

Extruder Alignment

[Print](#)
[\(10\)](#) » [Upstack vs. Downstack](#) » [Borescoping](#) » [Extruder Alignment](#)
Extruder alignment
Vol. 20 #2, July 1993

Extruders larger than 2 1/2", and/or longer than 30:1 L/D, should be aligned at installation, after barrel/feed block/transmission repairs, repositioning or after any significant barrel/screw mechanical interference problems. This can be done in most cases with optical or laser equipment when the system is at room temperature and the screw is removed. In order to check the system at operating temperature dial indicators must be mounted at the discharge end of the barrel while the system is at room temperature. Two indicators mounted at 90 degrees apart are required to obtain total movement . Observations can be made with just the barrel heat raised to the operating temperature or with the entire system assembled and running. Obviously, checking with just the barrel heated, does not take into account all factors present when the system is in operation, such as the die weight, transmission movement ,etc. Assuming proper alignment is achieved at room temperature and significant movement occurs during heat up or during operation, the causes of movement must be reconciled to prevent excessive wear or even failure of components. Such items as heater unbalance, loose connections, transmission run out, excessive cooling and side thrust from crammers/stuffers, are examples of causes for loss of alignment.

It can require considerable skill in machine design and operation to find some of these causes and resolve them properly. There is a considerable cost, however, in not resolving them; including component failure.

- Jim Frankland

See also:

- [Borescoping](#)
- [Machinery installation](#)
- [Misalignment](#)
- [Proper extruder installation insures optimum performance and safety](#)
- [Where's the wear? Part II](#)

Return to [Consultants' Corner](#)