# Technology Notes

**SELECTING WAVEGUIDE GASKETS - Made easy with the ATM GASKET Selection Aid**

## W/G Flange Gaskets & Hardware

<table>
<thead>
<tr>
<th>Description</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gasket, Full</td>
<td>Include gasket, screws, nuts, etc.</td>
</tr>
<tr>
<td>Gasket, Full O-Ring type for U/G style Flanges</td>
<td>Include o-ring for U/G style flanges</td>
</tr>
<tr>
<td>Gasket, Half for CPR style Flanges</td>
<td>Include half gasket for CPR style flanges</td>
</tr>
<tr>
<td>Gasket, Die Cut for Flat or Grooved Flanges</td>
<td>Include die cut gasket for flat or grooved flanges</td>
</tr>
</tbody>
</table>

How to select the correct gasket to join two waveguide flanges is one of the most frequently asked questions by customers. This is not surprising given the wide range of flanges and gaskets [sizes, shapes, conductive or non-conductive, etc.] that are available. In addition, there may be more than one Gasket type that can be used.

A few simple steps will help you to select the correct gasket type 
and ATM Model number....
FUNCTION
What is the FUNCTION of the gasket in your application ... 

PRESSURE SEAL; or PRESSURE and RF SEAL ?
- If a Pressure seal only, then use a NON-CONDUCTIVE Gasket.
  These are usually Silicon or Neoprene material, O-rings or Rectangles, designed to fit into flange grooves.
- If a Pressure and RF seal is required, then use a CONDUCTIVE Gasket.
  These look similar to the non-conductive gaskets, but are filled with a conductive material, usually copper or silver. The exception is the Die-cut Gasket, which resembles the flange face.

FLANGE TYPES
What is the waveguide size and Flange Types to be joined?
- If you are not sure, see our website for flange types and drawings.
  http://www.atmmicrowave.com/AtmFlanges.html

*North American EIA Standard
*European IEC Standard Flanges


FLANGE COMBINATIONS
Some flange types were designed to mate together, like a UG cover to a UG choke, and others were not (like a UG choke cannot mate to a UG Choke).
You must know your Waveguide size and Flange type.
Then, our ATM GASKET Selection Aid can help you select the right gasket for your flange combination.
SELECTING WAVEGUIDE GASKETS (cont’d)

ATM WAVEGUIDE GASKET SELECTION AID

Once you know:

- Waveguide size
- Type of flanges to be used
- Function: Pressure only [Non-Conductive] or Pressure and RF seal [Conductive]

Go to our website to access the ATM WAVEGUIDE GASKET SELECTION AID ...

http://www.atmmicrowave.com/calc_wg_gasket_frame.html

Just enter the waveguide size and click the Lookup button. The guide will show acceptable combinations of flanges and the correct ATM Model number of the gasket.

The website result for WR90 is shown below:

In the example above, if you want a gasket to provide both a Pressure and RF Seal for a WR90 Cover Flange to WR90 Choke Flange combination, then use a G90B7F gasket.

If you want a Gasket Kit, consisting of the selected gasket and matching hardware (screws, nuts, washers), just add a “K” after the “G” in the model number…. GK90B7F.