



# PENKO

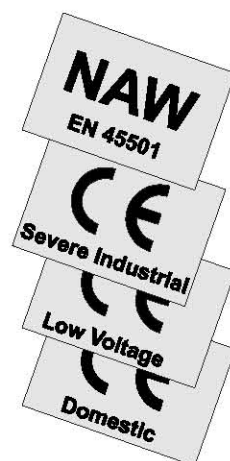
## SAI-MV



### FILLING INDICATOR type SAI-MV

Certified by NMI : TC 2636, 4000 div. 1d => 1µ V

- The solution for your filling equipment.
- Very fast. 250 Weighing samples per second.
- 3 Solid state outputs: Coarse, Fine & and Dosing ready.
- 4 Inputs for remote control-keys.
- Input functions for Zero, Start, Stop & Enable (pause)
- PC-version: RS232 or RS422 interface with ASCII protocol to down- and upload the setpoint, get the dosed value etc, etc, etc.
- PR-version: RS232 or RS422 interface with PRINTER protocol.
- Extruded and machined ALU-housing for Panel mounting.
- Also available in stainless steel housing.



## FOR EVERYTHING YOU FILL

This simple, but extremely strong filling device gives you an opportunity to do the job easy and extremely accurate.

You can use this instrument for all kind of filling activities.

Various materials-

- Solids
- Liquids
- Slurries

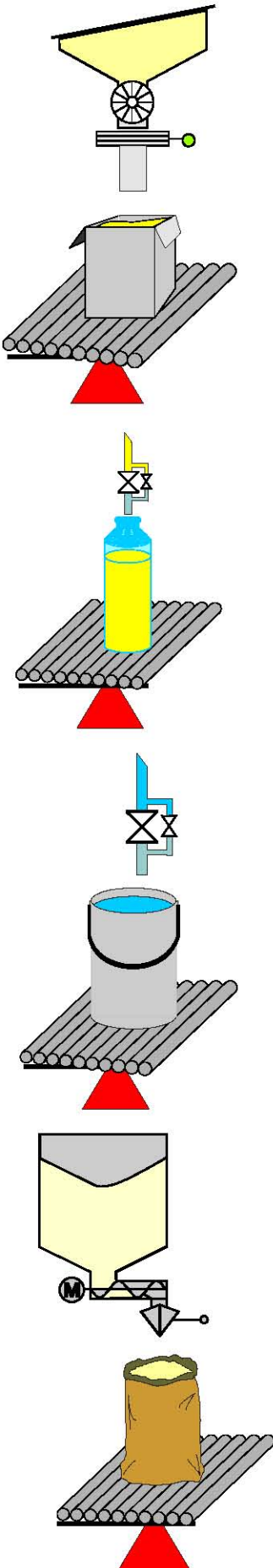
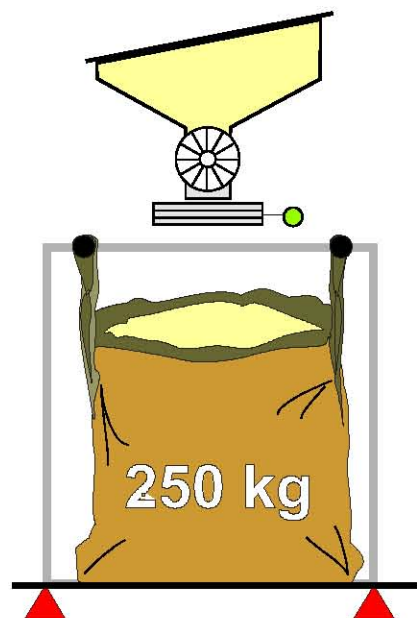
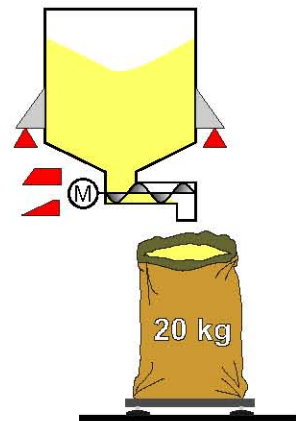
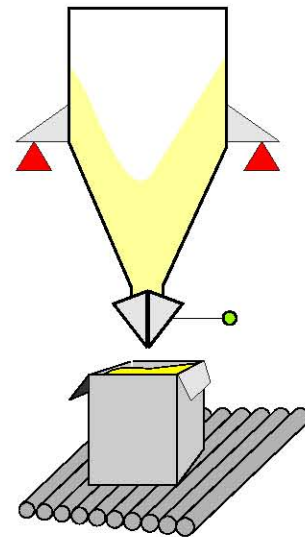
Different packaging-

- Boxes
- Bottles
- Cans
- Big Bags
- Sacks
- Pots
- etc.

The inputs provide the full control over the instrument.

