

## Selecting the Right Cutting Table

*Automatic scraper tables save time and improve productivity.*

**Y**ou got the green light to move forward on that new CNC plasma or oxy-fuel cutting system. Is your cutting table selection the right choice for your operations? The cutting table is only one component of your cutting system, but it needs to be properly matched to your cutting machine, fume extraction equipment and process if you expect optimal performance. Water tables and downdraft tables are standard in the industry, each with its own pros and cons. What has been growing is interest in automatic scraper tables.

Automatic scraper designs vary between suppliers, but they all have a common purpose—to remove slag and scrap with reduced time and labor. Unlike other tables, Koike's Klean Sweep utilizes multiple steel blades attached to a motor drive chain to "sweep" slag and scrap to one end for collection and removal. This cleaning process can take place while cutting operations continue.



Among conventional cutting tables, water tables are the least expensive choice. Using plant air to control a bladder, water levels are raised and lowered for cutting. With this method, smoke and dust are absorbed quite well into the water. In terms of housekeeping, however, a water table is the dirtiest and most time consuming to clean. How often it must be cleaned depends on the production levels and types of processing done. Most companies hold off on cleaning water tables as long as possible because of the time and effort involved. It's not uncommon for maintenance to shut down a

cutting operation for 1-2 shifts to clean a large cutting table. So, while the initial investment in a water table may be relatively low, the labor to remove waste and the accumulated lost production adds ongoing cost.

Standard downdraft table setups utilize a blower in a fume collector to draw smoke and dust from the table into a central filter. The filtration system and ducting adds to the initial cost, but provides a clean package if engineered correctly. For cutting aluminum or stainless, this is the table of choice over water units. It still requires the manual cleaning of catch trays, and it also causes some production



**Koike's Klean Sweep uses multiple blades attached to a continuous chain to "sweep" slag and scrap to one end for collection into in-floor hoppers or portable bins. (Photo courtesy Koike)**

downtime, but not nearly as much as with water tables.

Automatic scraper tables also utilize the fume collection components. With the Klean Sweep cutting table, production can continue uninterrupted while waste accumulates into a bin or pan for later disposal.

Before finalizing your new cutting table configuration, look beyond the initial investment. The upfront cost for an automated self-cleaning table is easily made up in operational savings over time. ■

**Koike Aronson Inc./Ransome, Arcade, N.Y., manufactures a range of metal cutting, welding and positioning equipment. For more information, call 800-252-5232 or visit [www.koike.com](http://www.koike.com).**

**Editor's note:** This article was contributed by the experts at Koike Aronson.