



# Steward Barrier Screws

Detailed performance data to assist decision-making and mitigate risk

## Form

We offer screws for every extrusion application:

- High Performance Barrier Screws
- Mixing Screws
- Metering Screws
- Two Stage Screws
- Compounding Screws
- Rubber/Silicone Screws

## Fit

Our screws fit any brand or model of extruder with:

- Four Key Tapered Shank
- Two Key Straight Shank
- Single Key Straight Shank
- Splined Shank

## Function

The Steward screws have a reputation as the premier screw design in the extrusion industry for good reason – they are designed to out-perform all others. Our Steward Barrier Screws are custom designed to:

- Maximize Output
- Improve Melt Homogeneity and Mixing Quality
- Minimize Pressure Fluctuations (Surging)
- Optimize Melt Temperature
- Improve Surface Appearance
- Widen the Process Window





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## Performance Assurance

With a very large data base of screws performing for thousands of customers in the field, we are able to offer proven screw designs for processing a wide variety of polymers. This experience and expertise enable us to provide screw performance assurance related to output rate, melt homogeneity, melt temperature, and drive torque required.

## For any polymer:

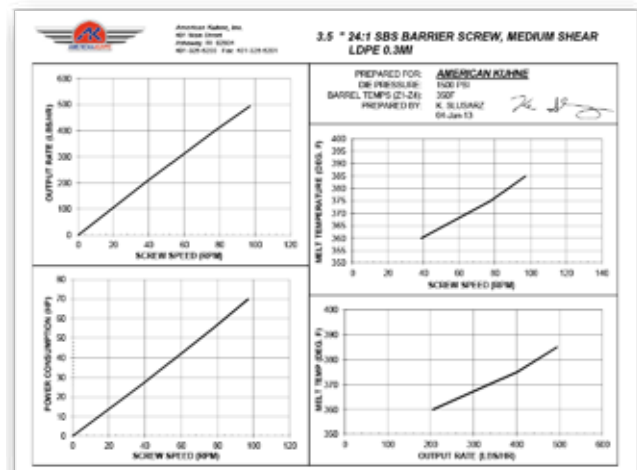
- |         |         |        |            |
|---------|---------|--------|------------|
| • LDPE  | • PBT   | • PVDF | • PET      |
| • FPVC  | • HDPE  | • PA   | • PFA      |
| • PMMA  | • ABS   | • PP   | • THV      |
| • TPE   | • EVOH  | • PU   | • PLA      |
| • MDPE  | • EVA   | • FEP  | • Rubber   |
| • PC    | • LLDPE | • MFA  | • Silicone |
| • PS    | • PET   | • RPVC | • ETFE     |
| • PEBAX | • PEEK  | • PLLA |            |

## In any process:

- |              |                |
|--------------|----------------|
| • Pipe       | • Wire & Cable |
| • Blown Film | • Blow Molding |
| • Profile    | • Wood         |
| • Cast Film  | • Composite    |
| • Tubing     | • Fiber        |
| • Extrusion  | • Sheet        |
| • Coating    | • Compounding  |
| • Melt Feed  | • Medical      |



Our Extrusion Lab enables us to run your exact resin(s) on production scale extruders to customize and optimize your screw design through empirical trials, not computer modeling. Our high speed data recorder monitors pressures along the barrel and melt temperatures to insure optimal quality at maximum rates.



Our state of the art Extrusion Lab enables us to provide you with assurance of the expected performance of our Steward Barrier Screws. After providing us with information about your resins, expected head pressures, and/or material samples, we can provide information detailing:

- Output vs. Screw Speed
- HP Required vs. Screw Speed
- Melt Temperature vs. Screw Speed
- Pressure Stability
- Temperature Stability
- Recommended Barrel Temperatures
- (see sample performance chart above)

## Rebuilt Screws & Replacement Barrels

We offer fast deliveries and competitive pricing for all types of screw rebuilds and replacement barrels for all brands of extruders.