

# KONNTRACK PRODUCT TRACKING AND DOSIMETRY INTEGRATION STREAMLINES YOUR OPERATION

Traditionally, dosimetry systems are independent of process control systems. Dosimeters are labeled ahead of processing by a run number, a location, and a tote/ carrier number. The dosimeters are then placed in a pouch and passed to production for processing. The operator responsible for loading ensures that a correct dosimeter is placed in the correct tote. Those responsible for preparing the dosimeters need to ensure that the correct information is written on their labels. Once they are processed, dosimeters are read with a dosimetry system. The ID and position are then manually entered in this system and dosimeters are measured. Minimum and maximum dose values are then transcribed to a Certificate of Processing (COP), which is often generated by yet another system. Needless to say, such systems are labour-intensive and are prone to inaccurate reporting.

konnTRACK offers an integrated solution that can eliminate many routine manual steps and rely on the system to guide personnel in the execution of each routine step correctly. This is accomplished by a three step process:

1. Specify;
2. Associate;
3. Measure and report.

## SPECIFICATIONS

Dosimeter type and loading specifications are prepared so that the loading location and frequency is specified ahead of time and approved using electronic signature by QA.

The screenshot shows a software interface for configuring dosimetry. It includes fields for Exposure ID (36), Name (54), and Description. The Dosimeter Type is set to 'Hanwell RED'. Under 'Exposure Tolerance', the Min (sMCi) is 378 and the Max (sMCi) is 634. Under 'Dosimeter Frequency', there are four checked options: 'Dosimeters in First Tote', 'Dosimeters in Last Tote', 'Dosimeters in Partial Totes', and 'Dosimeters in Middle Totes'. The 'Max. No. of Carriers Btwn Dosimeters' is set to 18.

**Figure 1: Exposure Dosimetry Specifications**

Similarly, dosimeter loading specifications are prepared well in advance of their use by QA.

The screenshot shows a 'Dosimeter Load Config' form. It includes fields for Dosimeter Load ID (16), Name (Dosl.d32), Description (None), and Special Loading Instructions (None). Below these fields is a 'Load Sequence' table:

Sequence	Coordinate	Reference Dosimeter
1	H3	<input type="checkbox"/>
2	I5	<input type="checkbox"/>
3	TOP1	<input type="checkbox"/>
*		<input type="checkbox"/>

**Figure 2: Dosimeter loading configuration specification**

## ASSOCIATION

Most dosimeter manufacturers place barcodes on dosimeter pouches that indicate a manufacturing batch as well as a unique dosimeter identifier.



**Figure 3: Bruker alanine dosimeters**



**Figure 4: FWT Dosimeter**

The konnTRACK application uses dosimeter barcoding information to perform the following:

- It associates the specific dosimeter serial number with a process run along with the tote or pallet being loaded through an efficient two scan process with a dosimeter barcode scan and a product stack barcode scan.
- It checks to ensure valid dosimeter calibration curve is available for the dosimeter.

