

1. Record Nr.	UNINA9910783460803321
Autore	Giles Harold F
Titolo	Extrusion [[electronic resource]] : the definitive processing guide and handbook // by Harold F. Giles, Jr., John R. Wagner, Jr., Eldridge M. Mount, III
Pubbl/distr/stampa	Norwich, NY, : William Andrew Pub., c2005
ISBN	9786612737725 0-08-094695-X 1-282-73772-4 1-282-25312-3 9786612253126 9786612253119 9786612252976 0-8155-1711-4 1-59124-850-7
Descrizione fisica	1 online resource (575 p.)
Collana	PDL handbook series
Altri autori (Persone)	WagnerJohn R MountEldridge M
Disciplina	668.4/13
Soggetti	Plastics - Extrusion
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Single screw extrusion -- Extrusion process -- Extruder safety -- Single screw extruder: equipment -- Plastic behavior in the extruder -- Screw design -- Processing conditions -- Scale-up -- Shear rates, pressure drops, and other extruder calculations -- Twin screw extrusion -- Twin screw extrusion process -- Extruder safety -- Twin screw extruder equipment -- Plastic behavior in twin screw extruders -- Screw design -- Processing conditions -- Applications -- Scale-up -- Shear rate, pressure drop, and other extruder calculations -- Polymer overview and definitions -- Polymer structure -- Polymer rheology -- Testing properties -- Processing recommendations for various resin systems -- Troubleshooting the extrusion process -- Problem solving -- Five step problem solving process -- Design of

experiments -- Quality -- Troubleshooting mechanical extrusion problems -- Troubleshooting extrusion product problems -- Troubleshooting sheet extrusion -- Troubleshooting cast film -- Troubleshooting blown film -- Troubleshooting profile and pipe -- Feed systems -- Dryers -- Screen changers -- Gear pumps -- Granulators -- Chillers and heaters -- Screw cleaning and purge compounds -- Coextrusion -- Coextrusion applications -- Feedblocks and dies -- Polymer selection for coextrusion -- Troubleshooting coextrusion -- Compounding -- Sheet and cast film -- Blown film -- Extrusion coating and lamination -- Wire and cable coating -- Profile extrusion -- Pipe and tubing extrusion -- Monofilament -- Extrusion blow molding -- Foam extrusion -- Solid stock shapes -- Reprocessing.

Sommario/riassunto

Why is it important to get to equilibrium and how long does it take? Are there problems running polypropylene profiles on a single screw extruder? Does the job involve compounding color concentrates on a corotating twin screw extruder? This unique reference work is designed to aid operators, engineers, and managers in quickly answering such practical day-to-day questions in extrusion processing. This comprehensive volume is divided into 7 Parts. It contains detailed reference data on such important operating conditions as temperatures, start-up procedures, shear rates, pressure drops, and safe
