to areas in the mold or molds. The nozzle locations are engineered to make sure that the plastic flow is optimal. This allows good parts to be produced given the tonnage of the machine you are using.

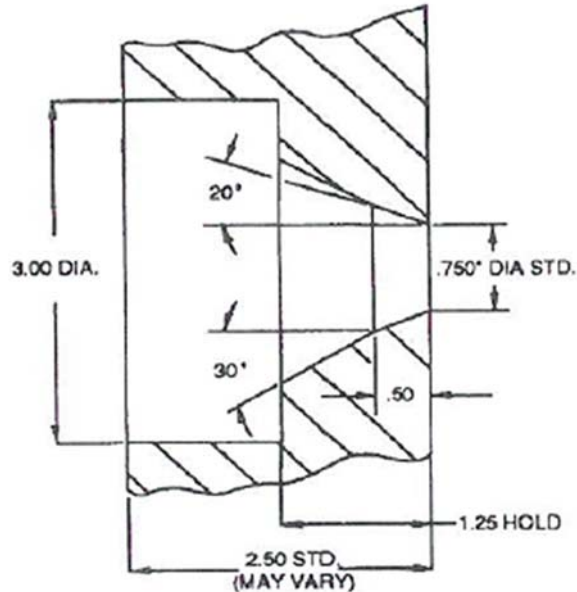
In this posting we are providing you with the drawings of the different nozzle assemblies used on structural foam machines and parts lists for the wear parts you will need to replace. As part of the drawings we are also providing you with the means to determine what the lengths of your rods and tubes are along with how many heater bands you will need.

### Benefits of Uniloy Nozzles:

- Built to OEM specifications and tolerances.
- Made with materials that are tested and proven.
- Stack up heights consistent to prevent plastic leaks and blow backs.
- Most parts in stock.
- Engineering support and documentation of assemblies

### Platen to Tip Dimensioning:

Each nozzle is made to fit the platen to tip dimension of the area in the mold it needs to service. The platen to tip dimension is arrived at by measuring the distance from the back of the mold where it meets the stationary platen (the left edge of the drawing below) to the front of the seat in the mold (the right edge of the drawing below). The diagram below shows what the seat of the mold should look like. The cross section shows a mold with a platen to tip dimension of 2.50 inches (this dimension can vary and be over 65 inches). It also shows the opening and the angular dimensions needed to have a good fit for your nozzles.



The platen to tip dimension is then used to determine the final length of the nozzle, along with the platen thickness and the distance from the center of the melt manifold to the rear of the stationary platen.

## Identifying Nozzle Parts:

There are 2 types of nozzles used and they are broken down into sub categories:

STRUCTURAL WEB

STRUCTURAL FOAM

[5/8 standard flow  
\(152666\)](#)

[5/8 standard flow  
\(144809\)](#)

[5/8 high flow \(159884\)](#)

[5/8 high flow \(144808\)](#)

[7/8 high flow \(144223\)](#)

If you click on the appropriate sub category above, you will see the assembly drawing for that nozzle type and then you can use the parts lists below to determine the part number of what you require.

