Dosing and Colouring Unit

KEM-TOUCH

EASY AND INTUITIVE TO USE

The new KEM-TOUCH is a Simple dosing and colouring unit with intuitive controls. Masterbatches or additives are dispensed through volumetric cell dosing into a free-flowing main component and for dose weights of 2 g to 2,000 g

The controls of KEM-TOUCH are integrated directly into the housing and offer a variety of programs for direct use with injection machines or extruders.

- The initial impulse either comes from the machine or is controlled by time.
- Compatible with KOCH modular system components
- Supply voltage for selection: 115 V or 230 V
- Alarm output: without voltage, 24 V or 115 V / 230 V (optional)
- Suitable for all KOCH type AZ flange adapters
- Easy, quick and trouble-free installation without tools

New motor for volumetric dosing:
In KEM-TOUCH with controls in the housing, a stepper motor * provides constant volumetric cellular dosing through a dosing roller.

The advantages of this stepper motor with an epicyclic gear is:
- High rotation torque and retaining torque for exact precise repeatability and a uniform dosing cycle

Dosierzyklus
- Exact start/stop behaviour
- 60 % less energy consumption

DIRECT COLOURING IN THE KOCH MODULAR SYSTEM:
KEM-TOUCH dosing unit with the AZ3 adapter flange, Z2 material container and Tm6D compact conveyor – for transporting two material components, e.g. new material and ground mix.

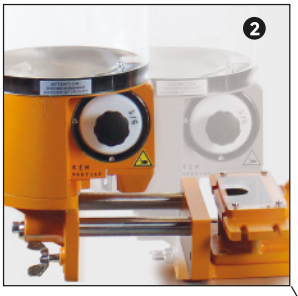
* KEM-Pu and KEM-Ma always have two shielded AC motors with a gearbox

RING INSERT AND SLIDING DEVICE

Automatic filling and very easy material change

❶
The rubber-mounted ring insert allows the MIKO conveyor (up to 15 kg/h) to be installed on an acrylic-glass container.

❷
In case of frequent material changes, it is advisable to install KEM-TOUCH on a flange with the SV2 sliding device. This makes it very easy to pull the whole station from the material shaft and balance or empty it without tools.



Functional: KEM-TOUCH with the AZ flange and SV2 sliding device

KEM-PU (no picture)

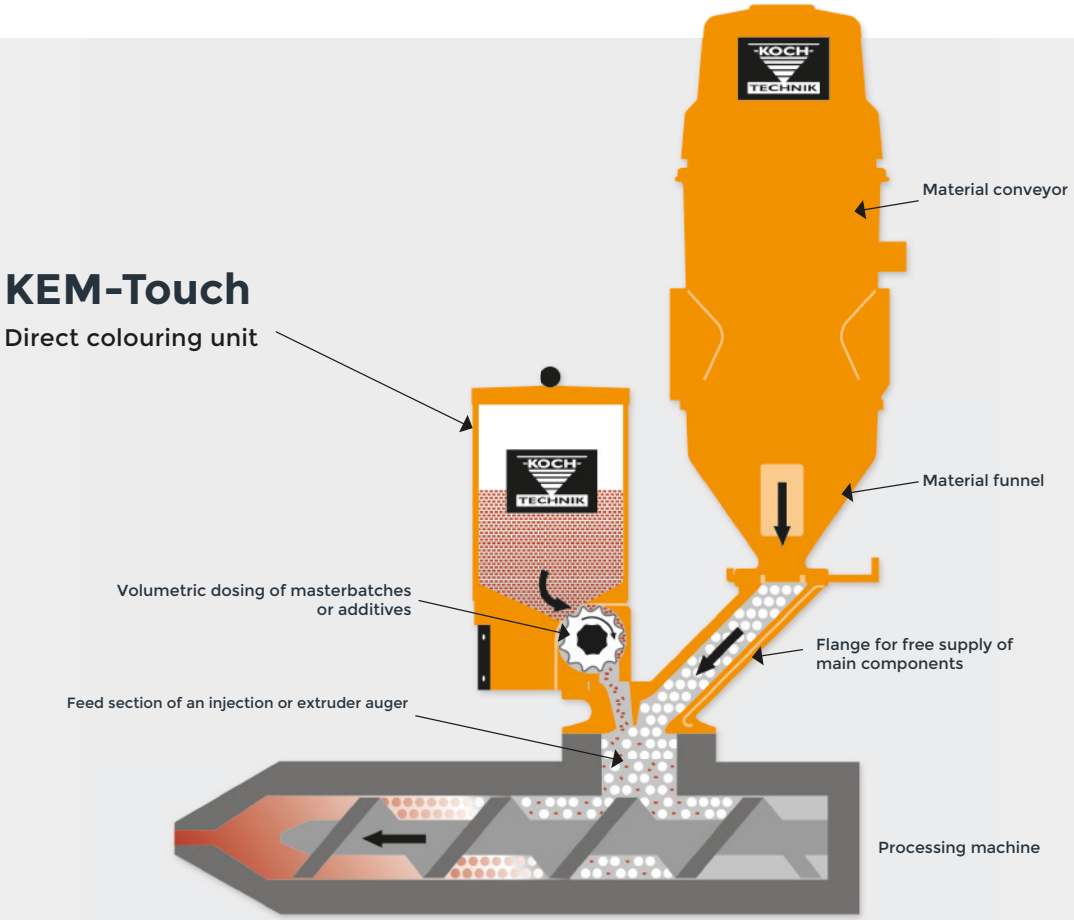
Direct adding of free-flowing powder
Also KEM-Pu for up to 2 kg/h of free-flowing powder is equipped with touch screen control. During powder dosing, cells of a special dosing roller are emptied by a scraper. Before that, an agitator in the container prevents the creation of bridges in the material and ensures even filling of the dosing roller. There are various dosing rollers available for adding powder.

