

## INSIDE INFORMATION

# Turnkey or turkey? Selecting a turnkey contractor for your powder coating installation

Nick Liberto, P.E.

*Powder Coating Consultants  
Division of Ninan, Inc.*

**T**he origins of the word *turnkey* stem from several folktales. The one I like the best describes the act of buying an existing retail business. In such cases, the sellers assure the buyers that all they need to do after the sale is to turn the key in the store's lock to begin operation. This assumes that they bought the business lock, stock, and barrel, another obvious reference to keys and locks.

In the powder coating industry, turnkey means that one supplier is responsible for providing all the equipment, installation, engineering, start-up assistance, training, and so on for a powder coating operation with little or no buyer involvement until the buyer accepts the system. The buyer can then begin operating the completed system by turning the key.

### **Pros and cons of turnkey contractors**

The following information on the different components and sources of a powder coating system shows you

the typical number of contractors involved in the sale, installation, and start-up of a powder coating operation.

System houses sell, engineer, and usually install surface preparation systems (a washer and a dry-off oven), cure systems (a convection, an infrared, or a combination convection-IR oven), conveying systems (typically an overhead conveyor and supports), and environmental rooms. Although they may buy some of these components from other suppliers, for example, the conveyor and environmental room, they are responsible for the design and installation of these components.

Powder application vendors sell, engineer, and supervise the installation of the devices that transport and apply the powder coating onto the part. This includes the devices that collect the overspray powder. Sometimes, another contractor, or contractors, installs the entire system. The contractor provides skilled tradespeople—such as electricians, mechanics, plumbers, welders, riggers, and sheet metal workers—to

assemble the equipment components into a working system.

As a result, a typical powder coating installation may require as few as two contractors to as many as four contractors to deliver and install a system. Large, complicated powder coating systems, such as those used in automotive assembly plants, can have many contractors, who are responsible for control systems, robots, masking aids, and so on.

The advantages of using a turnkey contractor stem from the fact that one responsible authority provides all the project management. As a result, the turnkey contractor becomes the single contact to the buyer of the powder coating system. This frees the buyer from daily dealings with the individual contractors needed for the system. In turn, the turnkey contractor charges the buyer a service fee and collects funds for all the subcontractors employed to complete the system. This fee can be up to 30 percent of the cost of the equipment components not supplied directly by the turnkey contractor. Depending on the overall system

cost, this fee can be valuable to the buyer because of the convenience of dealing with only one contractor.

This service fee, on the other hand, can represent one of the disadvantages of hiring a turnkey contractor: The buyer can usually afford to hire a finishing engineer or a consultant to do the same thing—except collect the funds. In addition, if the turnkey contractor doesn't pay the subcontractors for their equipment and services, the subcontractors will come to the buyer directly for the funds and may put a lien on the buyer's property until settlement is made.

Furthermore, the single contact feature of turnkey contracting is often misleading because the buyer has some other responsibilities that necessitate hands-on participation with the project. These responsibilities can include building modifications, powder and chemical selection, utility provisions, government permits, and insurance inspections. Therefore, if the buyer has to deal with several people that aren't covered in the turnkey contract during system installation, will it matter that much if the buyer has to deal with the two to four contractors covered by the turnkey contract? Only the buyer can answer that question and thus decide on the value of turnkey contractors.

### Turnkey contractor candidates

Several candidates are appropriate turnkey contractors for powder coating systems. Following are some suggestions and comments on various possibilities:

**System houses.** These contractors are the natural choice for turnkey responsibility in most powder coating systems because they design and manufacture most of the system components. Consequently, the project management fee is often lower than that of some other turnkey contractors. In addition, they normally have installation crews who can install not only their own equipment but also other system components, for example, the powder application and recovery equipment. Because they supply most of the equipment, they have the highest financial stake

in the system (often 60 percent) and are the most at risk if the system installation isn't done properly.

### Application equipment vendors.

These companies are the least likely candidates for turnkey contracting, unless the installation is a retrofit of an existing finishing installation where most of the other equipment components—such as the washer, ovens, and conveyor—are already in place. Given their risk of financial loss if the system installation goes badly, it would be difficult to entice these vendors to take on turnkey responsibility for the entire system.

**System integrators.** These companies don't actually build any equipment; they usually sell complete systems and may provide installation services. They are exposed to more risk than that of application equipment vendors because they must buy and resell the entire system. As a result, turnkey fees are the highest when this contractor takes on responsibility for the total system. Why do these companies take such a high risk? The answer is simple: They are unhappy with the amount of commission they get from the equipment manufacturer and think the increased revenue is worth the risk. These companies may be the only choice for turnkey contractor in operations that don't interest other vendors, such as very small powder installations.

**Engineering firms.** These firms are often used in large automotive installations where the powder system is part of a new assembly plant. Frequently, these firms are responsible for the project management of the entire plant, including the building construction. They aren't normally involved with the most typical powder coating installations.

### Turnkey contractor selection

The rule of thumb used in determining the best choice for turnkey contractor is to select the vendor who has the most knowledge, makes the largest portion of the system, and has the highest financial stake in seeing the project completed properly and on time.

Given the choices in this article, the most obvious turnkey contractors are system houses, unless the project is an automotive assembly plant. The reasons are based mostly on economics. Because system houses make 60 percent of the equipment, they only assess the 30 percent turnkey fee on the remaining 40 percent. Their higher financial stake compared with other turnkey contractors implies a desire to ensure the overall success of the project.

Finding the right turnkey contractor can be a difficult task for a layperson. However, general business instincts are usually the best guide. For instance, you should first decide if using a turnkey contractor is beneficial, given the probability that you'll have hands-on contact with the subcontractors anyway. To thoroughly investigate each turnkey contractor, do the following:

- Check the company's customer references on past performance
- Visit the company's manufacturing plant
- Investigate the company's financial stability and history
- Talk to the subcontractors who will be supervised by the turnkey contractor and determine their comfort level with the proposed turnkey contract
- Solicit help from knowledgeable, unbiased, credentialed people in the industry, who aren't affiliated with your vendors, to evaluate the results of your investigation

You should also understand that only you have your company's best interests at heart. Depending on others to feel the way you do about your company can be troublesome. By following the recommendations in this article, you'll separate the turnkey contractors from the turkey contractors. **PC**