

Dosing stations Pu / Kö / Ma

with chamber volume dosing system (patented by KOCH)



Type Pu

Unit for dosing powder

The dosing station Type Pu can be used to dose powder with extreme accuracy, up to 0.005%. Colours can be changed quickly and cleanly.

The powder station is of a simple and logical design and is reliable and easy to use: it has a feed roller for dosing with assisted discharge of its chambers, an agitator to move the powder and a screw to remove the roller for cleaning or exchanging.

type	to	kg/h	capacity/litre
Pu 1		0,5	4*
Pu 2		1,0	6*
Pu 3		2,0	10*
Pu 4		4,0	10*
Pu 5		7,0	10*
Pu 7		15,0	40 (V 2 A)

* container made of perspex.



Type Kö

**The grain station type Kö for masterbatch
Save on dye with chamber volume dosing!**

This station allows you to dose grains very accurately and with variable adjustment, for both masterbatch and small or large grains. The feed roller is very flexible. That is how it was designed and practice has shown that it works well.

type	to	kg/h	capacity/litre
Kö 2-1		0,5	4*
Kö 2		1,0	6*
Kö 3		4,0	10*
Kö 4		7,0	10*

* container made of die-cast aluminium or V 2 A (stainless steel) and perspex®



Type Ma

Ground material station and grain station Type Ma for up to 200 kg/h

For uninterrupted production it is essential to be able dose sharp-edged grains without clogging the dosing machine. That is why this dosing station has a cellular wheel made of V 2 A (highest-quality stainless steel). It is completely sealed to the outside to prevent dust from escaping, and in the centre is an agitator to homogenize the additives. It is possible to switch to another dye or another material quickly on the mixer without dismantling the machine.

type	to	kg/h	capacity/litre
Ma 1		7,0	11*
Ma 2		14,0	11*
Ma 3		25,0	11*
Ma 4		140,0	11*
Ma 5		200,0	20*

* container made of die-cast aluminium or V 2 A (stainless steel) and perspex®



Type Ma 7

The ground material station up to 600 kg/h

We have built the large Ma 7 dosing station especially for ground material or coarse powders which do not flow easily. A built-in cellular wheel and an agitator on the base ensure that the material is discharged smoothly.

It is equivalent to the Pu 7 powder station for throughputs up to 15 kg/h.

type	to	kg/h	capacity/litre
Ma 7		600,0	40*

* container made of die-cast aluminium or V 2 A (stainless steel) and perspex®



Types Kö 6 - Kö 8

The big grain station for virgin or ground material

A large built-in cellular wheel makes it possible to dose both new material and free-flowing ground material. The chamber volume dosing system ensures very high accuracy.

type	to	kg/h	capacity/litre
Kö 6		350,0	40*
Kö 7		600,0	60*
Kö 8		1000,0	100*

* container made of V 2 A (stainless steel) and perspex*



Type V (patented by KOCH)

Granular attachment for powder station

This unit provides flexibility because it can be used on the powder station to dose granulate of any kind. Just mount the attachment to the station using the two screws and you're ready for dosing granulate. This enables the performing of many additional tasks both quickly and easily.



SV 2 pushing device

Pushing device for dosing stations

- eased discharge of materials and weighing out
- for small to middle dosing stations on pre-mixers
- high-tensile die-cast aluminium
- easy handling



SV 3 swivel device

Swivel device for large dosing stations

- easy material change and weighing out
- for large dosing stations
- robust grey cast iron
- easy handling

Pre-mixers for injection moulding, blow moulding and extrusion



Pre-mixer type G, Kö 2, Z 5, 608 and control unit

Mixing plastic material for injection moulding



*KK pre-mixer
with Z 5 charging hopper
and Kö 2-1 dosing station*

Pre-mixer type KK

**A pre-mixer for machine throughputs up to 25 kg/h
Shot weights up to 200 g**

You should use a pre-mixer both for dosing of powder and for extremely accurate masterbatch processing. If regrind is also part of the equation, this is the surest way to go. All that's missing now for a fully automatic operation is a conveyor unit. The small pre-mixer unit fits on all machines.

Mixer made of die-cast aluminium, abrasion-resistant.



