



**SIMPLE Butt Seal GF >**  
*basically one fitting !*  
 nut & Fitting drilled out to take OD of the Tube  
 same Nut "size" and fitting OD for maybe 3 different sizes  
 from 1-1/4, 1-1/2 and to 2" OD Tube

No reason why this could NOT be scaled down to suit smaller Glass Tubes  
 for eg the H2-Site "14+mm" tubes  
 AND to minimise the Number of fittings and more complicated Swagelok  
 "cone" GFs etc "overall" required

ALSO For Simple(r) glass tube "double-ended" connector based on a  
 similar "Butt" GF -type Union

Biggest problems machining these large rod threads ( to 60mm) " etc  
 cost of rod & "tooling > taps and dies" and the "Hex" required for tightening  
 Swagelok tend to be prohibitive in cost > the limiting factor for any users