

Apex 400 Hydraulic Press

Quick Set Up Guide



To begin, make sure the Apex 400 set up correctly and the entire manual is available. You can scan the QR code to access our detailed guide or following the link: <https://specac.com/apex-400-manual>

Dimensions: W 462 mm x D 346 mm x H 573 mm (W 18.2" x D 13.6" x H 22.5")



CAUTION! The Apex 400 press weighs **120kg**, so care must be taken to transport it correctly. Please keep all press packing materials for future transportation, if needed. This will protect you and the press from accident or injury

1

Unpacking and installation:

The Apex 400 press is shipped in a wooden crate with a special pallet base.

- Loosen the screws and lift away the top and sides of the crate.
- Locate the lifting "eye bolt (p1)" which is affixed to the bottom of the pallet and screw it into the hole on the top of the press.
- After removing the top and sides of the crate, use a crane or hoist fitted with a lifting hook to lift the press from the pallet (p2). For example, an Engine Hoist or Powered hand truck can be used. Either transfer directly to the workbench or onto a scissor lift trolley for transportation to the work site.



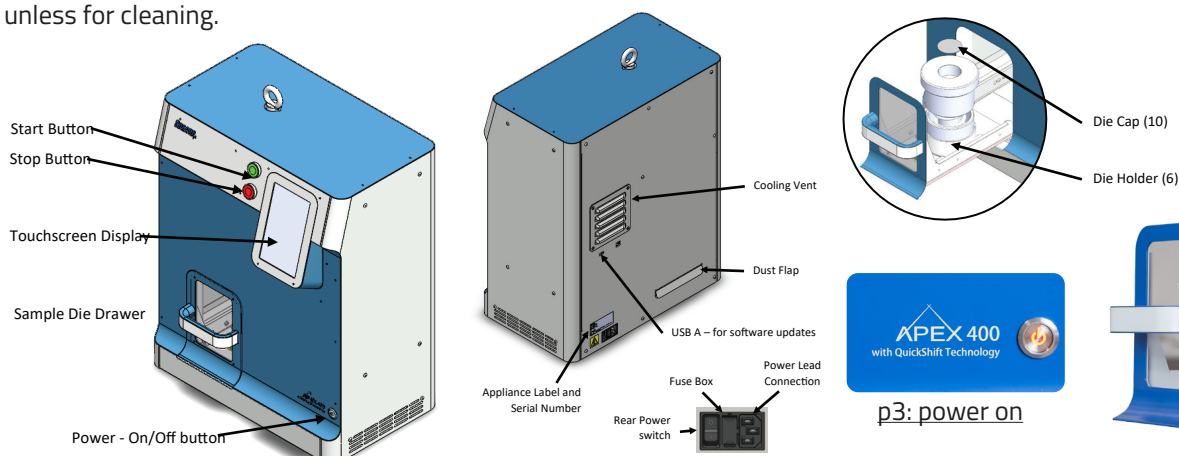
CAUTION: DO NOT ATTEMPT TO LIFT THE PRESS BY ANY OTHER METHOD. DO NOT USE A PIPE OR BAR THROUGH THE LIFTING EYE. DO NOT USE THE HANDLE ON THE FRONT TO LIFT THE PRESS.

- The press should be installed on a stable and level bench worktop, with a minimum thickness of 25mm. An ordinary electrical consumer outlet is required nearby to provide power to the press.

2

Initial Setup

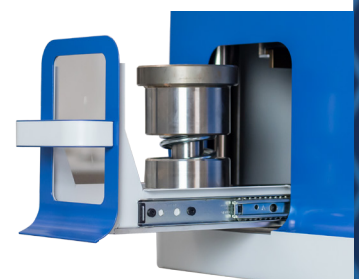
- Connect the supplier mains lead and flip the switch on the rear to its "on" position - red ring on the power button (p3).
- Then press the power on/off button on the lower right of the front panel to power up the press.
- Open the drawer and insert the pellet die (p4). The pellet die can be stored inside the press and does not need to be removed unless for cleaning.



p4: pellet die

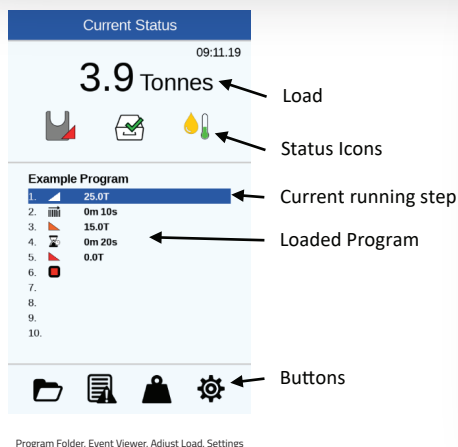
APEX 400
with QuickShift Technology

p3: power on



Initial Setup (continued)

