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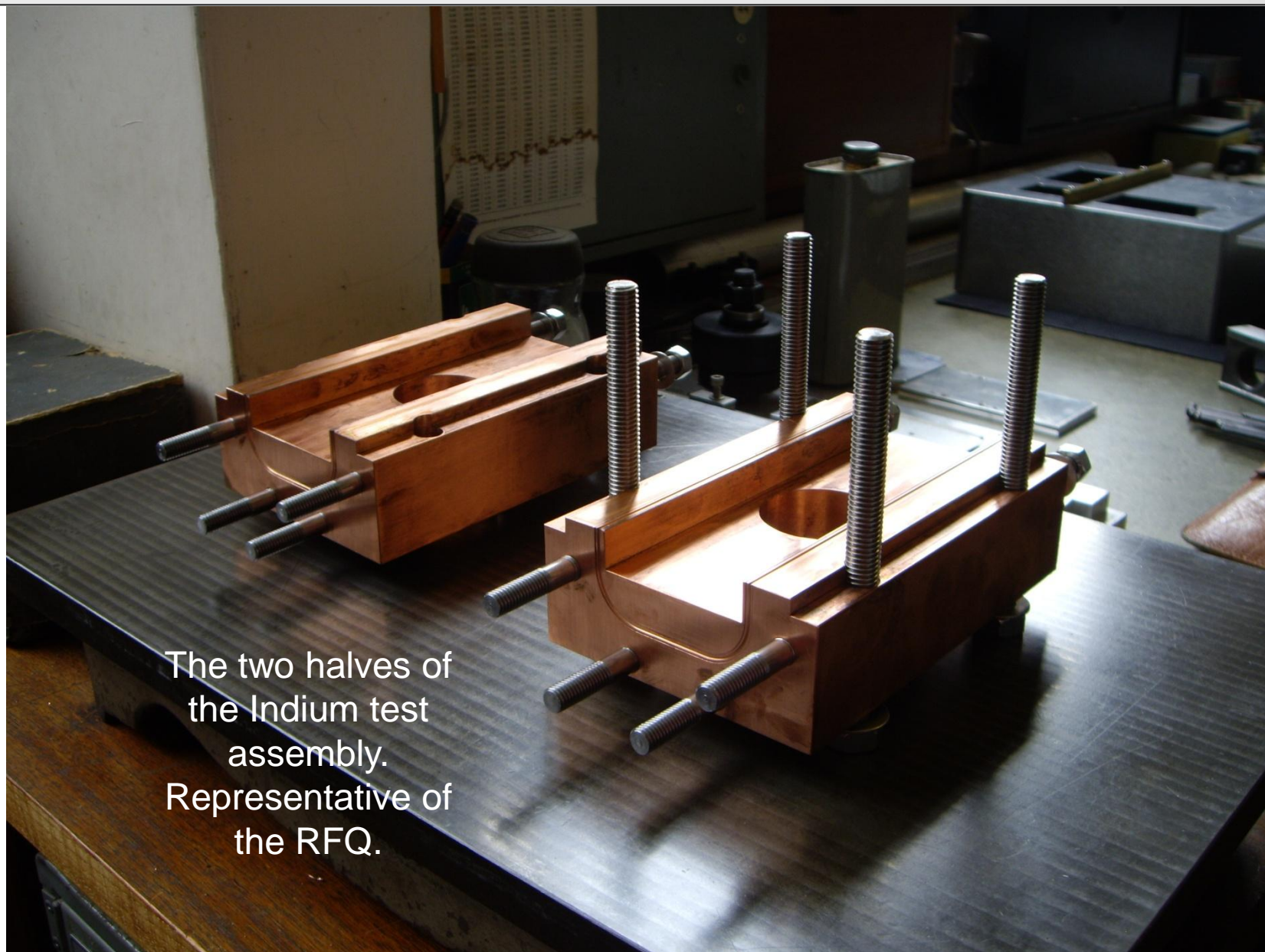


