

Suggestions to Minimize Screw and Barrel Wear When Molding Glass Reinforced Materials

By Randy Conner, President of Concor Tool & Machine

First, run high rear zone temperatures to reduce resin drag in cylinder.

Second, use minimum screw rpm consistent with overall cycle. The 60 second cycle recovering in 3 seconds is a no-no.

Third, do not use any more back pressure than is absolutely necessary.

Fourth, regrind should be kept to less than 25% and make sure the size of the regrind is similar to the size of the virgin material.

Lastly, inspect check valve performance frequently. If unable to maintain pad (cushion) during injection, repair or replace check ring and seat immediately. Severe screw wear usually follows a leaking check valve condition. Experience has shown that when the non-return valve fails to function correctly, additional screw wear occurs; as the performance (wear) of the check valve worsens, so does the condition of the screw.