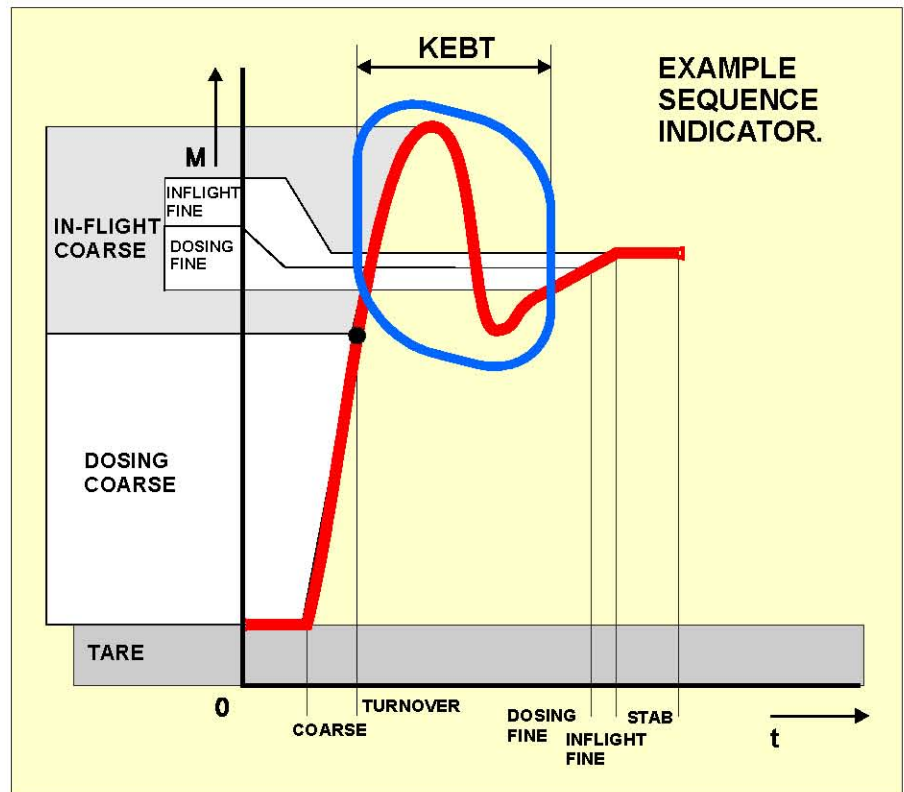
- Start input.  
When the enable input is activated, the instrument starts the sequence.
- Stop input.  
This input has to be activated all the time.  
( standard safety )
- Enable input.  
The enable input is used for the function "package in place" or "release-valve closed".

Our project-department is solving Special filling problems on request. They are experienced in OEM-applications. In this solution work, we also use other types of special developed hardware.



## YOU CAN SELECT

- Nett or Gross-weighing.
- Stability test or/and time out. (for zero or tare)
- Positive- or Negative weighing.
- Coarse- and/or Fine dosing.
- Kinetic Energy Bridge function. Yes or No.
- Inflight correction: 0(=no) / 10 / 20 / 50 % or a fixed value.
- Stability test- or/and time out. (for end value)
- End result for printer facilities.



## PR-version: PRINT THE RESULTS.

```

-----
PENKO ENGINEERING B.V.
DATE       : 05-09-96
TIME       : 10:15
SET POINT  : 1.000 kg
TARE PT    : 0.100 kg
SUBTOT.    : 123.174 kg
AVERAGE   : 1.001 kg
COUNT    : 123
WEIGHING = PROFIT
-----

```

The header and the footer of the ticket are programmable in a very easy way.

