

Equipment/Line Type	Productivity/Repeatability	Curing Options	Fluid Delivery Options
Manual Spray booth – open air cure – manual sealer sanding	Hand Spayed, dependent on hand sprayers demands skilled workforce the highest demand on the work force. Least transfer efficient from hand spraying.	Curing takes the longest amount of time; the risk of contamination is the highest without containment while air curing	Can use all the delivery applications from the chart above
Manual booth with batch oven	Hand Spayed, dependent on hand sprayers demands skilled workforce the highest demand on the work force. Least transfer efficient from hand spraying.	Curing times are optimized and the product doesn't set out wet risking possible contamination. Forced curing gives a better visualization of the final cure. Reduces cycle time.	Can use all the delivery applications from the chart above
Manual Spray booth with flat line oven	Hand Spayed, dependent on hand sprayers demands skilled workforce the highest demand on the work force. Least transfer efficient from hand spraying.	Curing times are optimized more than the batch oven and the product doesn't set out wet risking possible contamination. Forced curing gives a better visualization of the final cure. Parts can be loaded directly on the oven conveyor form the spray booth. Reduces cycle time.	Can use all the delivery applications from the chart above
Hang line – no oven	If no robotic sprayers are used then it is hand sprayed, and it is dependent on hand sprayers demands skilled workforce, the highest demand on the work force. Least transfer efficient from hand spraying. If not using automatic sealer sanders then enough operators to sealer sand are required to keep the line running at reasonable speed.	Curing takes the longest amount of time; the risk of contamination is the highest without containment while air curing	Can use all the delivery applications from the chart above
Hang Line – batch oven	If no robotic sprayers are uses then hand sprayers are used and it is dependent on hand sprayers and demands a skilled workforce, the highest demand on the work force. Least transfer efficient from hand spraying. It would demand the same sealer sanding operators as the previous hang line without automatic sealer sanding machines.	Curing times are optimized and the product doesn't set out wet risking possible contamination. Forced curing gives a better visualization of the final cure. Reduces cycle time.	Can use all the delivery applications from the chart above

Hang Line – in line ovens	If no robotic sprayers are used then hand sprayers are used and it is dependent on hand sprayers and demands a skilled workforce, the highest demand on the work force. Least transfer efficient from hand spraying. It would demand the same sealer sanding operators as the previous hang line.	Curing can be done more efficiently than the stand-alone batch oven. Usually the line speed can increase and the ovens increase quality.	Can use all the delivery applications from the chart above
Flat Line – no oven	A stand-alone spray machine can be productive to feed and fill the belt and rack the parts. It is best fitted with an automatic sealer sanding machine. The automatic spraying can create higher transfer efficiencies and potentially recover coatings for reuse. This usually reduces emissions. It also reduces filter usage per volume. The ability to consistently spray is easier than relying on multiple hand spray operators.		Can use all the delivery applications from the chart above. Typically, the transfer efficiency gains are complimented with HVLP, HVLP Turbo Spray, Airless or most commonly Air-assisted-Airless.
Flat Line – batch oven	A stand-alone spray machine can be productive to feed and fill the belt and rack the parts. It is best fitted with an automatic sealer sanding machine. The automatic spraying can create higher transfer efficiencies and potentially recover coatings for reuse. This usually reduces emissions. It also reduces filter usage per volume. The ability to consistently spray is easier than relying on multiple hand spray operators.	Curing times are optimized and the product doesn't set out wet risking possible contamination. Forced curing gives a better visualization of the final cure. Reduces cycle time. With the speed and productivity of the flat line sprayer the oven can reduce work in process as well.	Can use all the delivery applications from the chart above. Typically, the transfer efficiency gains are complimented with HVLP, HVLP Turbo Spray, Airless or most commonly Air-assisted-Airless.
Flat Line – In line oven	For 3-D two sided products the presents and optimal finishing solution for productivity and transfer efficiency with the possibility of recovering and re-using coatings. When fitted with other in line process equipment such as pre-heating and sealer sanding this solution is very effective. Per capita the volume of output usually requires the least number of skilled operators	Curing times are optimized and the product doesn't set out wet risking possible contamination. Forced curing gives a better visualization of the final cure. Reduces cycle time. With the speed and productivity of the flat line sprayer the oven can reduce work in process as well. The inline oven	Applies reduced solids UV coatings both solvent and water based the well to parts like cabinet doors, drawer fronts and face frames and components. Can use all the delivery applications from the chart above. Typically, the transfer efficiency gains are complimented with HVLP, HVLP Turbo Spray, Airless or most

		creates seamless work flow that can be automated for downstream operations.	commonly Air-assisted-Airless.
Feed through lineal sprayer – no oven	For lineal products such as molding this is more transfer efficient and productive than the off booth, hang line, or flat line but less transfer efficient than the vacuum coater or roll coater. It is productive in with feed rate of 100-300 feet per minute.		Can use all the delivery applications from the chart above.
Feed through lineal sprayer – oven	For lineal products such as molding this is more transfer efficient and productive than the off booth, hang line, or flat line but less transfer efficient than the vacuum coater.	Ovens with flashing capabilities, board heating capabilities and UV curing can be placed in line or stand alone with lineal sprayers. They can also keep up with the feed rate of 100-300 feet per minute.	Can use all the delivery applications from the chart above.
Vacuum Coater	Vacuum Coating material over all sides. Vacuum coaters are very productive for their application and typically run 100-200 feet per minute. (Most transfer efficient for method for finishing lineal multi-dimensional lineal material such as molding, drawer box sides, and trim)	Usually a UV oven is directly in line with the vacuum coater. The material is 100% solids which increases build and reduces coats.	Spay equipment isn't typically used with roll coating applications.
Roll Coater	Very high transfer efficiency mostly for flat products such as plywood, flooring, S4S molding etc.	Mostly UV cured with high solids (100%), very little flash off but a UV oven is usually required. Usually a UV oven is directly in line with the vacuum coater.	Spay equipment isn't typically used with roll coating applications.
Tow Cart/Power Cart Line -oven This option is most applicable for furniture and assembled case goods and architectural millwork that must be finished after is milled and assembled	If a robotic spray option is used it can be transfer efficient otherwise manual spray operators are required. Manual sealer sanding is usually required as well increasing the demand for manual operators.	Ovens are usually inline or in batch ovens where carts can be removed from the line and pushed to the ovens. Some ovens are flash, heat and UV. UV curing must be done 3D with a robot. Ovens usually maximize the feed rate of the line.	Can use all the delivery applications from the chart above.