*The G pre-mixer
with Z 12 intermediate hopper
and Kö 2 dosing station*

Pre-mixer type G

**A pre-mixer for machine throughputs up to 70 kg/h
Shot weights up to 900 g**

An economical unit designed for medium processing capacity. Up to four different components can be processed in the modular system. Add a conveyor unit by KOCH and you are ready for a trouble-free automatic operation.

Mixer made of die-cast aluminium, abrasion-resistant.



Conveying system with pre-mixers



Mixer type KK with compact conveyor and dosing station



V 12 pre-mixer with
Z 12 intermediate hopper
and Kö 3 dosing station

Pre-mixer type V 12

Pre-mixer for machine throughputs up to 100 kg/h

Shot weights up to 1,5 kg

Available here are also dosing units for liquid colours, powder, masterbatch, virgin material or regrind in conjunction with the matching conveying units.

The mixing body is made from V 2 A (highest-quality stainless steel).



V 25 pre-mixer with
Z 24 intermediate hopper
and Ma 2 dosing station

Pre-mixer type 25

Pre-mixer for machine throughputs up to 250 kg/h

Shot weights up to 4 kg

Designed for medium-sized processing capacities with 25 litre capacity, made of stainless steel suitable for up to four components.

The mixing body is made from V 2 A (highest-quality stainless steel).

Type V 40 not shown (comparable to type V 25)

Pre-mixer for machine throughputs up to 400 kg/h

Shot weights up to 7 kg

Made of V 2 A (highest-quality stainless steel) this machine is intended to cope with large and really large processing capacities. Up to four different components can be processed.

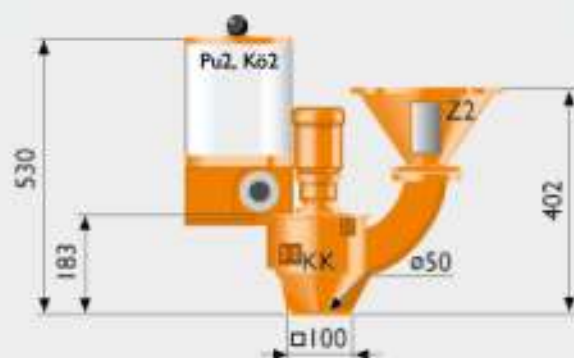


Injection moulding machines with pre-mixers and hopper loaders

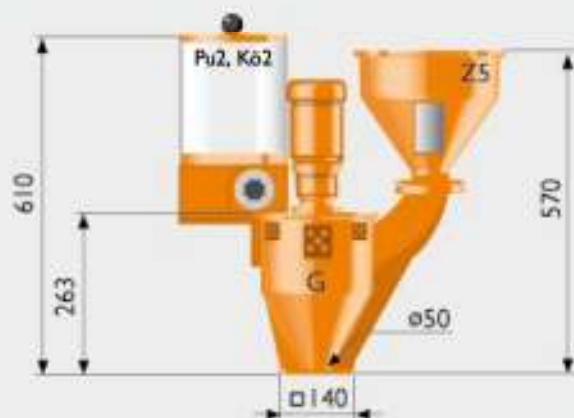


Pre-mixer V 12

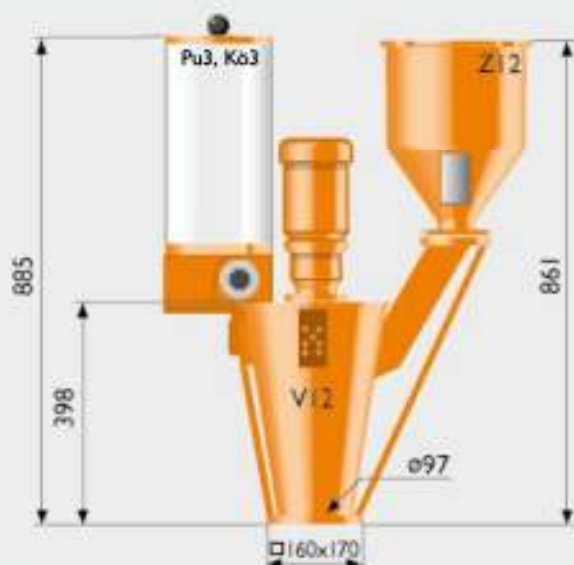
Performance data – pre-mixers for injection moulding machines