## **FETS Indium Test Assembly**

by Peter Savage

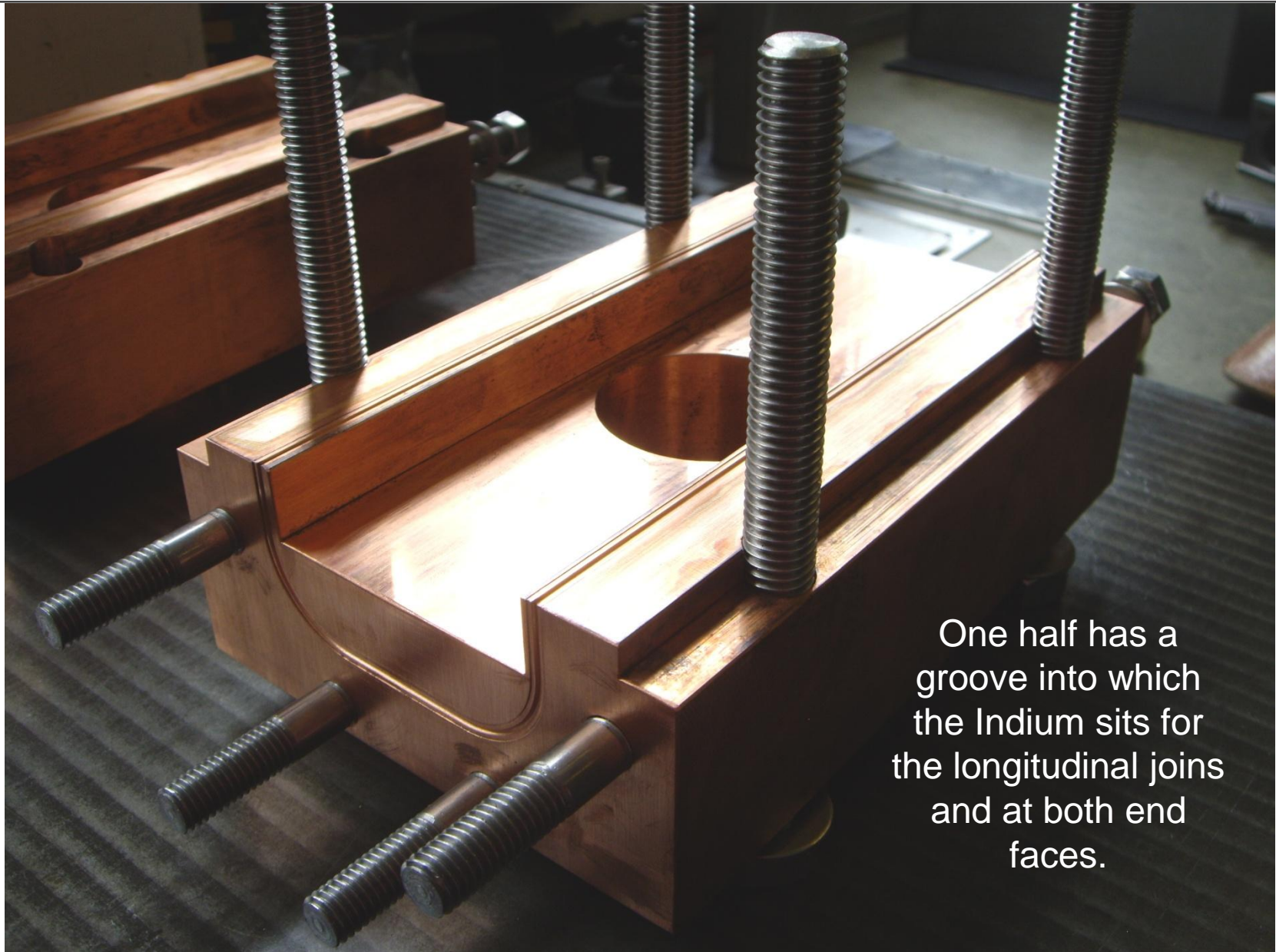
*29th September 2010*



