

# Steps to Properly Inspect & Purchase a Tablet Press in the US and Abroad

## The Inspection

We want to help our customers make the best choices when purchasing used equipment. Over time, we realised most of the questions our sales group receives revolve around the basic inquiry, “What do I look for when inspecting a used piece of equipment?” With this article, we will focus on tablet presses — sharing tips from equipment specialists who have seen more than their fair share. So without delay, here’s what your engineers, technicians, and procurement professionals should thoroughly inspect before committing to purchasing a used tablet press.

One of the most common inquiries received when buyers are searching the second-hand equipment market includes “**what do I look for when inspecting a used piece of equipment?**”. It is important to ensure confidence before making a purchasing decision for your company, and a lot of factors come into play when conducting a proper inspection. With tablet presses, some of the primary components that should be checked before purchasing include the turret, pressure rolls, fill cam, hoppers and chutes, as well as the maintenance records, manuals and types of controls. We gathered all of the essential information from leading engineers, technicians, and procurement professionals to provide prospective buyers with quality tips for inspecting tablet presses.

### Turret Inspection Part 1

One of the most critical components of a tablet press is the turret. This crucial component should be the first part of the tablet press that gets your attention.

You should be looking for any signs of:

- Damage
- Wear and tear
- Rust
- Physical deformation

Aside from a basic visual inspection, turrets can also be inspected for

measurement (specifically the punch bores – both upper and lower and the die pockets).

### Turret Inspection Part 2

This second inspection tip is slightly more labour-intensive and any damage present cannot be detected with the naked eye. You will need a ‘go/no-go’ tool to measure each bore and pocket to check for slop. A go/no-go is a tool that is used to test certain parts of a tablet press (turret and tooling). There are different go/no-gos for measuring the punch bores (upper and lower) in a turret. They are also made for measuring the die pockets and the tooling heads. They are used to determine what parts of the machine are ‘in spec’ and which are ‘out of spec’ – you will need to check every station on a turret. All of the positions could measure out fine, or as a ‘go’, and will not need to be bored and bushed to bring them back to spec.

### Turret Inspection Part 3

Another good way to check the overall condition of the turret, and the tablet press as a whole, is to open the panels on the bottom of the press, revealing a hand crank for manual operation. This crank, or hand-wheel, is connected to the press’s main gearbox and will allow you to rotate the press, and visually confirm that it rotates smoothly and without any odd noises or delay. While performing this inspection, if you notice a delay or hear any scraping or grinding noises, then it is possible that the gearbox in the press will need to be replaced or rebuilt. Generally speaking, a visual inspection of the turret should suffice. If the turret appears to be in good condition, with no signs of wear and tear or damage, it usually indicates that the press as a whole was properly maintained throughout its usage.

### Pressure Rolls Inspection

After ensuring that the turret is in

great condition, you will next want to inspect the press’s pressure rolls – both the pre-compression rolls and the main compression rolls. When performing this visual inspection, you will want to look for any signs of scoring or wear. If there are signs of wear, and the pressure rolls are no longer the same measurements, both sets can be re-ground to a smooth measurement, but only to a certain diameter. If they fall below the minimum diameter, they will need to be replaced.

### Feed Frame Inspection

If the turret and the pressure rollers are in good condition, the next component you will want to inspect is the feed frame.

This entails another visual inspection, during which you are checking for:

- Any physical deformation
- Rust
- Materials obstructing the feeders

You will want to get as close a look as possible, as one of the most common problems associated with a malfunctioning feed frame is that there are large granules or broken tablets lodged in the feed frame, obstructing the flow of material.

### Fill Cam Inspection

The fill cams, both upper and lower, are important components to a functional tablet press. Unfortunately, due to the nature of their task, they wear away quickly. Although it is not crucial that the cams be in pristine condition, it is important to note what condition they are in since that fact is usually an indication of how the press was maintained and whether or not it was properly cleaned during its period of usage. Fortunately, even if the cams are in horrible condition, and the rest of the press seems to be in great condition, the cams can be easily replaced.

### Hoppers and Chutes Inspection

The last part of your inspection

could easily be your first; however, I wanted to list these tips in order of importance. With regard to the used press's hoppers and chutes, you will want to ensure that both are installed securely and intact, with no signs of cracks or holes. In order to be sure that the hopper and chutes are in good condition and properly installed, you will want to visually check the tablet press for signs of any spillage. The presence of tablet ingredients outside of the hoppers and chutes could indicate a leak somewhere in the system. With these tips in mind, you will be able to gauge the quality of a used tablet press before putting any money on the table, ultimately enabling you to make the right decision, the first time.

**Maintenance Records, Manuals, and the Type of Controls Part 1**

After closely inspecting all of the above, you will want to ask the seller of the press for any documentation they have that details their efforts to provide consistent and regularly scheduled preventative maintenance to the tablet press and all of its individual components. This is crucial, since even the best naked-eye inspection can overlook or simply miss indicators of problems lurking inside the press.

**Maintenance Records, Manuals, and the Type of Controls Part 2**

You will also want to request the OEM's manual for the press. This is less important than the maintenance records, since even if they do not have the manual, you can, in most cases, visit the OEM's website to download the manual. But nonetheless, if the seller still has the original manual that came with the

press, it is likely they treated their press with care and used it within the guidelines of the manufacturer. Lastly, you will want to take note of what type of controls accompany the press. This is mostly a matter of preference, as some tablet presses come with slick, digital, touchscreen displays, while others (usually the older models) come with analogue controls, complete with seemingly outdated knobs and buttons.

**Purchasing a Tablet Press in the United States**

Once you know what to look for when inspecting your tablet press, you should be ready to make your purchase. But before you move forward, remember there are a lot of different rules and regulations in place by the government when purchasing a tablet press. Some of these regulations may affect a buyer's transaction, so it is important to know and understand these.

In the United States, tablet presses are regulated by the DEA, domestically. The DEA tracks which companies have purchased this instrumentation and where they are being used. When a buyer comes to us to purchase a tablet press, there are a number of proper steps to follow before releasing the equipment to them.

Here is a quick overview of the process.

**Step 1: The Tablet Press is Sold**

We then report the sale to the DEA, including the sales information, the exact address of the purchaser, and information of the carrier transporting the tablet press.

**Step 2: We Wait**

The typical wait time once a request is submitted to the DEA is about 15 business days.

**Step 3: Shipment**

Once the tablet press is verified, we are able to ship the item. Once the tablet press is shipped, we must also provide a copy of the signed Bill of Lading, confirming it was delivered to the registered location.

**Purchasing a Tablet Press Abroad**

If you are purchasing a tablet press in a country other than the US, the DEA has no jurisdiction, and thus there is typically no wait time for shipment. Instead, the seller simply notifies the DEA of the sale and informs the DEA that the press will no longer be at the registered location. Tablet presses that originate outside the USA and are entering back into the USA must be registered with the DEA. We have to provide port of entry, date of entry, and copy of signed Bill of Lading confirming delivery to the registered location.

**Other Regulations**

Additionally, some of our sellers have their own DEA compliance departments. For example, though it might only take 15 days to get in touch with the DEA, the seller's policy could state that they have scheduled release times of 30 days. Always ask the sellers which processes they utilise to ensure everyone is on the same page.



**Mark Middlemist**

He is a pharmaceutical equipment expert. He works with many global leaders of the industry. For the past 18 years he has been working with EquipNet revolutionising the way companies manage their surplus assets. Mark will attend CPHi show in Frankfurt; contact him to schedule a meeting during the show.

Email: [mmiddlemist@equipnet.com](mailto:mmiddlemist@equipnet.com)