Total processing capacity:		type KK
powder and virgin material	max.	20 kg/h
masterbatch	max.	25 kg/h
Shot weight		
with powder	max.	150 g
with masterbatch	max.	200 g
connected value		approx. 0,1 kW
number of stations	max.	3



Total processing capacity:		type G
powder and virgin material	max.	60 kg/h
masterbatch	max.	70 kg/h
Shot weight		
with powder	max.	700 g
with masterbatch	max.	900 g
connected value		approx. 0,15 kW
number of stations	max.	4



Total processing capacity:		type V 12	type V 25
powder and virgin material	max.	80 kg/h	200 kg/h
masterbatch	max.	100 kg/h	250 kg/h
Shot weight			
with powder	max.	1000 g	2000 g
with masterbatch	max.	1500 g	3000 g
connected value		approx. 0,2 kW	0,25 kW
number of stations	max.	4	4 - 5

Pre-mixers for extruders and other machines (batch dosing)



Type V 40 x,
Ma 4, A 8, K6 4





G x pre-mixer with dosing stations and the 612 D compact conveyor



Type V 12 x pre-mixer with dosing stations and A 8 hopper loaders



V x 40 pre-mixer with dosing stations and A 8 hopper loaders

Pre-mixer type G x

For machine throughputs up to 60 kg/h

Pre-mixer for extruders and blow moulding machines. Dosing is batchwise. If the material level falls below a certain point, all the stations accurately dose a set quantity into the mixer. It is irrelevant whether the output from the machine is regular or irregular. The colour always remains consistent.

Up to three dosing stations attached to the mixer.

Mixer made of die-cast aluminium, abrasion-resistant

Pre-mixer type G x 7

For machine throughputs up to 120 kg/h

Up to four dosing stations can be fitted; comparable to Type G x,

Mixer made of die-cast aluminium, abrasion-resistant

Pre-mixer type V 12 x

For machine throughputs up to 250 kg/h

Another batch metering unit for largest capacities. Up to four components can be processed without difficulty. Whether powder, granulate or regrind – the same excellent results are achieved. All that is required to convert the system to trouble-free operation are matching conveyors.

The mixer is made from V 2 A (highest-quality stainless steel).

Pre-mixer type V 25 x

For machine throughputs up to 350 kg/h

Comparable to Type V 40 x, suitable for four dosing stations.

The mixer is made from V 2 A (highest-quality stainless steel).

Pre-mixer type V 40 x

For machine throughputs up to 500 kg/h

Here too, metering takes place in batches. Up to a maximum of four dosing stations or alternatively six stations can be fitted to the pre-mixer unit. A material change requires just a minute to slide the stations away from the mixer and a further minute to swivel away the conveyors. And all this without the need to resort to tools, saving both time and effort.

The mixer is made from V 2 A (highest-quality stainless steel).

Pre-mixer type V 60 x

For machine throughputs up to 1000 kg/h

Comparable to V 40 x, but higher.