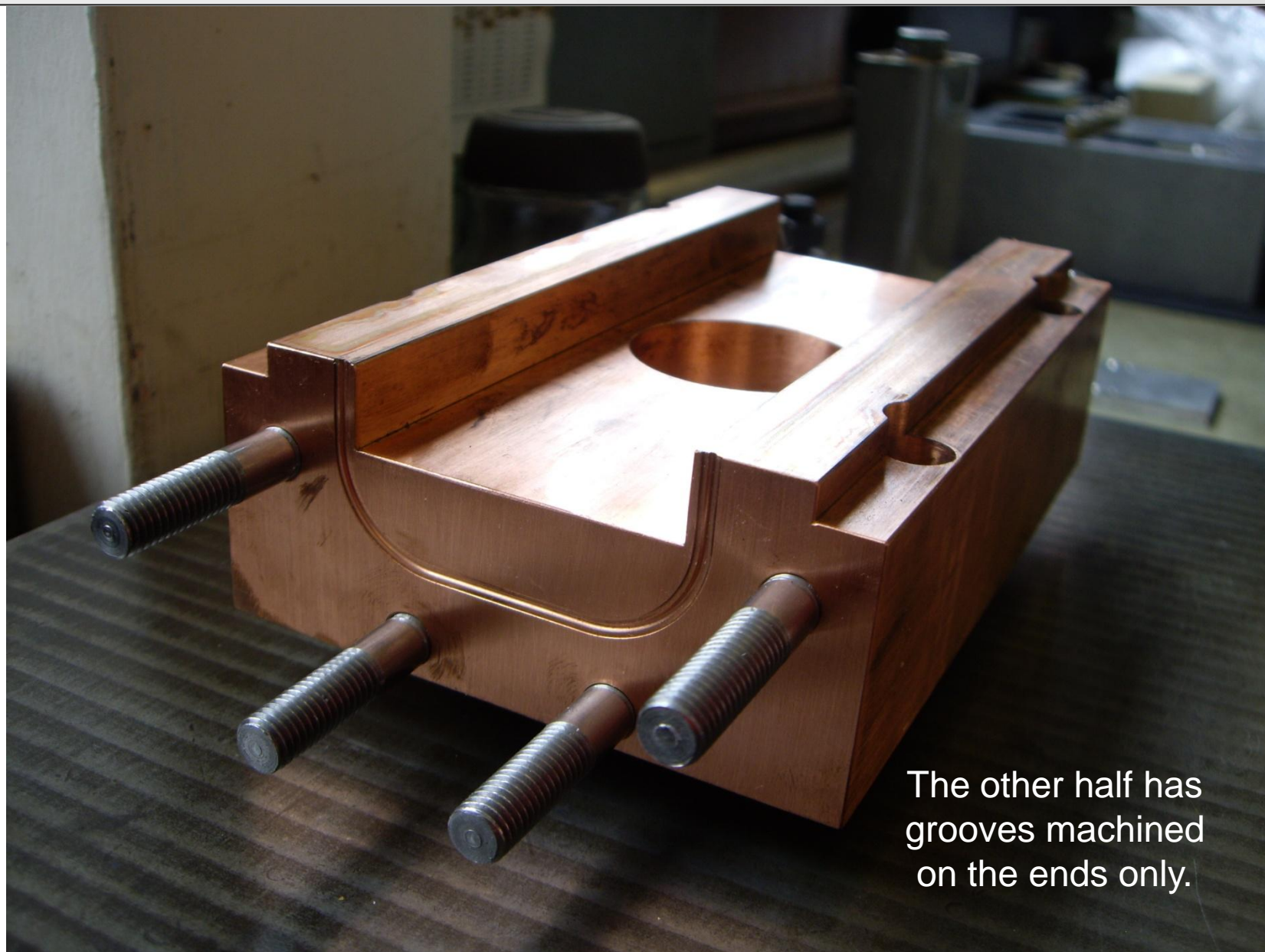


The two halves of  
the Indium test  
assembly.  
Representative of  
the RFQ.



