

Press Release 4/2010

ZSE 18 MAXX – Smallest Twin Screw with an OD/ID of 1.66

Leistritz introduces the new extruder of the ZSE MAXX series at the K show in Duesseldorf/Germany from October 27th to November 3rd, 2010 – The ZSE 50 MAXX presents itself in a new design – Show with a Leistritz XXtrusion custom bike

Düsseldorf (Oct. 27th,2010) – "On the road to suXXess" – the German extruder manufacturer Leistritz Extrusionstechnik GmbH has taken up this slogan for the K show. They present this road impressively at their booth in hall 16/F22. Small, but huge – this is how one could describe the newest Leistritz extruder, the ZSE 18 MAXX. The co-rotating twin screw extruder holds a worldwide unique feature: It is the smallest of its kind with such a high screw volume. "When the word is about formulation development, basic research or small batch production, the ZSE 18 MAXX is the right choice", explains Dr. Hubertus Schulte, CEO at Leistritz. "With this machine, we developed a small scale extruder that offers cost-effective, authentic production conditions."

ZSE 18 MAXX Design Details

The ZSE 18 MAXX is the perfect completion of the ZSE MAXX series. It convinces with the worldwide unique maXXshaft feature: With an OD/ID ratio of 1.66, it has a higher volume than the ZSE 18 HPe machines. Scale-up calculations to larger ZSE MAXX extruders are considerably simplified and even more reliable. Another advantage: The throughput of volume restricted formulations can be increased by up to 30%. Depending on the formulation, throughputs of up to 50 kg/h can be run.

Also regarding the processing unit, the company made some improvements. The barrel length is – analogue to larger machines – designed in a 4D system. The spline profile of the shaft was adapted in order to have more volume in the screw and by this transmit a higher torque. By placing four instead of formerly two tie rods inside the barrel, several side feeders can be mounted. This feature enables the user to realize any kind of compounding process. "What should be mentioned here, is that now we use four instead of two heating cartridges per barrel", Dr. Schulte sums up. "So, we are able to run high temperature applications like



LEISTRITZ EXTRUSIONSTECHNIK GMBH

PEEK on a ZSE 18 MAXX." Leistritz will show the extruder running every day in various live demonstrations on its booth.

ZSE MAXX Extruder – even more efficient

The well established ZSE MAXX series comes up with several new features at the K show: Leistritz demonstrates them with a ZSE 50 MAXX extruder. The whole machine concept is based on a platform construction. This facilitates a wide range of modules and a stronger extruder systemization. All electricity supplies for drive, control and heating/cooling system are placed in a control cabinet system directly at the machine. This makes the machine wellarranged and easy to maintain. An additional water-cooling of the clamping boxes and the cover above the processing unit is therefore not necessary. Further novelties: The extruder can be operated from four sides (left/right/front/back). By putting the extruder onto leveling elements, it can easily and quickly be assembled.

"Of course, our ZSE MAXX machines still convince with the combination of high torque density of up to 15 Nm/cm³ and high volume with an OD/ID of 1.66 as well as a special cooling", explains Dr. Schulte. With these advantages the user gets a wide processing window. "In order to interpret the enormous potential of our machines, the ZSE 50 MAXX extruder will, let's say, compete with a the XXtrusion custom bike", the extruder expert reveals slightly amused. "Everyone can see what this looks like at our daily live shows on our booth."

Easy and User-friendly Screw Exchange

A further K show highlight is the new sleeve coupling, developed by Leistritz. It facilitates a quick and easy screw exchange, without having to use additional tools. The two clutch sleeves, which transmit the torque of the drive shaft onto the spline shaft profile, are pushed back manually. By doing so, the form-closed, axial safety lock can be pulled out and the srews extracted. The resulting advantages are: Highest torques can be transmitted safely and above all, the user benefits from more convenient handling.

Zeichen: ca. 4.200



Pictures:



The smallest extruder with an OD/ID of 1.66 – the ZSE 18 MAXX



Modular setup and even more efficient: the new ZSE 50 MAXX



The Leistritz sleeve couplings convince through convenient handling.









On the Road to SuXXess - with the Leistritz custom bike, where original screws (shafts) were used.

Further Information: Leistritz Extrusionstechnik GmbH Head of Marketing Michael Thummert Markgrafenstrasse 29-39 D-90459 Nuernberg / Germany

fon +49 911/4306-550 fax +49 911/4306-400 E-Mail mthummert@leistritz.com Internet www.leistritz-extrusion.com

Leistritz Extrusionstechnik GmbH

For almost 40 years Leistritz Extrusionstechnik GmbH with its headquarters in Nuremberg/Germany has been building twin screw extruders for the processing technology. Leistritz customers benefit from the know-how in various areas of material processing such as masterbatch, compounding, direct, lab and pharmaceutical extrusion. The company employs around 150 people worldwide and keeps a subsidiary in the US., the American Leistritz Extruder Corp., as well as sales offices in Italy, France and Singapore.

Leistritz at the K show 2010: Hall 16/F22

PM 4-2010