

CLEARANCE AND WEAR GUIDELINES

Probably the question we hear the most often is “At what point should I consider replacing or rebuilding my screw and barrel?” Our observation is that the answer to that question can vary drastically. We have seen some situations where .003 wear is unacceptable, and other situations where the customer continues to make parts when the flights were nearly worn completely off the screw.

In his book Polymer Extrusion, Chris Rauwendaal states “**Considering that the standard clearance is .001 D; a doubling of the standard clearance causes a reduction in melting rate of about 25 percent. A tripling of the standard clearance causes a reduction in melting rate of about 35 percent**”.

<u>0"-1" or</u>	<u>Up to 25mm</u>	<u>.004 - .0045 clearance</u>
<u>1"-1 1/4" or</u>	<u>25mm to 32mm</u>	<u>.004 - .005 clearance</u>
<u>1 1/4"-1 3/8" or</u>	<u>33mm to 35mm</u>	<u>.004 - .005 clearance</u>
<u>1 3/8"-1 5/8" or</u>	<u>36mm to 42mm</u>	<u>.005 - .006 clearance</u>
<u>1 5/8"-2" or</u>	<u>43mm to 49mm</u>	<u>.005 - .0065 clearance</u>
<u>2"-2 1/4" or</u>	<u>50mm to 57mm</u>	<u>.006 - .007 clearance</u>
<u>2 1/4"-3" or</u>	<u>58mm to 76mm</u>	<u>.007 - .008 clearance</u>
<u>3"-Over or</u>	<u>76mm to over</u>	<u>.008 - .009 clearance</u>