XPS Portable transport Suitcase concise directions.

(ATM pressure version)

1/2021

**Be careful with the valves, Figure 2, where the TS gets attached. Opening these valve when the LL is under vacuum will crash the LL.**

(1) Remember:
   a. Keep the TS capped.
   b. The puck mounts to the TS using the bottom grove.
   c. Handle TS with valve actuator at 12 o'clock.
(2) Place the TS into your inert atmospher box.
(3) Open the TS's and extend the claw.
(4) Mount the puck on the TS claw using **bottom** groove.
(5) Lock the magnet on TS.
(6) Hold the suitcase arm with the VAT label on the valve is oriented up.
(7) At the Kratos, check that the pressure in the STC is < $10^{-8}$ Torr and the LL is < $10^{-7}$Torr.
(8) Attaching the TS to the Transport KF Flange.
   a. The valve actuator should face up.
   b. The clamp for the KF facing down
(9) Vent the LL turbo pump.
(10) Wait till the LL is completely up to atmosphere.
(11) Open gate between LL and TS. Keep gate on the TS closed.
(12) Pump down the LL.
*(13) Put sign on the LL turbo.*
(14) Wait until turbo reaches full speed and pressure is <$10^{-4}$ Torr.
(15) Vent LL.
(16) With the LL still under a slight vacuum, restart LL turbo and open valve on the TS.
(17) Wait until LL pressure is <$10^{-6}$ Torr, takes about 1h.
(18) Unlock TS magnet and extend TS arm into LL.
(19) Transfer your sample from TS claw onto LL claw.
(20) Retract TS arm back into TS, lock the magnet, and close the TS valve,4.
(21) Close valve to the LL.
(22) When pressure in LL is < $10^{-6-}$ Torr insert the sample into the STC.
(23) Close valve from LL to the STM.
(24) If you have not waited more that an hour.
(25) Open valve the TS valve.
(26) Open the valve from the LL to the TS.
(27) Vent the LL.
(28) When up to 1 atmosphere close valves from LL to TS and on the TS.
(29) Remove the TS from the KF Flange port.
(30) Attach the KF flange blank to the KF port.
(31) Restart the LL turbo.