**Facts for the trade press**

*Mechanical surface finishing integrated directly into the manufacturing flow*

Rotary solutions for castings and stampings save time, space and costs

New rotary finishing vibrators can be seamlessly integrated into interlinked manufacturing operations

**Introduction**

**Haan/Germany, October 6, 2020 When it comes to surface finishing of die-castings and stampings, the optimized CB rotary vibrators from Walther Trowal combine the technical features of linear continuous flow systems with the advantages of rotary vibrators. The CB machines are ideal for processing of work pieces, which merely require a light deburring operation. For example, in case of die-castings containing only small metal flashes or stampings demanding a slight edge deburring. Since they allow feeding the work pieces individually into the machines in a continuous flow, the CB rotary vibrators can be very easily integrated into interlinked manufacturing operations.**

**Long text**

Compared to just a few years ago the on-going technical improvement of aluminum, zinc or magnesium die-casting production processes has resulted in significantly shorter cycle times for de-flashing and light deburring. Also, today many stampings have just minor burs. Likewise, the slight rounding of sharp edges nowadays can be achieved in just a few minutes of “trowalizing”.

For example, based on improved production methods a renowned die-casting company was able to reduce the cycle times for de-flashing and surface homogenization of the raw die-castings to merely five to six minutes. For this reason, in close cooperation with the customer, Walther Trowal implemented some technical changes that allowed processing the work pieces in continuous flow mode and, therefore, made it possible to integrate the rotary vibrators directly into the manufacturing flow.

New is that the work pieces are no longer loaded into the work bowl in complete batches but are continuously fed into the rotary vibrator in single piece flow at the actual production rate. For example, in die-casting operations this allows linking the rotary vibrator directly to the die-casting machine so that the raw die-castings can be finished without the need for any additional material handling or intermediate buffer systems.

Contrary to the rectangular work bowl in linear continuous flow systems, rotary vibrators have a spiral processing channel with a steady incline towards the machine discharge section. This is equipped with a screen that permits the separation of the media from the finished work pieces. While the work pieces are discharged from the machine, the abrasive media is falling through the separation screen back into the processing bowl.

Several customers have already made the switch from the much more intensive linear continuous flow AV systems to CB rotary vibrators. One user, who operates seven vibratory finishing systems from Walther Trowal, has confirmed that with a cycle time of five to six minutes all material flashes are consistently removed from his aluminum die-castings.

The experience from actual customer installations has shown that with a CB 400 optimal finishing results can be achieved with a cycle time of four minutes, whereas the cycle time in the much bigger CB 800 amounts to seven to eight minutes.

Christoph Cruse, sales director at Walther Trowal, identifies significant advantages for his customers: „Only four minutes for “trowalizing” of aluminum die-castings? Until recently this would have been considered as impossible. But our customers have refined their manufacturing methods to a point, where such short cycle times for de-flashing and light deburring are fully sufficient. Under such conditions our optimized CB rotary vibrators, seamlessly integrated into the overall manufacturing flow, are especially economical. And, compared to the technically more complex linear continuous flow AV systems, their price tag is considerably lower.”

When it comes to “trowalizing” of die-castings and stampings, Walther Trowal can now offer two processing alternatives to its customers: For work pieces with minor burs the CB rotary vibrators are the right choice. They can be easily integrated into interlinked manufacturing processes and, because of their compact design, require a minimum of space. Whenever a high processing intensity and/or a higher throughput is needed, the linear continuous flow AV machines are still the optimum solution. They allow practically any processing time that may be required for more difficult applications

Photos

**For downloading of photos in printable quality:**Please click here: [**Walther Trowal photos for the trade press**](https://www.vip-kommunikation.de/WaltherTrowal.html)

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| **Photo 1:** Die-castings embedded in the media mix  File name:  WT-BUVO-Pressefoto.jpg |  |
| **Photo 2:** The CB 5 rotary vibrator from Walther Trowal  File name:  WT\_CB\_5.jpg |  |
| **Photo 3a:** A CB rotary vibrator equipped with a magnetic separator that removes ferromagnetic work pieces from the media mix and feeds them into a drier (visible on the right side of the photo).  File name:  WT\_18072017\_0001.jpg |  |
| **Photo 3b:** A CB rotary vibrator equipped with a magnetic separator that removes ferromagnetic work pieces from the media mix and feeds them into a drier (visible on the right side of the photo).  File name:  WT\_18072017\_0002.jpg |  |
| **Photo 4:** The work pieces are transferred into the machine from the side with a conveyor belt.  File name:  WT\_18072017\_0007.jpg |  |
| **Photo 5:** Jointly conducted processing trials in the test lab in Haan so far have always produced practical and economic solutions.  File name:  WT1609160014.jpg |  |

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About Walther Trowal

Surface finishing technologies from the inventor of the “Trowalizing” process

Since 1931 Walther Trowal has been developing and producing systems for the refinement of surfaces. Initially focusing exclusively on mass finishing – the term “Trowalizing” derived from the company’s cable address “Trommel Walther –Walther Trowal has continuously expanded its product portfolio.

Over time the company has developed a broad range of machinery and systems for mass finishing, shot blasting and coating of mass produced small components.

With the invention of new systems like, for example, drag finishing and the development of special finishing methods for 3D printed components the company has proven its innovative capabilities again and again.

Walther Trowal develops and implements complete surface treatment solutions that can be seamlessly integrated into the linked production systems existing at the customers. This includes the entire process technology, perfectly adapted to the specific surface finishing requirements of the work pieces: Equipment and the respective consumables always complement each other in a perfect manner.

Each individual work piece and each manufacturing process must meet special technical requirements. That is why the experienced process engineers in our test lab, in close cooperation with the customers, develop the optimal process technology for the finishing task at hand. The result: Work piece surfaces that meet exactly the required specifications…with short processing times and a high degree of consistent, repeatable results.

Walther Trowal is one of the few manufacturers who develops and produces all machines and mass finishing consumables in-house… including ceramic and plastic grinding and polishing media as well as compounds.

The company’s equipment range also includes all kinds of peripheral equipment for handling the work pieces like lift and tip loaders, conveyor belts and roller conveyors, in addition, special driers for mass finishing applications and, last-but-not-least, systems for cleaning and recycling of the process water.

With its exchange program for wear items like work bowls, which are part of a continuous recycling program, Walther Trowal conserves valuable resources and, thus, makes a significant contribution towards sustainability in the field of industrial production. Quick technical support and the global repair and maintenance service ensure high uptimes for our equipment.

Walther Trowal serves customers in a wide range of different industries all over the world, for example, automotive, aerospace, medical engineering and wind power.

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