

## INTERACTIVE LEARNING SYSTEM

## ILS

## THEORY

## UNIT OPERATIONS

## EQUIPMENT FUNCTION

## SOP

## GMP

## TRAINING

## TESTING

## THE KEY TO EFFECTIVE MANUFACTURING

The key elements of a powerfully productive company must be clearly defined to accomplish the objective.

One of the key objectives is in building the most effective manufacturing team.

This means that several elements within manufacturing must work in a coordinated effort that develops employees knowledge and skills while combining the regulatory and quality systems needed.

With this demand in mind, Techceuticals has developed the new ILS (Interactive Learning System). This is an interactive training and manufacturing tool that promises to accelerate employee performance.

The new ILS encapsulates several key areas of training and day to day operations into one system:

Manufacturing Theory

Unit Operations

Batch Production Records

SOP's

cGMP's

Training

Testing

Employee improvement

It is simple to use with the new Kiosk designed touch screen display. Simply log in for a review of a process, or to review the process you are about to go through.

One of the true benefits is it allows for continuous and redundant training; allowing the technician to review and demonstrate new skills that are measurable and recorded.



## SPECIAL POINTS OF INTEREST:

- Increase Productivity
- Reduce Downtime
- Improve Quality
- Improve Yields
- On-going Training
- Reduce equipment cost
- Save Money

## WHAT IS AN INTERACTIVE LEARNING SYSTEM

**Combining all aspects of Pharmaceutical & Nutritional manufacturing into an interactive and continuous system**

**Interactive:** Allowing or involving the exchange of information or instructions between a person and a computer.

**Learning:** The cognitive process of acquiring skills and knowledge.

By combining the theory of manufacturing with the required application, creating challenge and testing to assure proper procedures are understood and followed.

**System:** A group of unrelated elements forming a complex whole.

The challenge is for all phases and components of manufacturing to work together effectively, productively, with continuous improvement while being competitive in the market place.

## WHY USE THE INTERACTIVE LEARNING SYSTEM

The old way of training was to host multiple training sessions from different vendors and trainers in order to cover each unit operation of the solid dose process.

Each trainer has their own style of presenting information. Whether the trainer is from outside, or from within the company, trainers have days where they are really on and days when they aren't really on!

The ILS provides a consistent delivery of information the same way all the time. The student can review any topic as frequently as needed to grasp the subject.

Another key issue is maintaining training documents and getting the old documents out of circulation. It is also difficult to update the information in a printed document. Changes on a computer driven system allow for

updates and changes without having to search for the old documents.



### Unit Operations

**Weighing**

**Granulating**

**Milling**

**Blending**

**Compression**

**Coating**

**Encapsulation**

**Packaging**

## USING A KIOSK ILS

Combining the ILS with a Kiosk design, and a touch screen monitor becomes an attractive and usable learning station.

All materials are centralized in the training Kiosk. All training sessions for each unit operation are developed by one source.

This means each training module can be customized to reflect your process.

The kiosk is used by individual employees minimizing the impact on the production floor.

Employees can concentrate on specific training modules. Online exams will provide information about their training progress.

The printout from the kiosk will provide the documentation needed for continuous training.

The kiosk training system is a standardized modular learning environment for your entire solid dose process.

It is an excellent tool to elevate and maintain operator skill levels.

The architecture of this system provides an easy avenue to changes, future expansions and additional unit operations.



The tablet press is the report card for all previous operations

## UNIT OPERATIONS TRADITIONAL TRAINING

Imagine what it takes to bring a new employee or someone from a different department into a new unit operation.

The first step is to expose them to the operation.

Who does the training now? Usually it is another operator, or possibly someone who is a trainer with experience from

that particular operation.

They provide a tour and lecture of how "they do things" and then the real OJT (on the job) training begins, and most of the time it is trial by error.

Show and tell is another way to introduce a new employee to a unit operation. If you have hired a number of new employees, the challenge is

that everyone does not learn the same way, and the learning curve can be different for each one.

The kiosk system simply provides the same information, reviewed over and over, allowing for more complete and total comprehension.