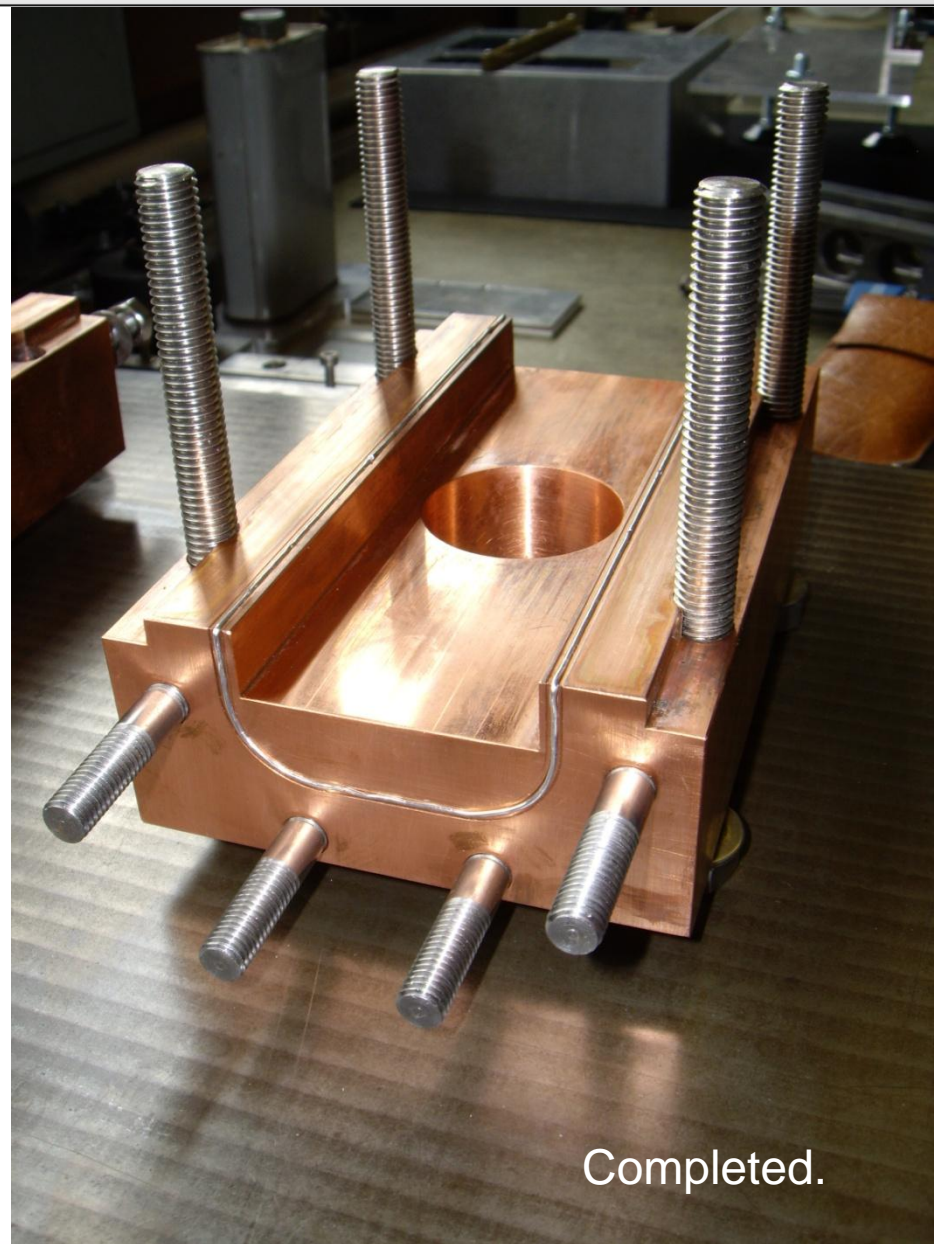


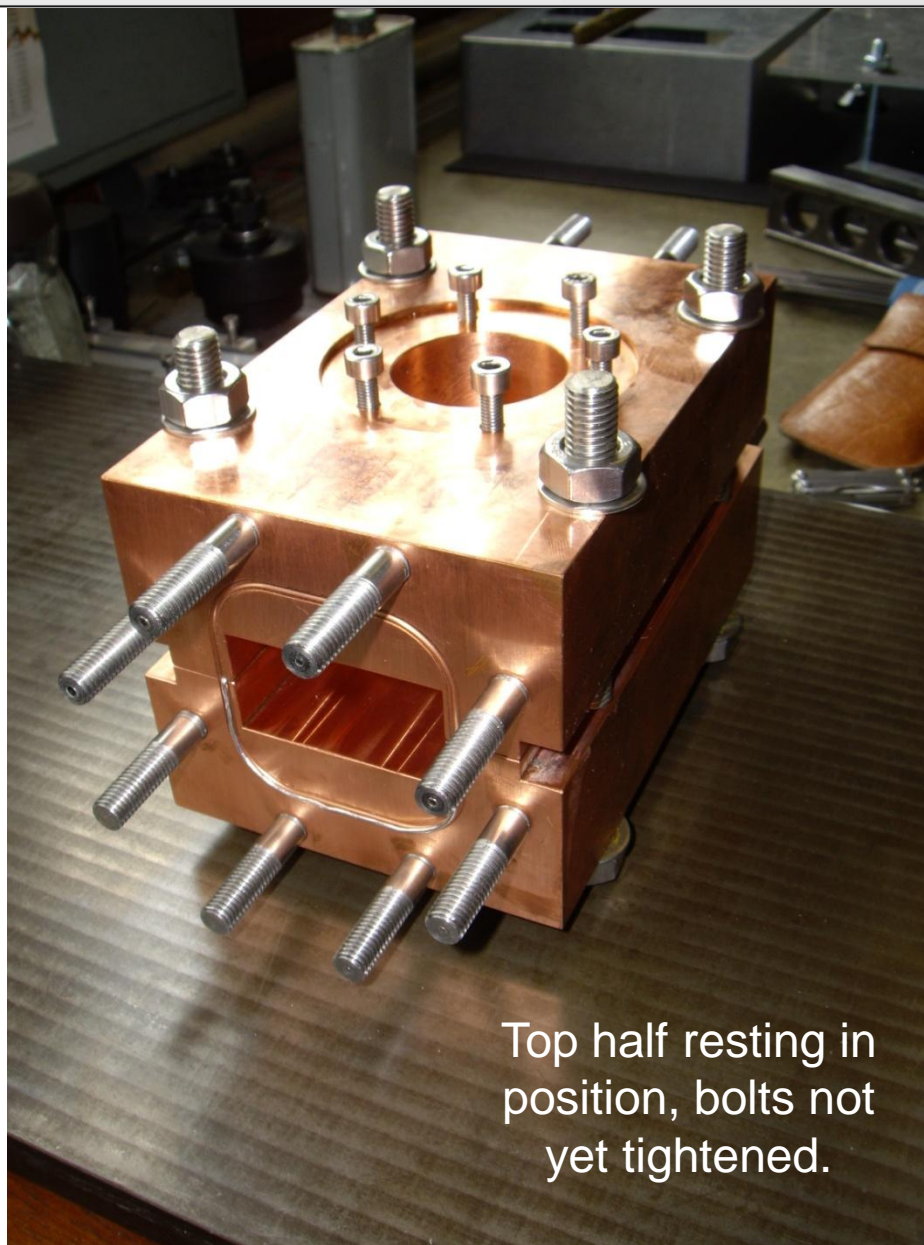
One half has a groove into which the Indium sits for the longitudinal joins and at both end faces.



The other half has  
grooves machined  
on the ends only.

