Core Competence in Pre-Metered Coating Systems

The dies of TSE Troller are of highest quality. Every die plate that is made at TSE is of excellent quality and polished to perfection. The accuracy and quality that you can expect when ordering from TSE are surpassed by no one.

At TSE we use the most precise equipment for building, measuring, and testing our dies in order to be certain that we will produce equipment of the highest possible quality. This measuring device is accurate down to 0.1 microns.

Beside precision and surface quality it is the design of the cavities that plays a crucial role in achieving a good function and performance of the die. TSE has wide know how in modeling different liquids and is in contact with leading institutes and universities in material science world-wide. Target of modeling the dual cavity distribution system is a uniform cross profile of the coated film on the substrate as well as long intervals between die cleaning cycles to achieve high coating line efficiency – for a wide range of applications of course.

In the diagram the uniformity of the film thickness is shown over the width of the die – measured from the feed port. For a centre fed die the resulting profile will be symmetrical relative to the centre line of the die. The red curve shows the theoretically calculated flow profile for a specific application. The blue curves represent the level of mechanical precision and the green line stands for the actual measurement data of the finished die.