



Topworks Plastic Mold

Plastic Preform Molding

Troubleshooting

faults	causes	solutions
bottom whitening of PET preform	too low temperature of nozzle of hot runner too low temperature of plastic material	improve the insulation increase the nozzle temperature increase the material temperature increase the injection speed lower the packing pressure lower down the cooling water speed
Opaque pet preform body	poor material drying insufficient material plasticization too thick wall and poor cooling foreign material mixed too low material temperature	ensure 4+ hrs drying increase material temperature increase the rotation speed of screw verify the drying temperature and shot volume, drying temperature 165 °C and moisture<0.02% improve the cooling and make the wall thinner
Pet preform from transparency to Opaque	too high ejection temperature	imrpove cooling prelong the cooling time change injection time
haze on the one side of the preform	too high hold pressure eccentric gate	lower the hold pressure fix the PET preform mold
sliver streaking or yellowing of PET preform	plastic decomposition	lower drying temperature and prelong drying time change the injection speed lower the material temperature lower nozzle temperature
voids in Pet preform	insufficient drying	improve the drying increase the material temperature lower the rotation speed of the screw
uneven ring groove on the inner wall	vapor condensation in the core and cavity	improve the workshop drying increase the cooling water temperature drain the PET preform mold
	misalignment of hotrunner nozzle and gate	fix the PET preform mold

breakage on the gate of the PET preform	undercut on the gate gate too hot	fix the gate prolong the cooling time increase the injection speed or prolong the injection time improve the insulation of the gate
short fill or welt line on the neck of PET preform	poor venting eccentric gate position	enlarge the venting groove clean the screw neck lower the injection speed fix the gate
uneven wall thickness of PET preform	poor quality of PET preform mold eccentric gate orifice too high injection pressure eccentric core	fix the PET preform mold increase the material temperature lower down the pressure improve the accuracy and use adjustable core and cavity
surface dent of the PET preform	too high material temperature too short injection time too short hold time too quick injection speed insufficient cooling	lower the material temperature prolong the injection time increase the hold pressure lower the injection speed increase the cooling water pressure
nozzle drooling	poor insulation insufficient cooling too much pressure on the melt poor non-return on screw head too low hold pressure	secure the gate insulation improve the cooling clean the screw increase the hold pressure
PET preform bend after ejection	eccentric gate orifice uneven cooling	fix the PET preform mold; lower hold pressure increase the injection speed; prolong the cooling time clean the cooling line; increase the cooling water pressure
PET preform bend after heating	eccentric core eccentric temperature adjust orifice uneven density of PET preform	fix the PET preform mold fix temperature adjust base lower the temperature, especially on the bend section.
PET preform local whitening	insufficient PET preform heating temperature	increase the PET preform heating temperature and even the all body temperature

PET preform whitening after temperature adjust	too high temperature	assure PET preform 80 °C and PP 110 °C
insufficient expanding of PET preform	insufficient air pressure insufficient heating temperature injection fault of PET preform	increase the air pressure and air increase the temperature of the PET preform verify the PET preform even soften by 100 °C water
crack of the preform bottom	too high preform bottom temperature too low preform temperature severe decomposition	adjust the preform temperature check and change the preform and material,improve the drying
PET preform eccentricity	too early blowing too high air pressure misalignment of blow pin the bottle bottom severe eccentricity too low speed of blow pin distance between blow pin and bottle bottom over 1.5mm too high PET preform bottom temperature	delay the blowing time lower down the air pressure check and fix the installment check the PET preform adjust the air cylinder pressure adjust the distance between blow pin and bottle bottom to be 1.5mm or smaller lower the preform bottom heating temperature
preform body insufficient extending on the vertical direction	too high heating temperature local cold slug insufficient air pressure and air volume poor venting of blow mold too high blow mold temperature;too thin wall bottle insufficient vertical draw ratio	adjust the PET preform temperature increase the air pressure and air improve the blow mold venting; improve the blow mold cooling fix the blow mold increase the vertical draw ratio
bottle circumferential uneven wall thickness	PET preform eccentricity uneven heating temperature poor venting	fix the PET preform mold improve the heating apparatus lower the problem section temperature improve the venting
protrusion on the bottom	low temperature of PET preform bottom	blow earlier and adjust the heating temperature
bottle local whitening after blowing	local insufficient heating temperature too much local draw ratio	increase the PET preform temperature check the design of PET preform

blowing	moisture in compressed air	improve the filtration of water and oil
bottle poor vertical loading	uneven wall thickness too high PET preform heating poor bottle profile	make the wall thickness uniform try low temperature and high pressure molding improve the design of bottle
bottle ease of broken after falling	unsufficient draw of bottom of preform decomposition after much heating	improve the draw raio of preform bottom improve the material drying before pet preform injection molding lower the blowing temperature
Pitting and whitening on the bottle body	unclean air too much moisture	install the air filter dehumidification of compressed air
too soft bottle body	poor design too high blowing temperature	improve the design try low temperature and high pressure blowing
burning and odour smell after blowing	too high blowing temperature poor quality of compressed air poor quality of material	lower the blowing temperature fix the air compressor and filter use the good quality material
The water taste changed after filling	too much aldehyde content bad quality material	low temperature of injection and blowing check the aldehyde content and expel bad material