

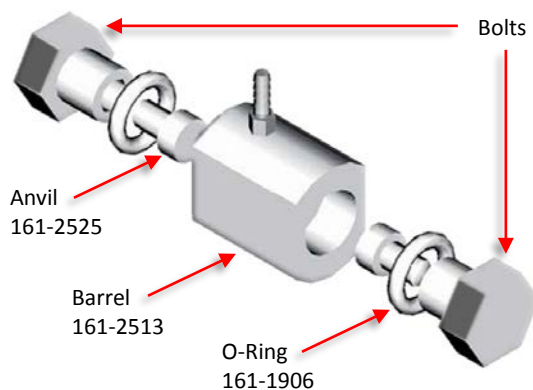
# Evacuatable KBr Bolt Press

## Part Number 161-2500

### INSTRUCTIONS



The KBr Bolt Press is an economical device for preparing KBr pellets. It consists of a threaded stainless steel barrel with two hardened and polished 13 mm anvils and matching bolts. The barrel is also equipped with a fitting which allows evacuation of air while the pellet is formed. The pressure is applied to the sample by tightening the bolts against each other using 15/16" wrenches. Once a clear pellet is formed, the bolts are removed and the sample is analyzed while still in the barrel (the barrel is placed directly in the beam on the special sample holder with a standard 2"x 3" slide mount). The accessory allows formation of 13 mm pellets.



### PROCEDURE

1. Insert one of the bolts in the barrel and rotate it all the way until the O-ring comes in contact with the barrel surface.
2. Flip the press vertically and place it on a flat surface using the screwed bolt head as a base.
3. Drop one of the anvils into the press cavity.
4. Place approximately 100 mg of the ground sample/KBr mix in the barrel, on top of the anvil.
5. Spread the sample evenly by gently tapping the walls of the press.
6. Drop the second anvil into the barrel and insert the top bolt. Turn it all the way down until finger tight.
7. If required, draw a vacuum on the die for 1 to 2 minutes to remove air.
8. Place the enclosed wrenches on both bolts approximately 30° apart (scissor-like position). Bring the wrench handles together. Repeat 2 to 3 times, until tight (if available, the bottom bolt can be placed in a vise for this procedure).
9. Apply pressure for approximately 1 to 2 minutes. Disconnect the vacuum line if used.
10. Release the bolts. To do so place one wrench on the bench and insert the bolt press into its grip. Position the other wrench at the 90° angle and pull gently until the bolts release. Remove anvils.
11. Mount the press holder in the spectrometer's sample compartment and position the barrel with the KBr pellet on the holder for analysis.
12. When done, carefully punch the pellet out with a nut driver and dissolve any residues in distilled water. Rinse the press with acetone and dry with compressed air. Store in a desiccated environment.

### PACKING LIST

Part No.	Description	Qty
161-2513	Evacuatable Barrel	1
161-2525	Anvils (set of 2)	1
161-1906	Bolt O-Rings	2
161-2511	15/16" Wrenches	2
161-2520	Bolt Press Holder	1

**SAMPLE GRINDING TIPS:** Use a mortar and pestle or a PIKE ShakIR Sample Grinder to achieve best results. Grind using a mortar and pestle using a circular motion until the sample and KBr are fully homogenous. With the ShakIR you can produce an excellent fine powdered mixture in about 10 seconds time.

### OTHER PIKE PRODUCTS AVAILABLE

For KBr Pellet Preparation/Sampling

Part No.	Description
161-5050	Agate Mortar and Pestle, 50 mm
160-8010	KBr Powder, 100 g
162-5300	Magnetic Pellet Holder
162-5410	Card Pellet Holders (10 pcs)
161-1070	ShakIR, Heavy Duty Sample Grinder
161-1035	Stainless Steel Vial with Ball for ShakIR