By pressing the print command button shorter than 3 seconds, you get a full SUBTOTAL report. This gives you an view of the work done up to this moment . So you have a good idea what has been done up to now.

```

-----
PENKO ENGINEERING B.V.
DATE       : 05-09-96
TIME       : 10:16
SET POINT  : 1.000 kg
TARE PT    : 0.100 kg
TOTAL      : 123.174 kg
AVERAGE   : 1.001 kg
COUNT    : 123
WEIGHING = PROFIT
-----

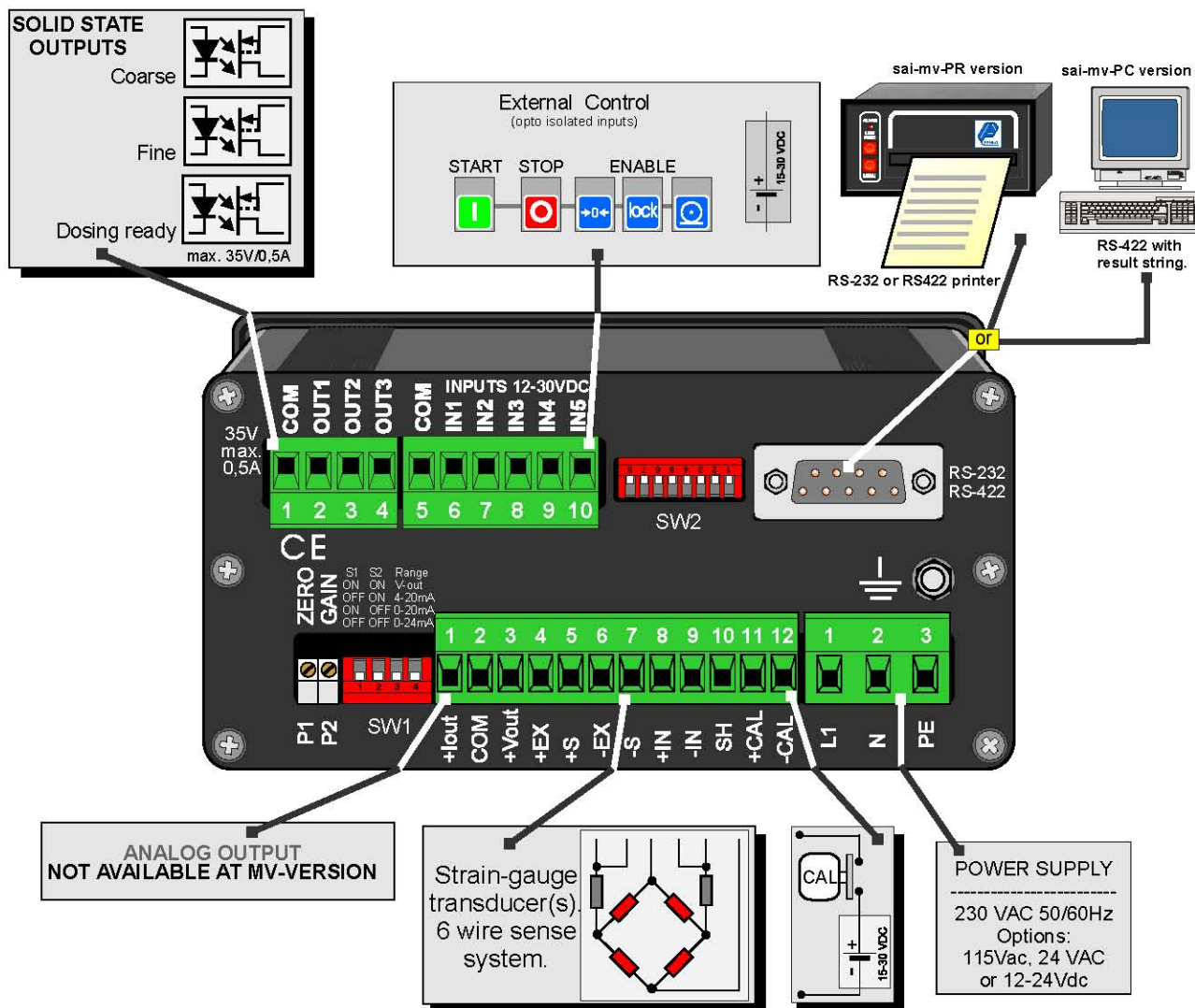
```

By pressing the print command button longer than 3 seconds, you get a full TOTAL report. You also clean the memory. The instrument is ready for a new job. This print- out gives you an view of the work.

On request the instrument can be delivered with an RS232 port which generates a string, suitable for the set up of an "e" mark protocol.



## Filling Indicator, type SAI-MV



### Specifications:

Power supply	230 Vac - 50/60 Hz, +/- 10%. Options: 24Vac, 115 Vac, 12-24Vdc.
Wiring	full Wheatstone bridge with sense connections.
Display	5 digits 0.56" - 14.2 mm. Ultra Bright.
Display speed	1-10 readings per second.
Excitation voltage	10 V DC, suitable for 1-4 loadcells with a bridge resistance of 350 Ohm.
Input range	+/- 23 mV. Verification unit 1 $\mu$ V/part.
Conversion speed	250 samples/second.
Linearity	< 0.006 % FS.
Resolution	1/65,000 counts. ( 16bit internal )
Temperature effect	on zero $\leq$ 12 ppm/°C. on span $\leq$ 10 ppm/°C.
Temperature range	-10 - + 50°C.
Analog filter	12 dB/octave e.g. 40dB/decade 2.5 Hz.
Digital filter	36 dB/octave e.g. 120dB/decade 10Hz
Digital output	Isolated RS 232, 1200/9600 Baud or 4-wire RS422.
Inputs	5 optical isolated 12-30 V. DC.
Outputs	3 solid state outputs 15-35 Vdc or ac max 0.5A.
Consumption	14 Watt. with 4 loadcells- 350 Ohm.
Dimensions	150 x 78 x 180 (ALU-housing, depth 250mm at certified version).
Weight	appr. 1800 g

Certification TC 2636 (for 4000 divisions).

