tatapack

FILLING & SCREW ADAPTATION

Your formula. Your fill weight.

A practical guide to water-based capacity, filling trials and screw adaptation.

Tatapack uses water as the reference for nominal filling capacity. Your formula may have a different density, so its net fill weight can differ in the same container.



ADM75 / actual CAD exterior

Confirm your target net weight with your own formula and filling process before finalizing the screw configuration.

SAME TARGET WEIGHT. DIFFERENT VOLUMES.

Illustration: a 60 g target, using three hypothetical densities.

0.80
g/mL

75 mL
Required volume

1.00
g/mL

60 mL
Required volume

1.20
g/mL

50 mL
Required volume

Mathematical examples only. These values are not ADM75 capacity specifications or verified formula data.

Net weight (g) = density (g/mL) x filled volume (mL)

Understand the difference.

Start with volume and density, then verify the result on your filling line.

Capacity is a volume reference

A water-based capacity does not directly specify the grams of every formula. Check the reference filling condition for the selected container; a model name alone is not a formula-specific net-weight guarantee.

Density changes the required space

At the same target weight, a lower-density formula needs more volume. A higher-density formula needs less. Density should correspond to the filling conditions; viscosity (how easily it flows) is a separate property.

Trial filling checks the real result

Air, filling temperature and cooling or setting can affect the fill level. A calculation helps planning; actual filling and conditioning establish the usable result for your formula.

RUN YOUR OWN FILLING TRIAL

01 / Define and weigh	Confirm the target net weight and sample configuration. Record tare and gross weight with the same packaging parts included in both weighings.
02 / Fill and condition	Use your own formula, intended filling direction, filling temperature and cooling or setting process. Follow the supplied sample assembly method.
03 / Inspect and operate	Record the conditioned fill level and actual net weight. Check closure, leakage, voids, smooth extension and retraction using multiple trial samples.

Actual net weight = gross weight - tare weight. Water is a capacity reference; use your formula for the filling and function trial.

Check the hub.
Record the height.

For the bottom-fill reference shown here, the formula needs to cover the top face of the central screw hub.



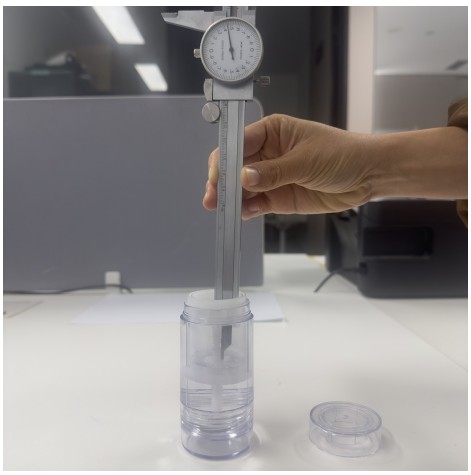
Reference sample / trial fill position



Reference sample / central hub top face

A necessary fill check

For this reference configuration, the set formula should extend past the hub's upper face and engage the intended anchoring structure. Verify extension and retraction with the actual formula.



Measure H from a defined datum

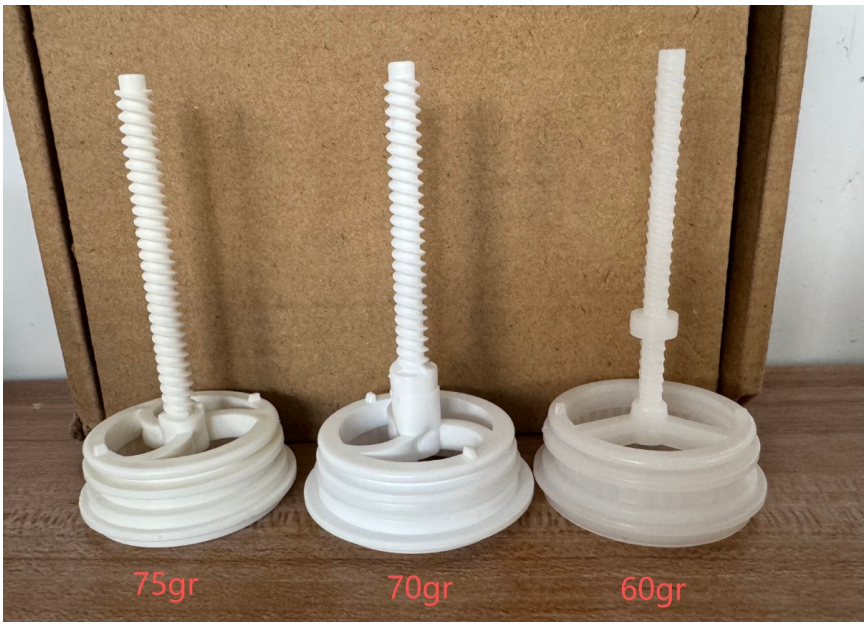
Measure the distance from the bottom-opening reference plane to the top face of the central screw hub, as shown in the caliper photo. Keep the sample orientation and component configuration consistent.

Send a clear photo of both contact points and the reading. The photograph is a method reference; no dimension is prescribed here.

Reference photos illustrate the method and may show a different sample configuration from the ADM75 CAD exterior.

Match the screw to the trial result.

Screw and central-hub geometry may need adaptation to the target fill level. Tatapack reviews the trial evidence before proposing a sample configuration.



Reference screw options / different central-hub heights

The 75gr / 70gr / 60gr marks belong to the photographed reference samples. They are not universal filling weights for other formulas.

Trial data › **Geometry review** › **Sample re-test**

PLEASE SEND THESE TRIAL RESULTS

Target & result	Target net weight, measured net weight, formula identification and sample configuration.
Process	Filling direction, filling temperature, density if measured, and cooling or setting conditions.
Photos & dimension	Fill position after conditioning, hub coverage, H value and a caliper photo with the reference planes visible.
Function	A short extension/retraction video; note voids, shrinkage, leakage or assembly issues.

Repeat the filling and function trial with the proposed screw sample before confirming the final specification.