- From start up the display will load the Main Operation Screen. The last used program will be loaded ready for use.
- Note: On first start up or if the power has been lost the press may ask for the current time to be set. This can be set or cancelled. Directions to correct are in the User Manual.
- The display will load the Main Operation Screen. The last used program will be loaded ready for use.
- At initial start-up a typical operating screen will be presented as shown below.



Main Operating Screen – Status Icons	
	Status Icon - The Pressure Plate is in the Sample Loading state
	Status Icon - The Pressure Plate is in the Sample Release/Eject state
	Status Icon - The Pressure Plate is moving or in transitory state
	Status Icon - Drawer is Open or Closed – The press will only run with the drawer closed
	Status Icon - Indicates if the oil temperature is OK.

Note: If the drawer is open, the drawer symbol will be shown with a red exclamation mark. This means that all power to the motor has been cut to prevent any accidental operation.



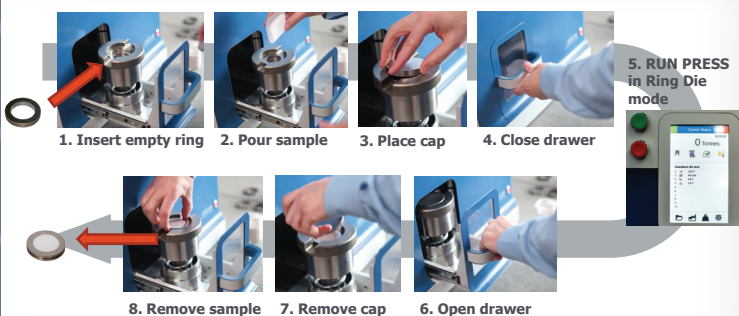
Start Pressing Sample

- Obtain the sample and the correct Die. Make sure it is the correct size and set up correctly.
- Open the drawer (image above) and place into support ring as shows above. The dies supplied by Specac with the press are designed specifically for this drawer and have the correct height to be used with the press. Contact Specac before using any other die.
- Place powder sample into the die cavity and fit the die top cap. Make sure the top cap is fitted securely. Recommended mass examples, please refer to table **Recommended masses of sample and load**
- Close the drawer.
- Once the sample is correctly positioned and drawer is closed, a program can be run. Please remember there is a maximum piston travel of 38mm, and the press motor and pump will automatically stop when this travel limit is reached.
- Please view "Operation" section of the Apex 400 Manual for the additional steps needed to run this sample

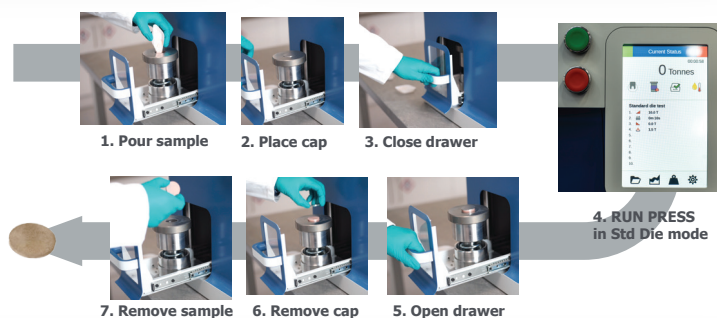
Recommended masses of sample and load

Sample:	Rock	Food
Ø 32 mm die	7 g	3 g
Ø 35 mm die	8 g	4 g
Ø 40 mm die	10 g	5 g
Starting Load:	200 kN	40 kN

Run the press with Ring Die



Run the press with Standard die



The Apex 400 press can apply a load by running program which can be loaded from the **Directory**. The press is configured with a couple of starter programs, but more can be added by the user.

When using a program, the 1st load to be applied can be quickly edited from the main screen by touching the **Adjust Load** symbol of the Display Screen and then applied when the start button is pressed. A load between 40 kN to 400 kN can be set. For first time use test the operation by running at 40kN.

Note: If you experience any technical issues with the press, please refer first to the **Troubleshooting guide** section of the User Instruction Manual for possible causes and remedies.