

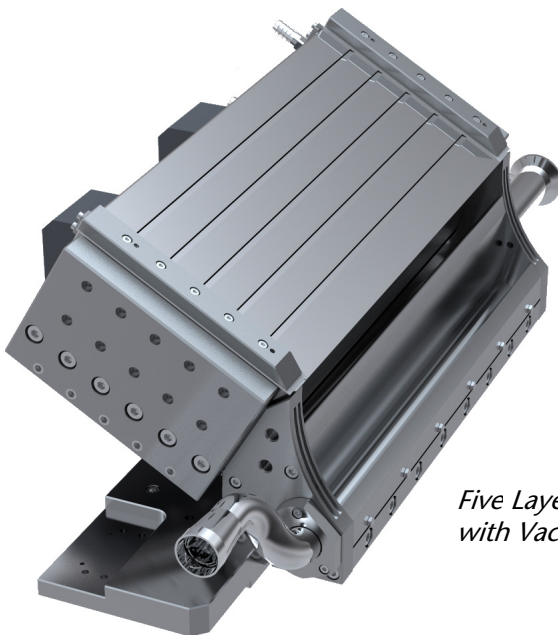
## Slide Dies

Slide coating has been the multilayer workhorse for the photographic industry for many years and its use has been extended to other applications where excellent quality multilayer coatings are required. TSE has a long history of providing successful slide dies and slide coating stations to the world's most competitive coating companies.

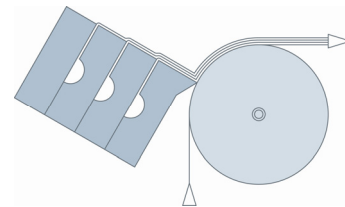
For truly excellent coating quality, slide dies require a level of excellence in design and fabrication precision rivaled only by slot dies. The slide die lip region is critical. The die lip must have a capable shape, a superb surface finish, well defined corners and these features all must be uniform across the coating width. Furthermore, the lip must be extremely

straight. The geometry of the transition between the individual distribution slot exits and the slide surface is also critical in that it must allow disturbance-free introduction of the layer into the multilayer package flowing down the slide. Finally, as with all pre-metered coaters, the production of a uniformly distributed flow via the internal flow manifold requires both optimal manifold design and excellent slot depth uniformity.

The challenges in slide die optimal design and precision fabrication are considerable, but TSE has consistently demonstrated its expertise by providing world-class slide dies to its customers.



*Five Layer Slide Bead Die  
with Vacuum Box*



### Range of Application (order of magnitude only)

- |                             |                      |           |
|-----------------------------|----------------------|-----------|
| • Viscosity range:          | [mPas]               | 1 – 1'000 |
| • Surface tension:          | [mN/m]               | -         |
| • Coating speed:            | [m/s]                | 1 – 10    |
| • Wet thickness $H_{wet}$ : | [ $\mu$ m]           | > 50      |
| • Dry thickness $H_{dry}$ : | [ $\mu$ m]           | < 1       |
| • Number of layers:         |                      | 1 – > 10  |
| • Minimum flow rate:        | [cm <sup>2</sup> /s] | -         |