# Screw Maintenance


Screw maintenance
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What Is the Proper Way To Handle a Feedscrew?
Always remember the feedscrew is a precision machined component and should be handled with the same care as you would handle a mold or die. Always support the screw at several points across its entire length when installing and removing it from the machine. Never allow the screw to hang out of the barrel more than 2/3 of its length without supporting it. If the screw is allow to flex it could effect the straightness and cause difficulty in installation. Never force the screw into the barrel.

Installation procedure:
A properly machined screw should slide into the barrel with very little effort. If the screw does not slide into the barrel by hand remove it at once and check the following:

- Make sure the screw and barrel is clean and all the plastic is removed.
- Inspect the screw and barrel for any burrs and obstructions.
- Make sure the screw and barrel is straight within SPI specifications.
- Use a soft material such as wood or aluminum to push the screw into the barrel. Never use a hammer or fork truck to push the screw in. Remember, "When in Doubt - Pull it Out".

What is the best way to store a screw:
Screws that are not used for an extended period of time should be cleaned of all plastic material and sprayed with a rust inhibitor and wrapped in a protected paper. If possible always store the screw in its original box. The box should contain the following markings that are easily visible:

- Size and L/D ratio
- Machine # or I.D.
- Drawing # and supplier #

Information on the design, i.e., Conventional / Mixing screw / High performance screw
Screws should be stored horizontally on some type of rack system. They should be supported at least in two spots along its length. Never store the screw unprotected on the ground. This could result in damage to the screw.

What is the best way to clean a screw and barrel:
Always try to clean the screw and barrel while the plastic is hot. Use copper gauze and a soft wire brush to remove the plastic. Never use a hard wire brush to clean the screw or barrel. This could damage the high polish on the root of the screw and the I.D. of the barrel. Scotch Bright pads are not recommended for cleaning unprotected screws. This could scratch the screw surface and affect the performance. Remember, if you are generating sparks then the cleaning tools are too hard. If the screw is chrome plated never use a power wire brush. Even though the chrome plating is hard (60 Rc) it is only .001 thick. It is very easy to remove the chrome from the screw and effect the performance.

- Jeff Myers, Glycon

See also:

- Proper extruder installation insures optimum performance
- Removing screw elements from splined shafts
- Screw cleaning
- Screw cooling in extrusion
- Screw installation and removal

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