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	INSTRUMENT: KBr PELLET PRESS	PAGE NO.: 01-02
	MAKE: Technosearch MODEL: M-15 PROCURED ON: 12-12-2009	EFFECTIVE DATE: 01/01/2022
	SUBJECT: SOP FOR KBr PELLET PRESS	REVIEW PERIOD: 31/12/2022

Objective:

The following document describes the standard operating procedure KBr pellet press

Scope:

KBr pellet press used for making KBr pellets/films of solid samples used in IR spectrophotometer. The press is capable of producing maximum pressure upto 15 tons. It is compact in construction & occupies very little bench space. Acrylic screens are provided for the safety of the operator. The base plate has a provision for bench mounting. A pressure gauge for indication of pressure release valve is provided. A telescopic handle is used for extra leverage. KBr Press Model MP-15, fixing bolts for table mounting.

Procedure:

1. The user must be properly trained before using the pellet press.
2. Always check for damage or broken parts and oil leak before using the press.
3. Press the prepared die into the pellet press. If the platform is too high, loosen the knob (i.e. turn it counterclockwise) located on the front of the press. Do not loosen this all the way or it will fall out and spill a quart of hydraulic oil on the bench. CAUTION Align the apparatus in the exact middle of the press, with the top of the dies centered under the metal knob that project downward from the top plate of the press.
4. Double check that the die assembly is centered and that the knob on the front of the press is firmly closed (do not overtighten). Pump the handle to raise the lower platform. There is a movable black line on the pressure dial -- this is a high-pressure cutout. Pump the

press and let your pellet sit at that pressure for a minute or two. Use extreme caution when pressing pellets. If the die is misaligned, it could shoot across the room with enough force to injure someone.

5. When you are done, loosen the front knob to release the pressure and lower the platform. If it doesn't move on its own then press down on the platform gently. Retighten the knob.
6. Remove the die containing your pellet and the piston. Turn it upside down. Find the cylindrical aluminum piece and place this on top. Put the whole assembly back into the press and pump the handle to force the pellet out (this should not generate appreciable pressure on the die). Be sure to hold onto the body of the die as you do this or your pellet could fall out unexpectedly.
7. Use cotton-tipped applicators and/or KimWipes to clean all residues from the die components. Do not use acid. Avoid scraping and scratching which could damage the die walls or faces.

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