**"Each training module can be customized to reflect your process"**

## ABOUT VISUAL LEARNING

The concept of learning new information in a traditional sense is that it is not an effective means of training in today's work force environment.

Training documents and procedures rely on good reading comprehension. However our world is fast becoming visually driven. TV, books, phones, even newspapers and magazines are moving away from being printed and

are now available online.

Everyone is exposed to tons of information visually, and people learn and retain much more information when they have a "picture of the process" rather than a document they must decipher.

Languages is another huge challenge for companies. Many companies have employees from a variety of backgrounds or have facilities and many different loca-

tions. Training systems become islands of static information if they are not usable.

Using an ILS provides the same information and incorporates many visual aides; photos of equipment, process and other employees often help define a function that a document cannot adequately describe, and is easily converted to many different languages.



A photo showing a proper vortex is superior to any attempt to define a vortex in writing to someone new to manufacturing—Visual is better!

## HOW DO WE DO IT

We can provide generic information about each unit operation, or we can incorporate your specific unit operations into the ILS kiosk.

For general training purposes having comprehensive training programs that carry a wide brush stroke about the theory of a unit operation is very effective.

However, the next step is to incorporate specifics of

Setup, Operation, and Cleaning phases using your specific procedures and is a superior way to support on the job training.

We actually photograph and video tape procedures that are placed into a PowerPoint presentation that is then loaded into the kiosk. This means the kiosk can be updated on a continual basis.

The technician simply signs

onto the kiosk and clicks on the unit operation. Then they choose from Theory, or the specific procedure they are looking for, and at the end they can take a test that is graded and recorded.

The testing results can easily be used to create pay scale and operator levels, as well as becoming a part of the employee's permanent training record for compliance.

**The ROI over traditional training has a significant impact on productivity**

## WHERE DO WE BEGIN

If you have experienced our training we can simply begin to incorporate the ILS.

However if you have not had some of our training then it is important to get your key team members involved. We do this by presenting a comprehensive, yet short program that is specific to your unit operations.

Then we look at your written procedures, review batch records, and watch what is really occurring on the production floor. We record needed information into our existing modules.

An example of this is tablet compression operations. We can provide theory, and then we can go to the next level to

specifically address the different types of machines in use. We will define and demonstrate how they work, and show the operating procedures the technician should follow.



Tablet press operations

[www.techceuticals.com](http://www.techceuticals.com)

## TECHCEUTICALS

365 Red Cedar Street  
Unit 202  
Bluffton, South Carolina, USA 29910

Phone: 843-815-7441  
Fax: 843-815-7446  
E-mail: [sales@techceuticals.com](mailto:sales@techceuticals.com)

Techceuticals is a Training, Equipment, and Consulting Company specializing in Pharmaceutical & Nutritional solid dosage manufacturing.

We can provide clients with the equipment, training and troubleshooting needed in all areas of solid dosage manufacturing.

Our staff includes a qualified & certified auditor who can provide clear direction on the actions your company needs to take to be compliant with the quality and regulatory requirements of the industry.

**We are experts with real experience!**

**P R O V I D I N G   S O L U T I O N S   S I N C E   1 9 8 9**

## THE ILS SYSTEM

**The ILS system** includes all unit operations within a solid dose manufacturing company.

**Weighing:** Procedure, documentation, and proper material handling.

**Granulating:** Wet and dry granulating processes are covered.

**Milling:** Including many types of equipment used within the milling process.

**Blending:** We cover procedures, operation and cleaning of many common types of blenders in use today.

**Tablet Compression:** With over 70 years of cumulative experience with many different brands of tablet presses, our experts can help train and optimize a compression technician, mechanic, and all related operations.

**Tablet Compression Tooling:** No compression training would be complete without a thorough understanding of tooling and tooling management.

**Film Coating:** We cover batch and continuous style coating systems.

**Encapsulation:** Our experts know the many different technologies used to produce hard-shell, two piece capsules.

**Packaging:** We offer complete step by step setup, operation and cleaning of all components on a solid dose packaging line.

**GMP:** Quality within manufacturing is everyone's job, not just a QA QC function. GMP can be redundant to teach but not with the ILS kiosk training.



Knowledge is power