Whether it is yellow, red, green or blue: giving synthetic filaments a homoge-
neous color by extrusion is not an easy task and this has been the case for a very
long time.

A rational alternative is the coloration of fibers with liquid dyes. The amount of
additional material to the base material can be considerably reduced, becausethe liquid dyes are higher concentrated and needs therefore less carrier
material.

Therefore ViscoTec provides a complete system and an approved solution:
We have developed a liquid material handling system for the melt spinning
process which combines the advantages of liquid materials with the advantages
of standard plasticization. The main idea of most importance is that the color
is not applied to the plastic until it is liquid. This doesn’t only save time, energy
and costs on material changes, it also separates the melting operation from the
coloration process and thus allows a very constant metering process with full
plasticization.

ViscoTainer is a multifunctional tank
system and is suitable for both
filling and transporting viscous media,
i. e. also the pumping and dosing of
the aforementioned in downstream
production processes.

The system consists of two compo-
nents which together result in a
unique logistics and production
principle with flexible handling.

The adaption of the system takes place in the area of plasticization, at
the point where the polymer has already melted by min. 80 to 90 %.
Here, the best results concerning the color homogenization could be
achieved. Furthermore you have the advantage of a fast color change
and the cleaning effort is reduced. In this area the pressure conditions
are manageable (depending on the screw configuration and the
polymer between 20 and 120 bar). The adaption is made individually,
depending on the type and the configuration of the extruder.

And this technology allows the saving of millions
of liters of fresh water - year by year,
compared to dye over a water quench.
Is your medium highly viscous, shear-sensitive, sticky, abrasive or does it contain solids?

The reproducibility of all parameters is crucial to the dosing of high-viscosity products. Changes in product flow behaviour and viscosity are further important considerations. The easy adaptation to new ambient conditions and requirements must also be ensured.

ViscoTec has the perfect solution when it comes to dosing and conveying high-viscosity media!

**Endless-Piston-Principle**

- Pulsation-free dosing and conveying
- Suitable for forward and reverse operation
- Good suction capability
- Gentle operation
- Counter-pressure has no effect on dosing quantity / flow rate
- Dosing accuracy to +/- 1%
- Fully adjustable dosing quantity
- No dead spaces inside the pump
- A hermetically enclosed flexible shaft instead of joints inside the pump

**ViscoTec Endless-Piston-Principle:**

- Gentle procedure
- Pulsation-free dosing and medium flow
- The dosing volume/volumetric capacity is not influenced by the counter-pressure
- The dosing volume is infinitely variable
- Good priming behaviour
- Can be used in forward and backward direction
- Dosage precision +/- 1%

**Endless piston principle**

Our dosing technology – your advantage

At the core of every application is a volumetric conveying dosing pump, which belongs to the group of rotary positive displacement pumps. The interaction between an eccentrically moving rotor and a stator, adapted to application conditions, produces flow and dosing characteristics resembling those of an endlessly moving piston. This geometry ensures that, per rotation, a constant flow volume proportional to rotary angle is always produced.

**ViscoTec Pumpen- und Dosiertechnik GmbH**

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**Perfectly dosed!**

**About ViscoTec**

ViscoTec mainly produces systems for delivering, dosing, filling and extracting middle and highly viscous media. You will be profoundly advised for any kind of application and in case of very difficult tasks comprehensive tests will be made.

ViscoTec Pumpen und Dosiertechnik GmbH was founded in 1997 and succeeded from the former field of pump technology of Resch Maschinenbau GmbH.

60 employees having almost many years of know-how produce sophisticated solutions for the world market.

**Contact**

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Liquid dosing solution for the melt spinning process to produce synthetic filaments.