

PRODUCT SPEC GUIDE : OLED

PROBLEM

- < Long deposition run times, particularly with in-line systems, are not possible due to limited crystal life
- < Crystals fail at or around 10 hours

SOLUTIONS

- < Elevated crystal sensor operation temperatures, up to 90C, minimize crystal noise and extend crystal life
- < Temperature controlled sensor heads and instrumentation

RECOMMENDED PRODUCTS

- < Tempe™ self cleaning sensor head
- < Eon™ Monitor
- < RC™ or High Temperature (HT™) quartz crystals

PROBLEM

- < Noisy crystal behavior (rate noise +/- 50% of set point signal) leads to inaccurate thickness measurement and early crystal failure
- < Deposition rate is difficult to measure because the crystal reading has excessive rate noise

SOLUTIONS

- < Colnatec's superior finish AT-cut quartz crystals are designed to ensure low noise operation due to special surface treatment
- < Specialty cut quartz crystals reduce noise as a result of their insensitivity to stress and radiant heat
- < Temperature controlled sensor heads and instrumentation

RECOMMENDED PRODUCTS

- < Colnatec's superior finish AT-cut crystals, HT™, or RC™ quartz crystals
- < Tempe™ self-cleaning sensor head
- < Eon™ Monitor

PROBLEM

- < Measurement of thin (<100 Angstrom) layers is error prone due to thermal shock of the sensor crystal upon exposure to the deposition source
- < When the shutter on the deposition source is opened, the crystal rate spikes then settles, causing the rate reading to be obscured

SOLUTIONS

- < Specialty cut and high temperature crystals are impervious to thermal shock and result in high accuracy

RECOMMENDED PRODUCTS

- < RC™ and HT™ quartz crystals
- < Eon™ Monitor