

**NEWS RELEASE**

[Witt-NR-08-2019\_GRAVIMAX-cost-saving]

June 17, 2019

**Saving material costs is a much-discussed issue:  
GRAVIMAX blenders are the solution**

*In addition to easy operation, **GRAVIMAX** blenders offer extreme accuracy, made possible by **RTLS** (Real Time Live Scale) real-time weighing. With the help of this method, the gravimetric blenders from WITTMANN reach a metering accuracy of 0.006%, keeping the desired mixing ratio of virgin material and additives on a constant level. Deviations can be reduced to an absolute minimum, which enables processors to limit the material content to the minimum quantity in each case. The new functions of the **GRAVIMAX** blenders – available in different sizes for different throughput rates – contribute further to noticeable cost cuts in complex metering processes.*



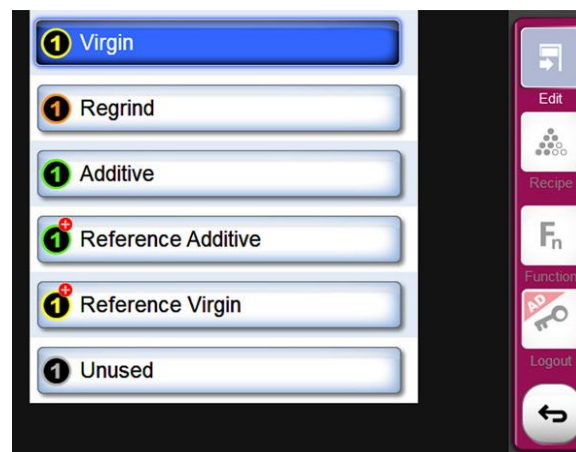
**GRAVIMAX G34 blender with hinged lid and up to 350 kg/h throughput.**

In practice, plastics processors often tend to exceed the actually sufficient dosage of additives by up to 30%, that is, to administer a massive overdose. A practice based on the fear that, due to fluctuations in metering, the dosage could fall below the required minimum quantity; and of course, the scrap rate in production must be kept low. In other words: production often takes place with a color additive content of 6 or even 6.5% instead of the required 5%. With a price of EUR 2.80 per kilogram of additive and a material throughput of 50 kg per hour, this excessive consumption adds up to about EUR 11,300.– per annum. If an additive costs EUR 10.– or even EUR 25.– per kilogram, the cost difference quickly reaches a six-digit figure.

The touch display terminal of the **GRAVIMAX** control panel offers a simple procedure for selecting different types of material, setting the correct metering quantities and saving them in the control system as part of the preparations for production. Here, the control system distinguishes between the material types: virgin material, regrind and additive.

Where it is necessary to blend in additives in highly accurate quantities – to prevent both color fluctuations and excessive material costs – the metering mode of **Reference Additive** can be set. Strong vibrations of the machine or sudden shocks can lead to blending in deviating quantities of additive, which inevitably leads to the production of parts of different quality. In the **Reference Additive** blending mode, the **GRAVIMAX** blender instantaneously adjusts the quantity of virgin material to be blended in to the actual quantity of additive, so that the percentage ratio between the two types of material corresponds again to the ratio defined in the original parameter settings for the production lot. So if an overdose of additive is blended in, this is compensated by adding more virgin material.

Accurate metering is generally very difficult to achieve where long glass-fiber (LGF) reinforced plastics are processed. Here, the top priority must always be given to the correct quantity of material with LGF content on the one hand, but on the other hand there is an added risk of “bridging” on the part of the material. To counteract this effect, **GRAVIMAX** blenders are equipped with pulsating metering valves. In this way, LGF materials are kept moving during metering. And again, there is a way to prevent the effect of an overdose – in this case that of the virgin material – by means of a specially selected metering mode: **Reference Virgin**. This metering mode ensures that – depending on the exact quantity of virgin LGF material metered in – the quantities of the other components to be added are adjusted accordingly.



*Screen view of the GRAVIMAX control system with display of the Reference Additive and Reference Virgin functions.*

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The WITTMANN Group is a worldwide leader in the production of injection molding machines, robots and peripheral equipment for the plastics processing industry, headquartered in Vienna/Austria and consisting of two main divisions: WITTMANN BATTENFELD and WITTMANN. These two divisions jointly operate the companies of the WITTMANN Group with eight production plants in five countries. Additional sales and service companies are active in 34 facilities in important plastics markets around the world.

WITTMANN BATTENFELD pursues the further expansion of its market position as an injection molding machine manufacturer and specialist for state-of-the-art plastic processing technologies. As a supplier of comprehensive, modern machine technology in modular design, the company meets both present and future market demands for plastics injection molding equipment.

The WITTMANN product portfolio includes robots and automation systems, material handling systems, dryers, gravimetric and volumetric blenders, granulators, temperature controllers and chillers. With this diversified range of peripheral units, WITTMANN offers plastics processors solutions to cover all production requirements, ranging from independent production cells to integrated plant-wide systems.

The integration of these various segments under the umbrella of the WITTMANN Group has led to complete connectivity between the various product lines. This integration has greatly benefited plastics processing users, who are increasingly looking for seamless production, including automation and peripheral functions.

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