

The new system uses wireless or hard wired networking to link individual pill counting stations to a central data base. The individual stations are NTEP certified prescription scales with extraordinary functionality that has been designed for networking. Each station includes a bar code scanner which is used for information entry and script verification. The system uses an FDA furnished NDC database to allow drug information to be displayed quickly and easily. Drug verification and high speed pill counting without the risk of cross contamination are major benefits.

The system resides on the internet and can be remotely accessed. The central data logging server is all solid state with a large memory (no moving parts, fans, or hard disc drives). The system allows a common data base of Average Piece Weights (APW) for the entire current formulary to be built quickly, as every work station becomes a contributor and can share in the benefits. The system software, which runs on a Linux based operating system, allows the user to force APW updating (which ensures accurate counts) on a user selected time table. The system builds a local APW library, which is kept current and stored cross referenced by NDC code, all under user control.

Every transaction on the system is date and time stamped with the responsible operator identified (administrator's option). The system can flag anomalous events, such as verification failures or incomplete fills, and can print a wide variety of reports. The system also gives the administrator the capability to send an email to any URL the administrator designates in the event of a particular type of anomalous event.

The system is non-contaminating and virtually maintenance free in normal operation. The scales are self calibrating, but may require annual inspection by weights and measures inspectors depending upon State laws. These precision scales use a magnetic force motor and a flexure based structure for weighing. The flexures are fragile and should not be abused with large overloads or loads dropped from heights. The bar code scanner contains an oscillating mirror and should not be used as a hammer. Aside from these two moving parts (the only moving parts in the system) being abused, the system should provide decades of reliable service. A 30 year write-off would not be unreasonable for accounting purposes.

The system is scalable (no pun intended) and can be added to as required by demand. The pricing is essentially a factor of 10 below that of robotic systems with similar counting capabilities. While this system **does not** fetch the supply bottle, pour the pills, apply the label to the vial, and deliver the vials to a single location, it **doe**

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perform the major function of counting the pills faster, and better (safely). Many robotic systems require the use of cassettes which adds an extra step to the process and adds fetching the supply bottle back to the process. Many robotic systems use optical counters for counting, which makes periodic cleaning a necessity. Where one optical counter with a common pill path is used for all drugs the risk of cross contamination is very high and frequent cleaning is necessary (to the extent that the original economical justification may completely disappear).

This system can provide a lot of relief, both economic and mental, to many pharmacies that have the volume to justify its small initial cost. It can replace the outdated and unsafe robotics in many others.