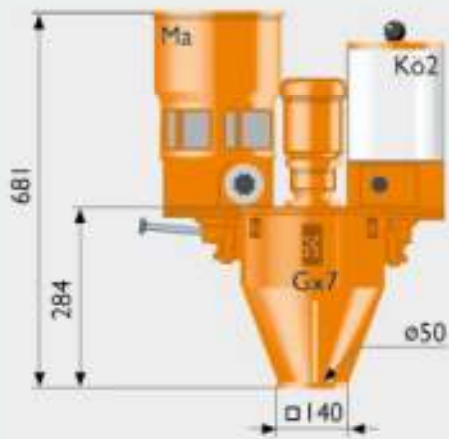
Pre-mixer type V 100 x

For machine throughputs up to 1500 kg/h

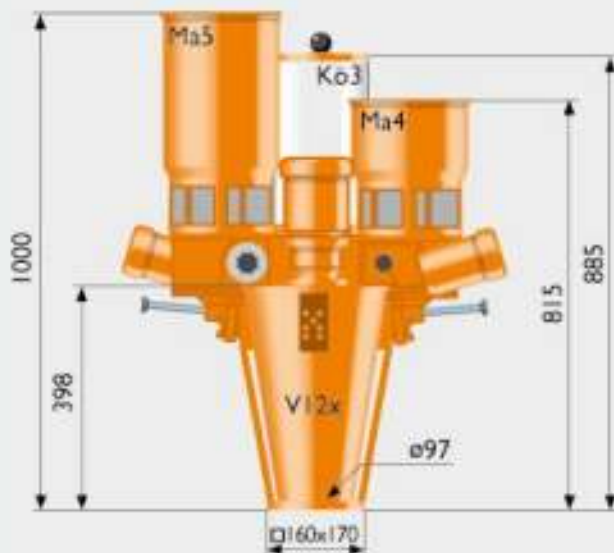
Comparable to V 40 x, but higher.



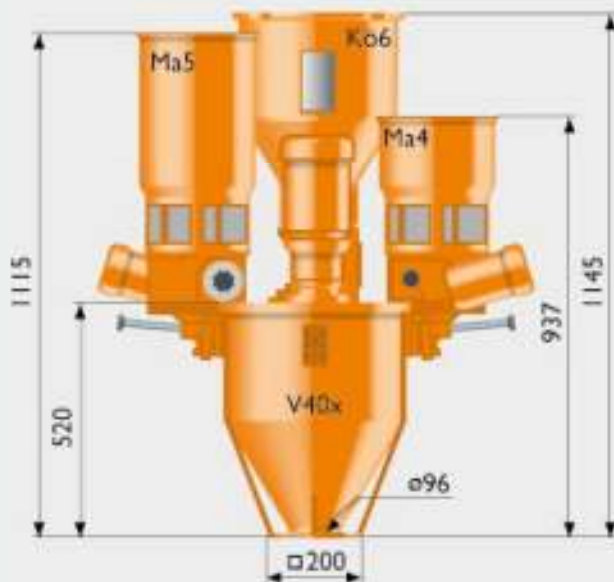
Performance data – pre-mixers for extruder and other machines



Total processing capacity:	type G x	type G x 7
powder	max. 40 kg/h	100 kg/h
masterbatch	max. 60 kg/h	120 kg/h
connected value	approx. 0,21 kW	0,22 kW
number of stations	max. 3 - 4	4



Total processing capacity:	type V 12 x	type V 25 x
powder	max. 180 kg/h	280 kg/h
masterbatch	max. 250 kg/h	350 kg/h
connected value	approx. 0,45 kW	0,55 kW
number of stations	max. 4	4 - 6



Total processing capacity:	type V 40 x	type V 60 x
powder	max. 400 kg/h	600 kg/h
masterbatch	max. 500 kg/h	1000 kg/h
connected value	approx. 0,75 kW	1 kW
number of stations	max. 4 - 6	4 - 6

Control units



Control unit type SL 42

Control unit type SL 31 (not shown)

KOCH control system for one or two stations

For connection to injection moulding machines: the feed and mixing times are controlled for every production cycle.

Control unit type SL 42

KOCH control unit for two stations

Key features:

- Simple, user-friendly operation
- Clearly laid-out operating panel with keyboard and text display
- Memory for up to 100 recipes
- Optional RS 422 data interface

You can enter the shot weight and the percentage values for the dosing directly via the operating panel. The device calculates the necessary dosing times automatically.

A restart program makes the automatic filling of the mixer easier when there is a switch to a new material.



Control unit type MCm

Control unit type MCm (microprocessor control unit)

KOCH microprocessor control unit for four or eight stations

Key features:

- Easy and user-friendly to operate
- Clearly laid-out operating panel with keyboard and text display
- All the operating data is stored and can be retrieved at any time
- Memory for up to 100 recipes
- Programmes for virgin material and ground material
- Interface to an external data processing system or a printer

The device controls and monitors all the workflows you specify. You enter the material to be processed into the unit and follow that with the required percentages. KOCH's MCm control system calculates the exact feed rate automatically.

All the operating data is stored in an internal memory for retrieval at any time. This is particularly important if there is an obligation to provide proof of standards in certified businesses.



Central conveying system of a toy manufacturer. The conveying system with hopper loaders and drying systems is supplied 108 processing machines.



Hopper loaders in combination with KEM units for direct dyeing as modules of a central conveying system.