

OPPORTUNITIES TO AUTOMATE

Powered movement of blast nozzles and/or workpieces automates air-blasting operations to varying degrees. For instance, using a powered turntable in combination with oscillating nozzles makes many blast-finishing processes virtually automatic when a timer package is added to control duration and on/off functions. Some techniques for automating Pro-Finish cabinets—easily and economically—are described below.

Turntables

Turntables, offered in both manual and pneumatically powered models, facilitate the handling of heavy parts and provide opportunities for automation. Turntables can be wheeled into or out of cabinets on a dolly or track, or fixed inside cabinets. Most stationary designs feature a low-profile, giving operators easy “over-the-top” access without wasting interior cabinet space.

Turntable sizes range from 18 to 48 inches in diameter with load capacities of up to 1,500 pounds. (Turntables with higher capacities are also available.) Powered turntables, with speed ranges from 8-to-20 rpm, can be controlled by a manual on/off valve or tied into an optional timer circuit for purposes of automation.

Gun Oscillators, Timers & Other Accessories

Gun oscillators, suitable for larger Pro-Finish cabinets, can be used with powered turntables and multiple nozzles to reduce the number of guns required, therefore reducing compressed-air consumption. The oscillator will blend multiple passes of the nozzle, creating a more uniform finish. Production rates increase as the benefits of manual coverage and multi-gun blasting are combined.

A radially sweeping oscillator, powered by an air cylinder, strokes as many as four blast guns through a range of up to 18 inches. Stroke length, stroke speed and on/off functions can also be controlled automatically.

Timers are employed to control the on/off functions of blast guns, oscillators and turntables. Our **60-minute spring timer** is powered mechanically and works well in most automated applications. Empire’s **precision reset timer**, powered by a synchronous motor, always clicks down from the same preset time. This feature, along with large graduations on the timer dial, assure more accurate control of blast durations.

When using timers with pressure systems, an adequate media supply must be available for the duration of the blast process. Consequently, a larger pressure vessel and/or media-level indicator should be considered.

Automatic door clamps lock the cabinet during blasting. For environments in which passive dust emissions present a safety concern, a timer is added to allow for adequate dust evacuation before the cabinet doors are opened. When “close-to-clean-room” standards are required, delay switches are supplied.

TYPE OF TURNTABLE	CABINET MODEL				
	2636	3648	4848	6060	7272
18" Manual with Dolly & Track (300 lb)	√				
24" Manual with Dolly & Track (1000 lb)		√	√	√	
36" Manual with Dolly & Track (1000 lb)			√	√	
48" Manual with Dolly & Track (1500 lb)					√
18" Manual, Fixed inside (300 lb)	√	√	√	√	√
24" Powered, Fixed inside (300 lb)		√	√	√	
36" Powered, Fixed inside (300 lb)			√	√	√
24" Powered with Dolly & Track (1000 lb)		√	√	√	
36" Powered with Dolly & Track (1000 lb)			√	√	√

√ Available with model number shown above



Turntables speed up parts handling and open avenues to automation.



Precision reset timer controls blast duration and helps deliver consistent results.