



**Experts in Solid
Dosage Technology**

A Division of *Spraying Systems Co.*



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Five Things to Consider

BEFORE PURCHASING USED OR REFURBISHED SOLID DOSAGE PROCESSING EQUIPMENT

Pharmaceutical companies sometimes choose to buy equipment second-hand, either from another pharmaceutical company or directly from the manufacturer of the equipment. While there exists a large and diverse market for used equipment, there are many things to consider before purchasing any used or refurbished system for processing pharmaceuticals. For example, while refurbished systems are often available at substantially lower prices than new ones, there may be defects that have gone undetected which will require repair. Additional overhead and maintenance requirements to get a refurbished machine running— like software upgrades, tracking down replacement components, system installation, integration with your existing process, possible re-validation procedures, etc.— can greatly increase the system’s total cost. Those who work for small R&D companies and start-ups often have trouble securing the necessary funding for a brand new machine and have little room for error when it comes to making large purchases, but it can be difficult to tell which systems will ultimately be worth the investment. Here are five questions to ask which should help determine which system will be right for you.

1. Is the system equipped with the required hardware/software?

Be aware that many companies who are willing to sell their used equipment may have removed critical components, in order to protect their proprietary data or processes. This may include the hard drive as well as other patented technology which may have rendered the machine inoperable.

Be sure to check the condition of the system’s control software- it may be very outdated and possibly no longer supported by its original manufacturers. Depending on the system, software replacement can be more expensive than buying a new machine. Verify the software has the features you need for your process; does it meet your requirements for data collection, automated batch control, security, etc.?

2. How has the system been used?

Determining what a system has been used for can be the best place to start when deciding whether or not it suits your needs. If it has been used to process proprietary materials, the owners probably won’t be willing to discuss specific operational parameters. However, they may be able to tell you the kind of research the unit was involved with, the general type of processing it was used for, or even the trade/generic name of the specific drug(s) it has produced.

To avoid potential problems with the FDA, create a secondary-source document (if no primary documentation can be found) cataloging each compound that the machine has processed. If this information cannot be found, contact the original manufacturer and check whether they are willing to disclose any information they may have on the system’s usage.

3. What functions do I need the system to perform?

Make sure that the equipment you’re looking at can actually do what you need it to. If you aren’t able to determine the unit’s exact specifications, the system’s manufacturer or the owner/operator should be able to provide more details. If the system doesn’t exactly meet your needs, can it be upgraded?

Can other options be added to increase the functionality of the system? These are questions that the manufacturer will be able to answer. Examples of common upgrades include humidification systems, modern filter systems, solvent-recovery systems, materials handling capabilities and replacement spray nozzles.

Some systems can be converted, but at significant cost. For example, a basic fluid bed dryer can be converted into a top-spray granulator or Wurster coater. In these cases, it is best to look for a different machine that is already capable of performing the functions you require.

4. Can the seller provide original documentation?

If they cannot provide the original documents and operating procedures, can they provide a backup reference? Can they provide training or detailed instructions on proper operation?

Verify that the original manufacturer hasn’t issued defects or end-of-support notices on the equipment or the control system. Determine whether you can purchase spare or replacement parts from the manufacturer, even if you don’t need them at the time of purchase.

5. Is this worth it?

Before making any purchases, have the equipment inspected by a trusted specialist who is familiar with your requirements. Request a quote or an estimate for additional modifications or expenses that may be necessary. It is very likely that the machine will need to be upgraded, redesigned or completely customized depending on validation requirements and drug processes.

Weigh all of your options carefully before making a decision. If the used equipment needs a lot of work, it may be more trouble than it’s worth, or there may be new systems available for a similar price.