

# Batching Systems



 **IEDCO**

Industrial Equipment & Design Company

*...a world of experience in powder handling*

## Batching Systems

At the heart of many process systems is the need to accurately weigh out a specific quantity of one or more ingredients for further processing. This procedure is often referred to as dosing, metering, dispensing, or batching.

IEDCO has a great deal of experience in this area and can design, manufacture, and integrate batching systems with extremely high accuracies.



### Loss-In-Weight or Gain-In-Weight

Batch systems obviously involve the use of a scale system to provide the weighing. The scale can be used on a “gain-in-weight” or “loss-in-weight” basis.

Each has its pros and cons and our experience permits us to help you evaluate your specific needs and choose the right system for your specific operation.

## Scales and Controllers

We do not manufacture our own load cells, scales, or controllers, nor are we married to any one manufacturer, although we have chosen to standardize on [Mettler Toledo](#) products.



Having said this, we strongly believe that if you have a facility full of scales and controllers supplied by another manufacturer, we will use that manufacturer’s products instead. Having a local scale supplier with whom you are happy and provides you with calibration and other support services, is a key aspect of any successful and enduring batching system.

## Batch Feeder

At the heart of any batch system is the feeder. This feeder is typically a screw feeder or even a belt feeder. Although we have installed many such traditional feeders in batching systems in the past, we have eliminated all such feeders from our designs and replaced them with Sanitary Rotary Valves (see our Feeders & Valves brochure).



The Rotary Valve is supplied with a position feedback device that will work in conjunction with a servo pneumatic valve for optimal batch control. This allows for precise oscillation of the Rotary Valve via HMI for highly accurate batching while minimizing wear and tear on the valve seal.

We have found no other feeder that matches the Rotary Valve in accuracy, low maintenance, or value.



## Powder Transfer Systems

Getting the powder from its container to the feeder system and from the feeder to the target, whether it is a tank, hopper, IBC, drum, or some other process, is the heart of our business.

Choosing and integrating the right powder transfer system is a vital aspect of any batching system.

Our expertise in powder handling (especially pneumatic conveying) systems contributes significantly to your next batch system being the successful installation that you want it to be.

## Flexibility

Most people know what their batching needs and specific recipes are today, but, in this ever-changing and competitive

environment, you may have to make something you never dreamed of six months from now.

This means that designing maximum flexibility into your batch system is the most important part of your batch system investment. At IEDCO, we know how important this kind of flexibility is and we know how to build it into your system.



## Automation



To what extent you do or don't want to automate your batching system is another major consideration. High-level automation may not be desirable or affordable now, but providing for it in the future may be the way to go.

We design and build all of our own control systems in our **UL Listed** panel shop, so we are well equipped to meet all of your needs in the area of control automation now and in the future.

## Testing Capabilities

At IEDCO we like to take as few chances as possible with both your money and ours. To this end, we are able to test most ideas and materials at either your facility or ours.

We know from experience that just because two ingredients may have the same name doesn't mean they necessarily handle or behave in the same way. Knowing as much as we can about your powders ahead of time, combined with flexibility in our system design, contributes greatly to a successful installation.



# Batching Systems

## IEDCO Batching Systems Gallery



## Dispensary Design

Many pharmaceutical facilities still deal with their excipient dispensing using manual methods like scooping or pouring material from drums or sacks into another drum, IBC, or container on a scale. Obviously, this system leaves a lot to be desired from both an ergonomic and containment standpoint, not to mention potential product quality, batch accuracy, and documentation issues.

Designing a modern, automated dispensary is highly desirable and offers many advantages, especially in the context of a new facility that is relatively unrestrained by existing architecture and validation considerations. However, designing such a dispensary is not as easy and straight forward as it may initially seem.



Designing a dispensary is a process. There is no one, right way and every facility has its own set of interests, priorities, and space constraints, as well as personal and personnel preferences.

For this reason, designing the dispensary is a process that must begin by understanding and defining all of these variables so that we can incorporate and/or address all of them into the initial conceptual proposal.

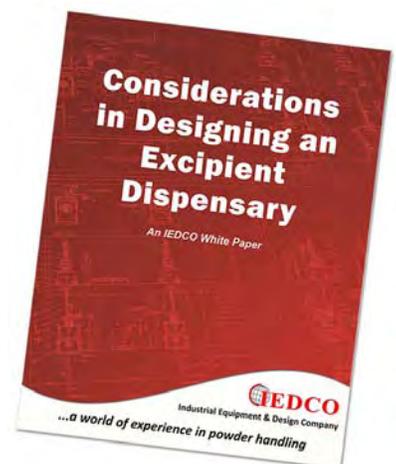
IEDCO has an extensive history of designing pharmaceutical dispensaries that are efficient and economical. We welcome the opportunity to help you with yours.

## Designing an Excipient Dispensary

Obviously, there are a wide range of factors to be considered when designing an excipient dispensary ranging from how to handle raw ingredient containers to powder transfer options to major vs. minor ingredient handling.

IEDCO has extensive experience in addressing all these issues and designing dispensaries that are efficient, contained, and operator friendly. To get a glimpse of our thought and design process, download and read our white paper:

[Considerations in Designing an Excipient Dispensary](#)



# Getting Powder & Tablets From Point "A" To Point "B" Is Our Only Business

