

As technology demands precision and smaller tolerances, engineers are turning to Bird Precision micro-drilled inserts, fittings and their filter components. We offer a high-value solution in nozzle, restrictor and orifice applications, all designed with Bird Precision accuracy.

Conventional drilling methods inherently sacrifice quality and dependability due to drill wobble, run out and burr generations. Bird Precision wire-lapped orifices are burr-free, extremely round and sharp-edged with a standard hole tolerance of $+.0002/-0.0000$ inches.

Economically produced using mass production techniques, standard hole sizes range from $.0004$ through $.0300$ inches in a synthetic sapphire or ruby material which is almost chemically inert and extremely wear resistant.

Bird Precision orifices are acclaimed for accuracy. They exhibit highly repeatable flows from 1cc/min.

Brass Barb Fittings



As plastic barb orifice fittings get smaller, users rapidly begin to sacrifice strength and rigidity. Smaller plastic barbs have thinner walls which often snap off with very little effort. This can be frustrating for production assembly line personnel, and costly in both time and dollar value. Many companies are, therefore, switching from plastic assemblies to metal assemblies.

Bird Precision has now introduced metal $1/16$ " barb fittings retrofit with precision ruby orifices offering the strength and precision design engineers need. These new miniature fittings are available as in-line barb to barb and 10-32 to barb as well as in tube inserts.

Bird's new brass $1/16$ " barb fittings with integral ruby orifices are available in sizes from 10 microns through $.035$ I.D. Ruby orifices offering accuracy that is not attainable by plastic molding or conventional drilling methods. These brass orifice fittings are stronger than any plastic fitting currently available, making usage and replacement of integral parts easier than ever. They are also very competitively priced.

Contained within these fittings are Bird's highly repeatable and precise ruby orifices. With zero porosity, high temperature, chemical, and wear resistance in ranges starting at 0.0004 ", these burr-free orifices are next to diamond in hardness and can be used in medical, control, hydraulic, pneumatic, aerospace, biotech/biomed, and many other applications.