### STRUCTURAL FOAM NOZZLE PARTS LIST

| REF# | QTY | DESCRIPTION               | P/N      | WEB        |            | STRUCTURAL FOAM |            |            |
|------|-----|---------------------------|----------|------------|------------|-----------------|------------|------------|
|      |     |                           |          | 5/8<br>ROD | 5/8<br>ROD | 5/8<br>ROD      | 5/8<br>ROD | 7/8<br>ROD |
|      |     |                           |          | STD        | HIGH       | STD             | HIGH       | HIGH       |
|      |     |                           |          | FLOW       | FLOW       | FLOW            | FLOW       | FLOW       |
| 1    | 1   | SCHEFFER CYLINDER         | 10409690 | -          | -          | X               | X          | X          |
| 1    | 1   | SCHEFFER WEB CYLINDER     | 10409601 | X          | X          | -               | -          | -          |
| 3    | 4   | CYL MOUNTING ROD          | 10409687 | -          | -          | X               | X          | X          |
| 3    | 4   | CYL MOUNTING ROD          | 10409832 | X          | X          | -               | -          | -          |
| 4    | 1   | NOZZLE BLOCK W/EARS       | 10409561 | X          | -          | X               | -          | -          |
| 4    | 1   | NOZZLE BLOCK W/EARS       | 10409554 | -          | X          | -               | X          | -          |
| 4    | 1   | NOZZLE BLOCK W/EARS       | 10409732 | -          | -          | -               | -          | X          |
| 5    | 1   | COUPLING                  | 10409688 | -          | -          | X               | X          | X          |
| 5    | 1   | ADJUSTABLE STOP           | 10410656 | X          | X          | -               | -          | -          |
| 10   | 1   | NOZZLE TUBE SEAL          | 10410660 | -          | X          | -               | X          | X          |
| 10   | 1   | NOZZLE TUBE SEAL          | 10410070 | X          | -          | X               | -          | -          |
| 11   | 1   | NOZZLE TIP                | 10409555 | -          | X          | -               | X          | -          |
| 11   | 1   | NOZZLE TIP                | 10410185 | X          | -          | X               | -          | -          |
| 11   | 1   | NOZZLE TIP                | 10410214 | -          | -          | -               | -          | X          |
| 11   | 1   | HEATED NOZZLE TIP         | 10409812 | -          | X          | -               | -          | -          |
| 11   | 1   | HEATED NOZZLE TIP         | 10410451 | X          | -          | -               | -          | -          |
| 12   | 1   | INSULATING TIP            | 10410174 | X          | X          | X               | X          | -          |
| 12   | 1   | INSULATING TIP            | 10410215 | -          | -          | -               | -          | X          |
| 20   | 1   | NOZZLE CAP                | 10410058 | X          | X          | X               | X          | X          |
| 21   | 1   | THERMOCOUPLE              | 10410076 | -          | -          | X               | X          | X          |
| 21   | 2   | THERMOCOUPLE              | 10410076 | X          | X          | -               | -          | -          |
| 26   | 2   | METAL ORING               | 10410269 | X          | X          | X               | X          | X          |
| 34   | 1   | THREAD SEAL 5/8 HIGH TEMP | 700749   | X          | X          | -               | -          | -          |
| 34   | 1   | THREAD SEAL 5/8           | 39790    | X          | X          | -               | -          | -          |
| 35   | 1   | THREAD SEAL 7/8           | 39791    | X          | X          | -               | -          | -          |
| 36   | 1   | MCHSCR 10-32X1/4          | 249016   | X          | X          | -               | -          | -          |
| 38   | 1   | MANATROL VALVE            | 1130030  | X          | X          | -               | -          | -          |
| 43   | 1   | HEATER BAND FOR TIP       | 10504311 | X          | -          | -               | -          | -          |
| 43   | 1   | HEATER BAND FOR TIP       | 10410641 | -          | X          | -               | -          | -          |
|      |     | HEATER BAND FOR TUBE      | 10410066 | X          | -          | X               | -          | -          |
|      |     | HEATER BAND FOR TUBE      | 10410646 | X          | -          | X               | -          | -          |
|      |     | HEATER BAND FOR TUBE      | 10410625 | -          | X          | -               | X          | X          |
|      |     | HEATER BAND FOR TUBE      | 22925    | -          | X          | -               | X          | X          |

The parts listed are typical but could be different for your machine(s). Most parts are in stock but in the event we run out, it may take up to 6 weeks to fill your order.

**Sales and Service:**

For more information including pricing and any other machine upgrade or for parts replacement please contact your Uniloy Parts Representatives. Trained Uniloy Service Representatives are available to assist in the installation of these parts and packages at your facility.