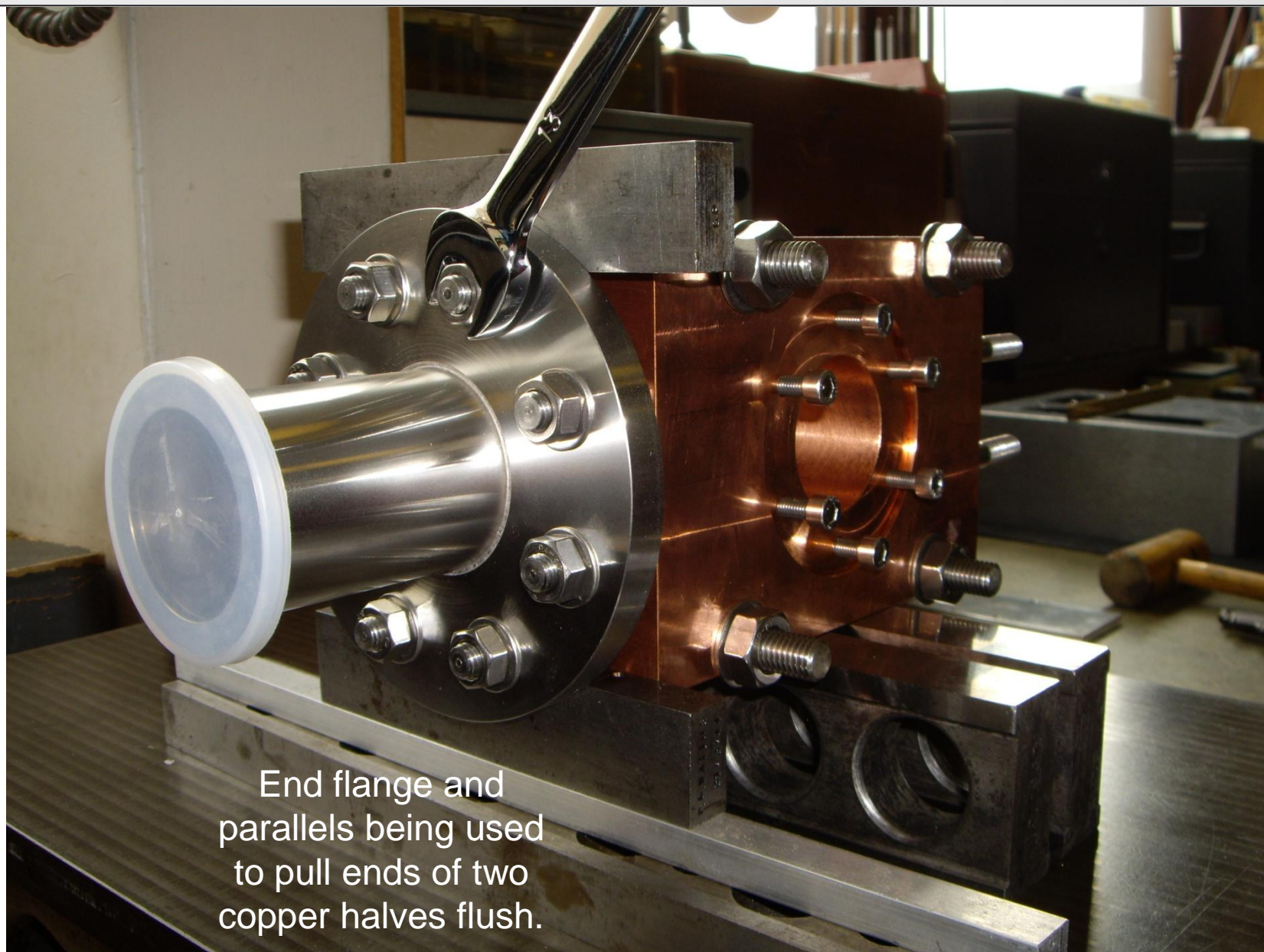






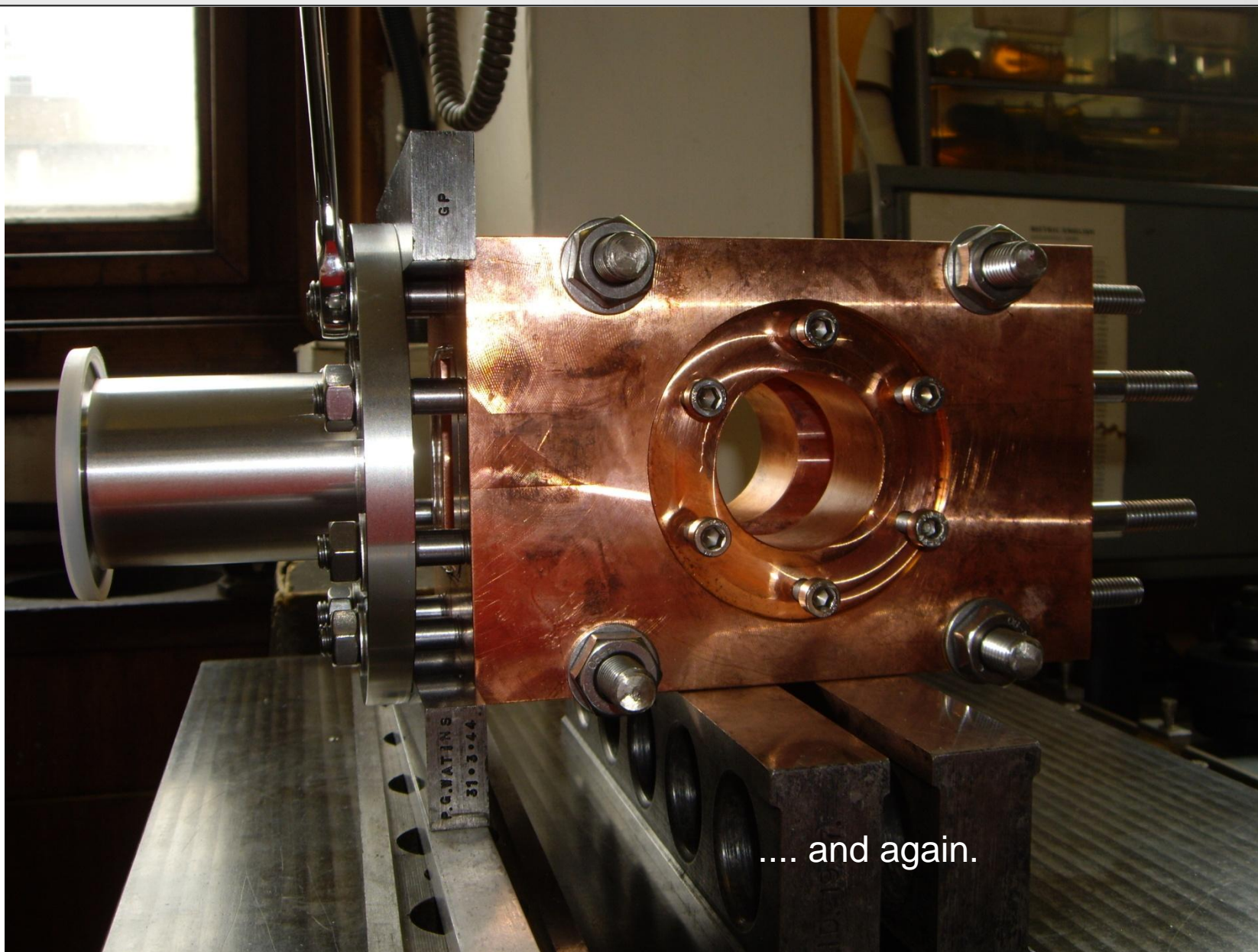
Top half resting in  
position, bolts not  
yet tightened.





End flange and  
parallels being used  
to pull ends of two  
copper halves flush.

