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Screw Design

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Screw Design
Vol. 17 #3, Dec. 1990

How to judge your screw design: Naturally, we assume when an extruder extrudes a polymer applicable to our process, it's a good design. This concept often falls short of potential melt quality that will never be obtained.


A good screw design provides a large operating window and is optimized when an adiabatic extrusion state is achieved. By monitoring heat vs. cooling mode variances, the screw design can be optimized. providing proper melt temperature and uniform melt pressure.

Improper designs yield a one vender resin, need for expensive water cooling jacket systems, high melt temperatures, and sporadic melt quality.

See also:

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