

Existing SPXE systems on denim production lines can be readily replaced by SpectraTrend HT systems. There are some differences in the two systems, so the following similarity and differences must be observed

- 1) Communications protocols for The SPXE uses RS232/422 com interface and the SpectraTrend uses Ethernet. Since they are different, an Ethernet cable must be routed from the SpectraTrend sensor head to the customer PC.
- 2) The Support Unit for the SpectraTrend HT can be mounted up to 20 meters from the sensor head. The existing SPXE support unit can not be used with the SpectraTrend.
- 3) The SpectraTrend and the SPXE support boxes require 110/220 V.
- 4) The rope handling frame used for the SPXE can also be used for the SpectraTrend HT. The spot size for the SpectraTrend is 1" diameter, so a smaller rope handling mechanism can be used if necessary. SPXE typically requires 4-5 ropes for the rope handler, whereas 2-3 ropes can be used for the smaller area of the viewing area of the SpectraTrend. Typically, customers use the same rope handling mechanism and center the SpectraTrend in the middle.
- 5) If the analog output is required by the customer, the existing 4 twisted pair cables can be used as it is the same for both systems. This may require the customer to mount the SpectraTrend support box close enough to the existing SPXE support box for the existing cabling to be long enough. This will depend on the length of the existing analog cable and the mounting location of the SpectraTrend support unit where the connections are made.
- 6) Software for the two systems are different, and unique to each sensor. The SPXE uses EasyMatch OL software, the SpectraTrend uses EasyMatch ST software. The sensors must be used with their specific software package and cannot be used interchangeably. Jobs and standards created under each software package cannot be opened by the other software package. Standards must be re-entered manually when changing from one system to another. Both software packages have very similar layouts and configurations so very little operator training is required.
- 7) The SPXE has a built in automatic calibration box, the SpectraTrend has a manual calibration box. The time between calibration of the SpectraTrend HT is much longer, so automatic calibration is not required nor available on this system. Customers typically calibrate intervals are between 1-4 weeks depending on the changes in temperature and the cleanliness of the environment.
- 8) Both the SPXE and SpectraTrend require vortex cooling because of the hot environment. The SpectraTrend requires the ST-PFA-ENC enclosure that is sold separately. The cooling systems are not interchangeable.
- 9) The SpectraTrend does not have a yardage counter. All measurements are timed based, and no yardage counter information is available. Typical update times are 30 seconds. The sensor will continue to update at each time interval even if the line has stopped, but can be paused or stopped through the software if needed.
- 10) The mounting for the SPXE and the SpectraTrend is vastly different because the sensors are different sizes and require a different height of the sensor above the rope. The SPXE is set to 1.5 inches above the top of the rope, whereas the SpectraTrend must be mounted 3.5 inches above top the rope. The SPXE is a traversing system, the SpectraTrend is a fixed mount system. The SpectraTrend can be mounted on a customer supplied swing arm or rolling system for ease of calibration, or it can be permanently mounted. There is 3.5 inches of clearance between the sensor window and the rope, so it is not necessary to move the sensor to perform calibration if the sensor is safely accessible from a platform or catwalk.