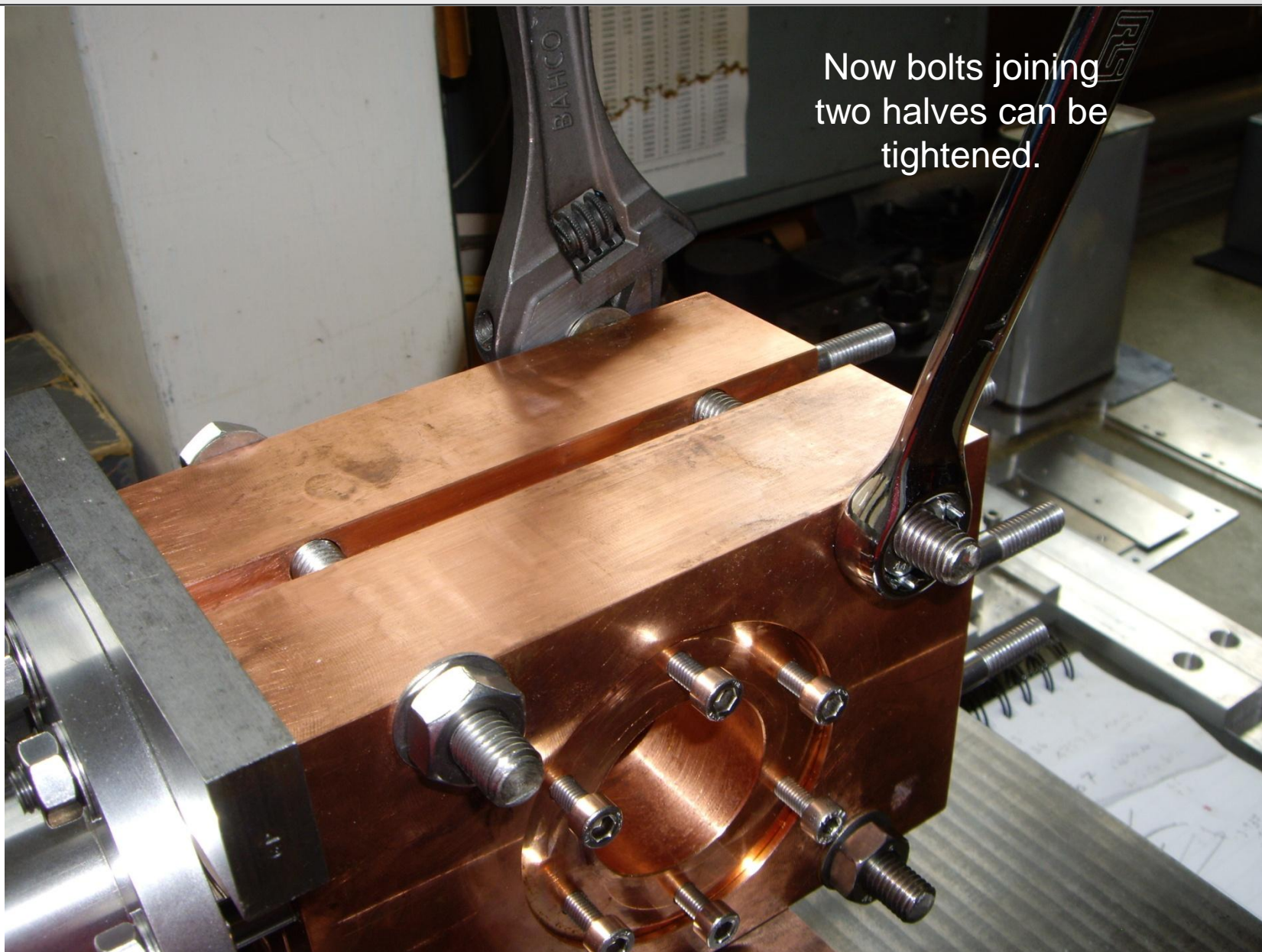








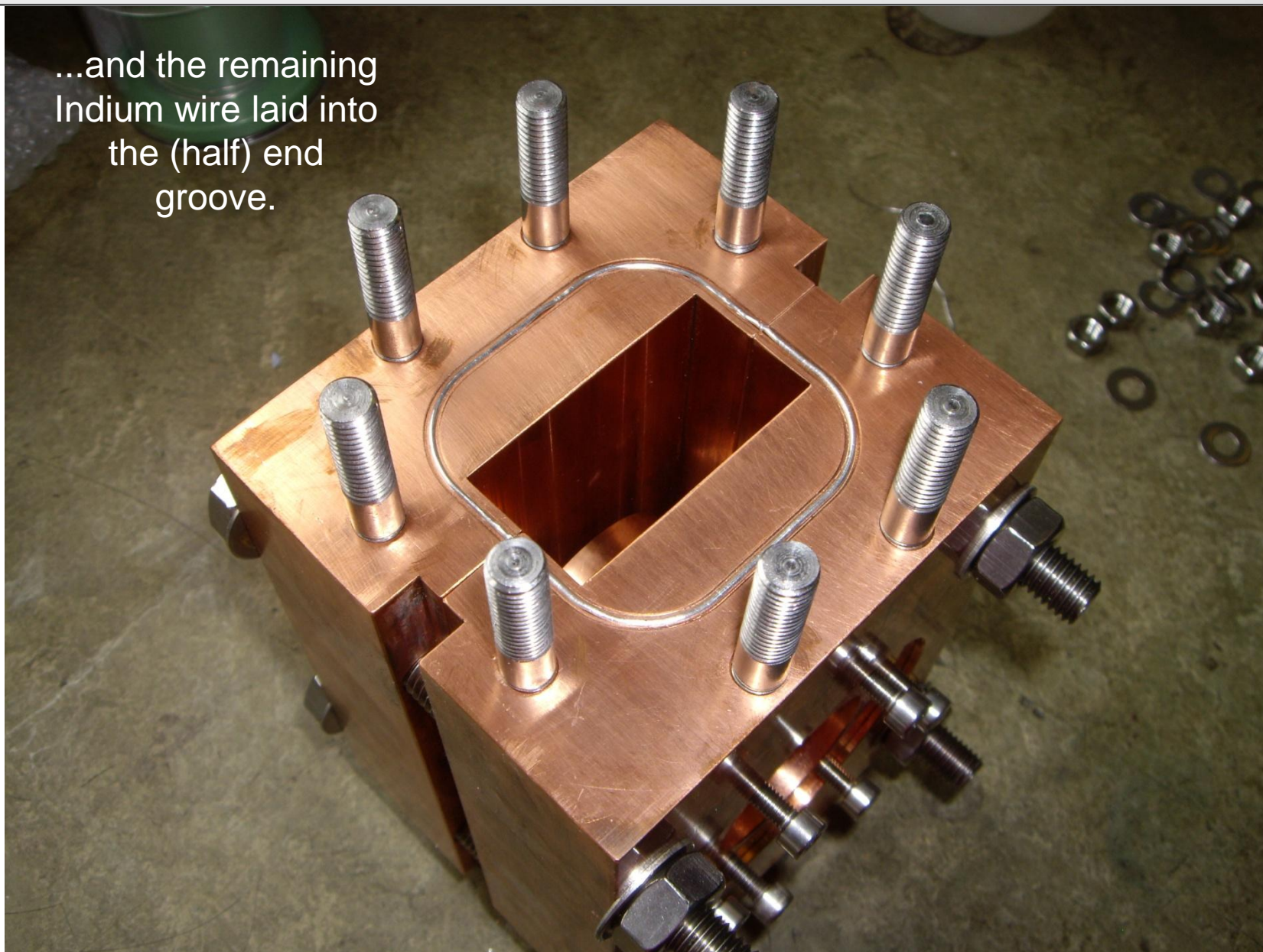
Now bolts joining  
two halves can be  
tightened.







