Planning Your Grout Pour

Grout is used to completely support the bottom surface of baseplates and machine bases. Attempting to pour the grout flush with the bottom of the baseplate will undermine that objective.

Attempting such a pour using an expansion style cementitious grout, such as Unisorb V-1 Premium Non-Shrink Grout, opens the possibility of pouring the grout short of the bottom elevation. It also invites the possibility that air pockets may form as the top surface of the grout rises to meet the bottom surface of the baseplate.

Epoxy grouts pose an additional challenge as all epoxy grouts experience some volume loss during the curing process. Even if a skilled contractor can pour the grout exactly even with the bottom of the baseplate, the curing process will reduce the grout volume so that it will pull away from that bottom surface.

Purposefully pouring the grout so that the top surface of the grout is well above the bottom surface of the baseplate solves this problem. The ideal pour uses the following steps.

1 **Install temporary grout forms around the baseplate** — The top of the forms must be well above the targeted grout pour elevation of the baseplate and sealed to prevent leaks and ultimately grout loss.

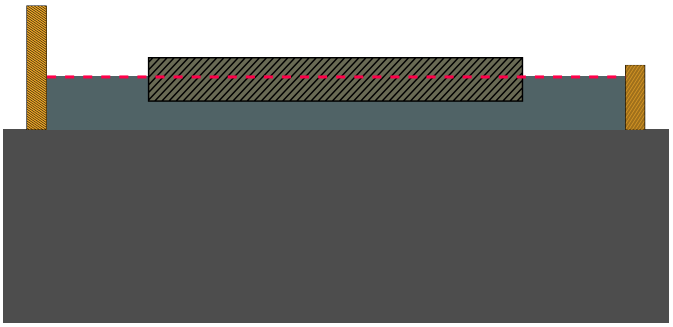
2 **Create a headbox or build the forms significantly taller where the grout will be poured** — Grout should only be poured from one side and allowed to flow to the other. Never pour from both sides of a baseplate as this will cause entrapped air.

3 **Mix the grout per the manufacturer's instructions** — Ensure that you have enough mixing capacity to keep the headbox and/or pour-side forms full throughout the placement of grout.

4 **Pour the grout into the headbox or pour-side forms** — Keep them full so that the leading edge of grout wipes the bottom of baseplate and displaces the air out of the opposite side.

Pro tip! Always pour the grout so that it flows across the smallest distance available.

5 **Pour until the grout has passed fully under the baseplate and is moving up the opposite side.**



6 **Grout may require agitation** — Depending on the grout being used and the size of the baseplate, additional agitation may be needed to help the grout flow under the baseplate. Additional agitation may be applied to assist the grout in flowing into position.

Large grout pours can pose additional challenges during mixing and placement. Prior planning is crucial to success. Do not hesitate to contact Unisorb if there are any questions about the successful completion of your project.