

## **Tomal Metering and Pneumatic Transport System**

Tomal's metering and transport system is specially designed to ensure accurate and consistent feeding of powder in diluted phase.

The equipment is designed for safe and easy operation and offers a cost-effective solution for your injection requirements.

Typical applications are feeding and injection of chemicals at flue-gas cleaning on incineration plants.

E.g. lime,  $\text{Ca}(\text{OH})_2$  and active carbon are added in the flue-gas channel to eliminate sulphur dioxide and chlorhydric acid. Alternatively limestone flour,  $\text{CaCO}_3$ , is added into the furnace.

### **The equipment consists of:**

**Storage silo with shut-off valve**, pos. 1 and 2.

**Tomal multi-screw feeder**, pos. 3, in a so-called "plug design", equipped with an arch indicator for start and stop of a possible arch breaking equipment.

The feeder is able to meter accurately and consistently even against slight overpressure.

**Injector** pos. 4, minimises the counter pressure at the outlet of the feeder. Therefore the feeding can operate without disturbance.

The nozzle of the injector is replaceable.

**Transport fan** type side channel blower (pos. 5), with a silencer (pos. 6), filter (pos. 7), relief valve (pos. 8), and a hose connection (pos. 9).

**Armatures**, for control and adjustment mounted on pipe connections, pos. 10, consisting of: regulating valve, pos. 11, type butterfly valve to adjust the pressure and the flow.

Pressure switch, pos. 12, with shut-off valve for alarm at too low pressure. (Works as plug guard and shall stop the feeding)

Thermometer, pos. 14.

Pressure indicator, pos. 13, for control of the pressure.

Connections for the armatures are available both before and after the regulating valve.

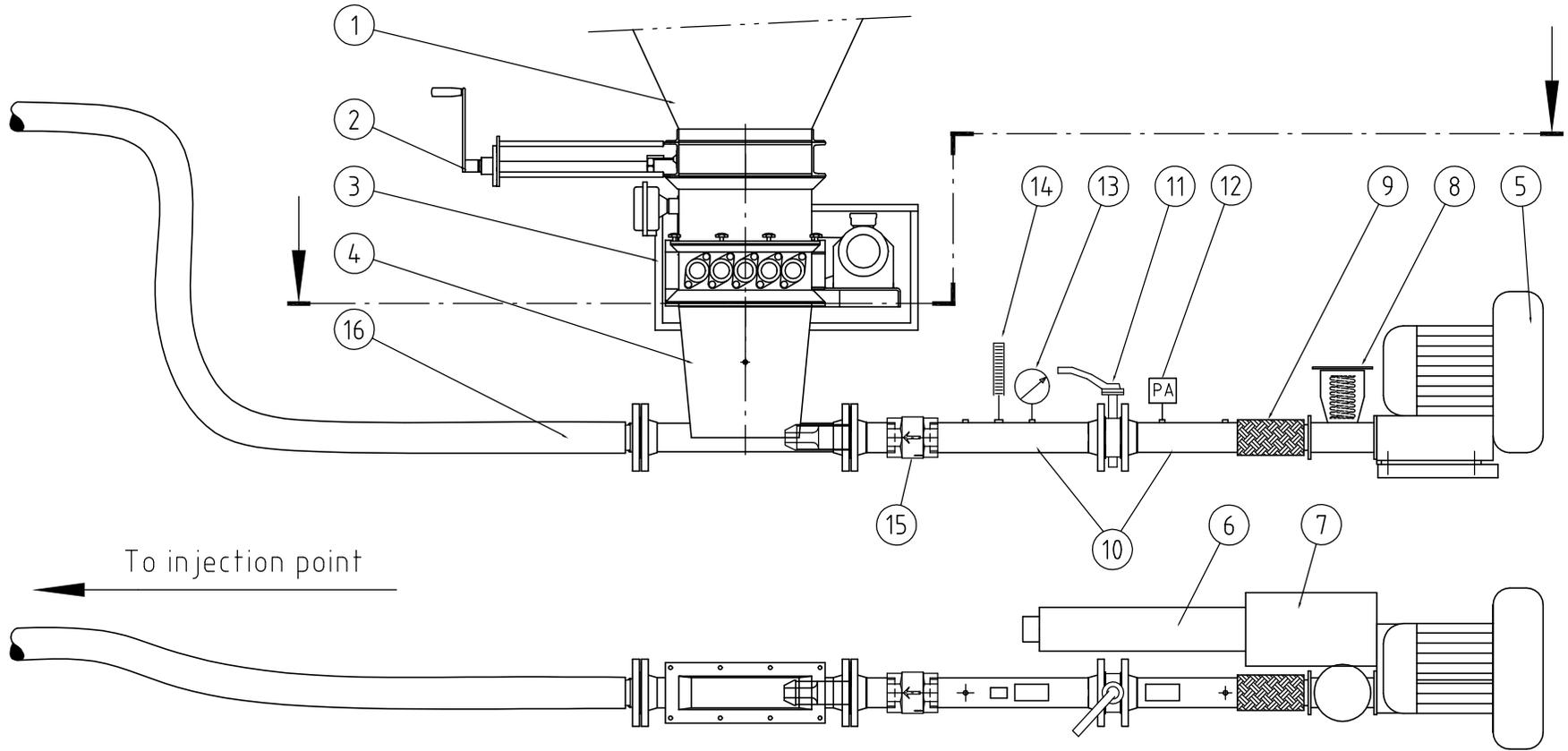
There is an additional connection for the pressure indicator at the injector housing.

The connections for the pressure switch and the pressure indicator are equipped with shut-off valves to enable removal of these armatures during operation.

**Nonreturn valve**, pos. 15, prevents possible gases from flowing backwards through the transport pipe, through the fan and out into the room.

**Transport pipe**, pos. 16, consisting of hose or pipe.

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× In "plug" design  
 ×× Can feed against a slight overpressure

16	1	Conveying pipe / hose			
15	1	Nonreturn valve			
14	1	Thermometer			
13	1	Pressure indicator			
12	1	Pressure switch			
11	1	Regulating valve			
10	2	Pipe connection			
9	1	Hose connection			
Det.No.	Qty	Denomination	Material	Modell or Dimension	Remark

8	1	Relief valve			
7	1	Filter			
6	1	Silencer			
5	1	Side channel blower			
4	1	Injector			Interchangable nozzle
3	1	Multiscrew feeder ×			××
2	1	Shut off valve			
1	1	Silo / hopper			
Det.No.	Qty	Denomination	Material	Modell or Dimension	Remark

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<b>TOMAL</b> ® <b>METERING SYSTEMS</b>												Tomal feeding- and pneumatic conveying system Product drawing		007784-A Date 990223
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