

Meyer Tool selected the 200 and 300 model DD Vibratory Finishers, an effluent system that is analogous to the ZM 03 FL Effluent Cleaning Machine as well as Walther Trowal compound and powder. The result: Walter Trowal's Total Solution reduced Meyer Tool's cycle time by 600%. Through its closed loop, Walther Trowal system that improves repeatability and quality, Meyer Tool now finishes 12 or more components in 30 minutes versus the previous time of 15 to 20 minutes per component.

The DD Series flat-bottom work bowl features an annealed construction with a high, wear-resistant cast polyurethane lining, ideal for processing delicate parts. The large opening between the bowl bottom and the separate gate, which is activated by a hand lever or pneumatic cylinder, allows for large components to be easily processed. Extra long separation screens with a 80-degree wrap-around facilitate easy separation of large, flat pieces. A unique, low profile provides user-friendly operation and trouble-free parts and media discharge, while direct drive operation makes for a lower maintenance machine.

Meyer Tool's DD finisher is connected in a closed loop system with another Walther Trowal machine, an effluent cleaning system that cleans the wastewater from the finishing process in the vibratory bowl. The Walther Trowal XL-70 machine used at Meyer Tool is no longer in production, but it is analogous to the ZM 03 FL that is a centrifugal cleaning machine enabling Meyer Tool to recycle its wastewater and reduce consumption of natural resources. Ideally suited to service up to approximately 60 cubic feet of vibratory finisher effluent and with an ability to process 260 gallons per hours, the Walther Trowal ZM 03 FL Centrifugal Effluent Cleaning Machine cleanses wastewaters of metal fines and oils after the finishing process and prior to draining or recycling. Abrasives and metal fines are separated from the process water by centrifugal force and can be removed as solid sludge, allowing the cleaned process water to be recycled to the finishing machine. The ZM 03 has double diaphragm air-operated supply pumps for the effluent and processing water infeeds, a motor gear stirrer in the dirty water tank, and a high G force (1,950 G's), balanced aluminum centrifugal bowl.

The finishing compound used by Meyer Tool is Walther Trowal's KFL compound. A biodegradable, liquid concentrate formulated for use on ferrous and non-ferrous metal, KFL is a mild alkaline cleansing agent with medium viscosity that can be used with ceramic or plastic media. Offering solid corrosion protection on ferrous and non-ferrous metals and recommended for recycling, KFL is excellent for degreasing, grinding, deburring, and radiusing. KFL is also good for polishing and brightening with low foaming characteristics, providing moderate cushioning and lubricating.

Meyer Tool uses P-1 powder to draw the impurities out of the finishing process water. Before it is recycled and to return clear water to the finishing machine, the P-1 powder flocculent is used to remove any oil and suspended solids such as metal fines.

Founded in 1931, Walther Trowal is the oldest manufacturer of mass finishing equipment and supplies in the world. Walther Trowal has developed equipment covering a wide range of applications in metal finishing, including radiusing, degreasing, fine finishing, surface cleaning, polishing, brightening and de-scaling and is part of the USF Surface Preparation Group.

## Walther Trowal

### Walther Trowal Provides Total Finishing Solution for Meyer Tool

**Marshall, MI.** Based in Cincinnati, OH, Meyer Tool needed vibratory finishing machines to complete EDM work on jet engine components. Deciding to depart from a hand finishing process that was labor and time intensive, Meyer Tool required a solution that reduced cycle time and provided greater control over quality. With this knowledge in mind, Meyer Tool turned to Walther Trowal, a name synonymous with innovative mass finishing technology. Together with the Walther Trowal team,