



Using a Pressure Chamber To Create Bubble-Free Castings

CAUTION: EXPLOSION RISK

Maximum working pressure is 80 psi (5.5 bar). Do not exceed. The safety relief valve is designed to protect the tank against excessive pressure. DO NOT attempt to make any adjustments to this valve. If the valve begins to vent air pressure, reduce the setting on the inlet regulator. DO NOT alter the tank in any way by welding, drilling or machining as this may weaken the structure of the tank. Be sure the tank pressure is completely relieved before attempting to remove the tank cover. Shut off the main air supply to the tank and vent the pressure using the tank vent valve located on the tank cover.

Using the Pressure Chamber on Wheels in a Vertical Position



Unpack the pressure pot, the wheel assemblies and the bracket hardware.



Attach the four wheel assemblies and secure tightly with a wrench.



Pressure chamber is fully assembled and ready to go.



Place a filled mold inside the pressure chamber



Place the lid on the pressure chamber and tighten the wing nuts.



Be sure to secure the lid properly by tightening the wing nuts in tandem diagonally for best results.



Attach an air supply hose. The regulator is preset at recommended 60 psi.



Flip the air control valve lever from the down position to the up position to release the air flow into the pressure chamber. Air will flow at 60 psi.



While the pressure pot's limit is 80 psi, it's not recommended to exceed 60 psi.

Close the air control valve by placing the valve in the down position.



The air hose can then be removed and the chamber will retain its pressure.



Keep the material under pressure for a duration at least equal to its demold time. Then release the air pressure valve.



When the demold time is up, remove the mold from the pressure chamber.



The result is a bubble-free casting that is identical to the original model.

Using the Pressure Chamber on Its Side in a Horizontal Position



1 Unpack the pressure chamber and all its contents.



2 Use the enclosed hardware to attach the two brackets to the chamber.



3 The chamber should be positioned so it extends slightly out over the table edge.



4 Use the self-starting screws to secure the chamber to the table top.



5 The pot is in working position and almost ready for pressure casting.



6 Make sure the chamber is level from front to back.



7 Place a board to use as a level surface inside the pressure chamber.



8 Place the resin-filled mold inside the pressure pot on the level board.



9 Position the lid on the pressure chamber.



10 Use your body to hold the lid in place as you tighten the wing nuts.



11 Attach a pressure hose and follow steps 9 through 13 on the previous page.

Caution: Although the pressure chamber is rated at 80 psi, it is not necessary to exceed 60 psi when casting. The air pressure valve is preset to 60 psi. Read and observe all safety precautions.

Reynolds Advanced Materials

BOSTON

45 Electric Ave.
Brighton, MA 02135
800-481-9246

CHICAGO

5346 East Avenue
Countryside, IL 60525
800-477-4457

DALLAS

2131 S. Harwood St,
Dallas, TX 75215
800-421-4378

HOLLYWOOD

10856 Vanowen St.
North Hollywood, CA 91605
800-348-4349

ORLANDO

1339 Bennett Dr. Suite 145
Longwood, FL 32750
800-328-8786



www.reynoldsam.com