KEM-MA

Adding of free-flowing mixes or masterbatches with the highest flow rates
KEM-Ma dosing units are available for various material throughputs. KEM-Ma1 up to 7 kg/h, KEM-Ma2 up to 14 kg/h, KEM-Ma3 up to 30 kg/h and KEM-Ma4 up to 140 kg/h. The units dispense larger quantities of free-flowing ground material as well as masterbatches using the V2A stainless steel cellular wheel. For automatic filling, the KOCH conveyor can be mounted to a container made of high-quality cast aluminium. The SV2 sliding device facilitates weighing and emptying. The agitator in the container ensures even dosing of the material.

KEM-Ma also features touch screen control.

DIRECT COLOURING



The KEM-TOUCH direct colouring unit is an affordable solution for dosing masterbatches or additives directly into the material feeder of an injection moulding machine or extruder. Thanks to a high precision, KEM ensures the exact same colour shades in the final product. Dosing is performed volumetrically during the entire auger feeding time and directly into free-flowing material. The advantage is that no mixed material remains in the machine when changing the product. Dosing through the cell volume allows precise addition of pellets as well as free-flowing powder and ground base. For dosing of smaller or larger amounts, the dosing rollers can be easily and quickly replaced.

FOR VOLUMETRIC DOSING, THERE ARE VARIOUS DOSING ROLLERS AVAILABLE FOR WEIGHTS RANGING FROM 2 G TO 10,000 G.

2g to 80g
9/0

5g to 300g
9/1

10g to 500g
9/2

20g to 2.000g
9/3

100g to 10.000g
Cellular wheel 8/1 for KEM-Ma

PRECISE

TOUCH CONTROL

CONTROL AND DOSING VIA A TOUCH SCREEN:
• 3,5“ colour touch screen (diagonal 8.9 cm)

5 PROGRAMS FOR DIRECT DOSING:

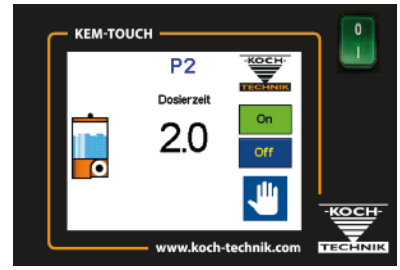
• **PROGRAM 1** for extruders with constant rpm
• **PROGRAM 2** for injection machines:
The initial impulse is given by the injection machine (plug-in „dynamic rotation speed “)
• **PROGRAM 3** for extruders and blowing machines with variable rpm. Dosing depends on the angular momentum of the extruder auger, which is removed through a contact.
• **PROGRAM 4** for injection machines: Dosing through a potential-free contact or impulse from the processing machine. Percentage input of the colour ratio (plug-in „dynamic rotation speed “)
• **PROGRAM 5** for extruders and blowing machines with variable rpm. Dosing depends on the signal of the production machine

• Direct setting of dosing quantities (amounts) in percent or seconds
• 100 freely configurable recipes (Program 4)
• Language selection and password protection for multiple machine operators
• Software update on a micro SD card
• Compatible with older KEM units

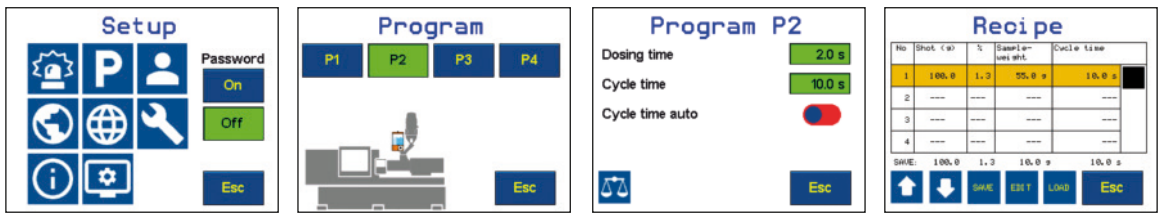
COMMUNICATION WITH EXTERNAL SYSTEMS:
Optionally, you can integrate the control of KEM-TOUCH into higher-level external systems:

• Ethernet interface (protocol: Modbus-TCP)
• Compatible with Industry 4.0 through OPC-UA
• Easy integration into machine control and KOCH visualization software

OPTIONS:
• Level and rotation monitoring
• Ethernet for remote maintenance, Modbus TCP and remote application control



Ideal if you need to add masterbatches, antistatic agents or flame retardants: 2 dosing units KEM-TOUCH with the AZ adapter flange, Z5 material funnel and TmA8 separator for two materials, e.g. new material and ground mix.



Easy-to-use control touch screen guides users through various menus.

EXPAND YOUR CAPABILITIES

MIXING AND DOSING

We are specialists in dosing, mixing and coloring of plastic materials! We provide you with precise, reliable technology - for injection moulding machines and extruders.

FEEDING

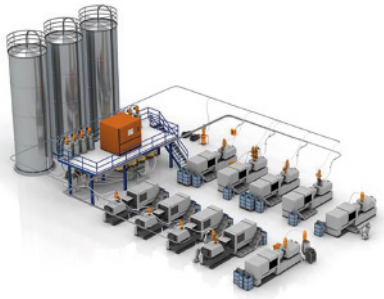
We offer peripheral equipment to supply your plastics processing machine with material. Our hopper loader transfer material save and clean to injection moulding machines and extruders.

DRYING

Our dryers for plastic materials are characterised by a high efficiency and cost effectiveness.

CENTRAL FEEDING SYSTEMS

We design, manufacture and install your centralised material feeding system. Specifically to your requirements and customised to your plastics processing needs.



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