...and the remaining  
Indium wire laid into  
the (half) end  
groove.



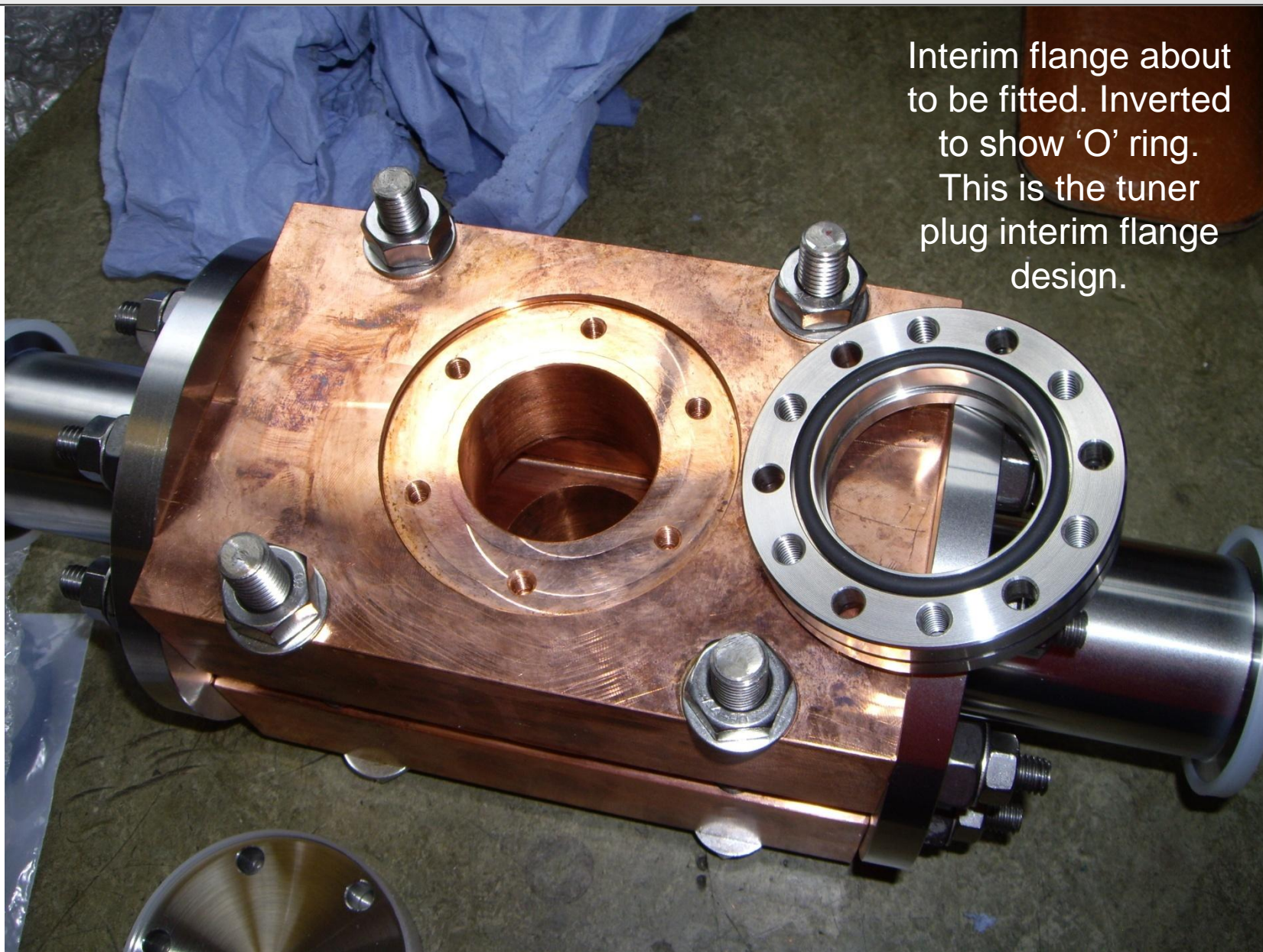




End flange is fitted  
and tightened.



Interim flange about  
to be fitted. Inverted  
to show 'O' ring.  
This is the tuner  
plug interim flange  
design.







Interim flange fitted  
showing DN40CF  
seal.

