Plateout

Plateout is a term used to describe a coating or buildup on the extruder screw or on the tooling. Such a buildup can decrease the throughput of the machine or impact the flow of material through the die. If the plateout is excessive, particles can flake off and plug the screen pack.

If plateout is suspected, check the following:

1. Has throughput of the extruder decreased?
2. Is the screen pack starting to plug frequently?

Possible causes of plateout and recommended solutions:

A. Feed zone temperature is too high.
   1. If, after pulling the screw, a buildup is noted in the feed zone, reduce the feed zone temperature 10-20°C.

B. Plateout may be the result of a coating on the resin or a contaminant.
   1. Examine the material. If a coating or contaminant is present, determine source.

C. Plateout on the foam extruder screw.
   1. If the blowing agent contains cyanuric acid, plateout will occur. Use a non-plateout (NP) version of blowing agent.
   2. Plateout may occur if there is excessive wear on the screw.