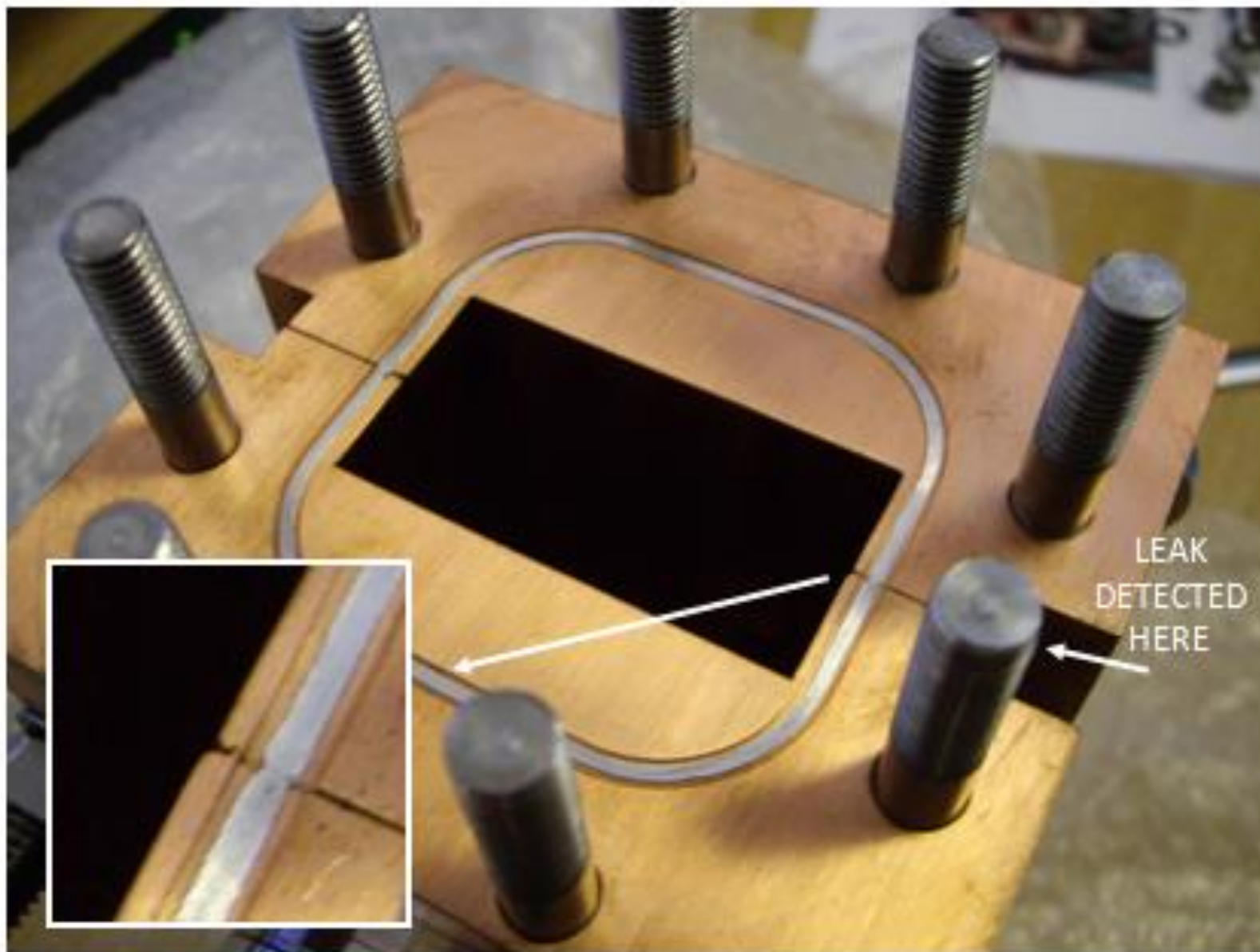




All flanges fitted.  
Ready for vacuum  
test.

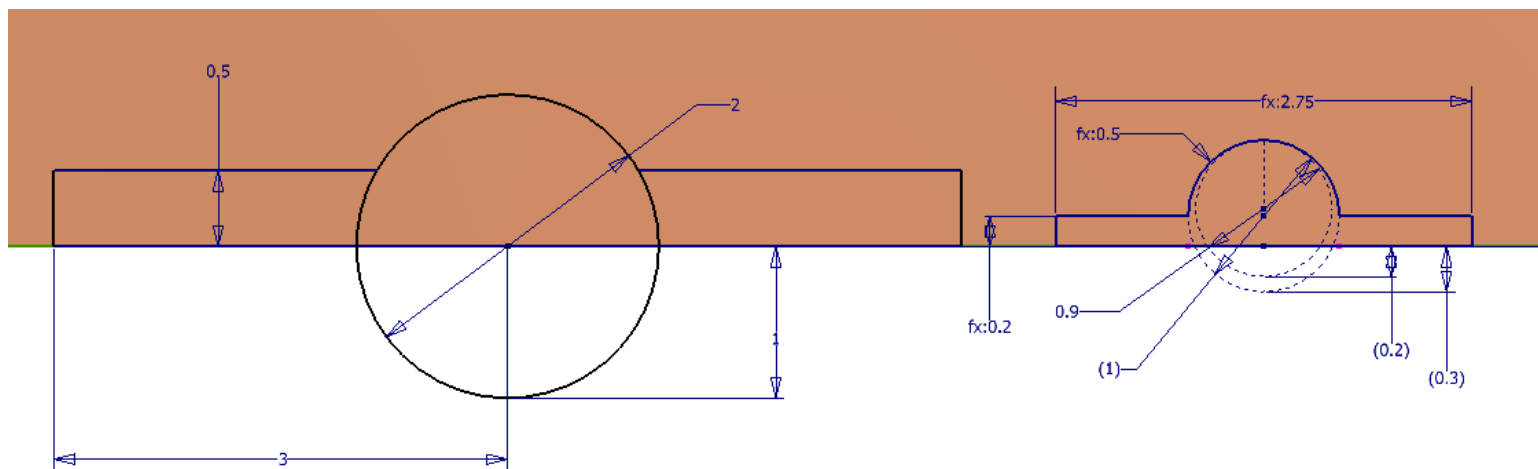








## Groove profiles for diameter 2mm & 1mm wire



### Indium Wire

**Wire Tolerances:** Usually better than  $\pm 5\%$  on nominal diameter.

1950 (2)

2.0 mm (diameter). Purity 99.99+%.

Catalogue item no	Weight/m (g)	Length	Price in Pounds sterling	Add to order/quote
IN522607	"	0.5m	£111.00	
IN522609	22.94	1m	£171.00	
IN522610	"	2m	£292.00	
IN522611	"	5m	£609.00	
IN522616	"	10.9m	£1,065.00	

Typical analysis ppm: Sn 0.5, Pb 2, Cu < 0.5, Fe 1, Ni 4, Bi 0.5, Cd < 0.5, Ag < 0.5, Ga < 0.5, Tl 1.



