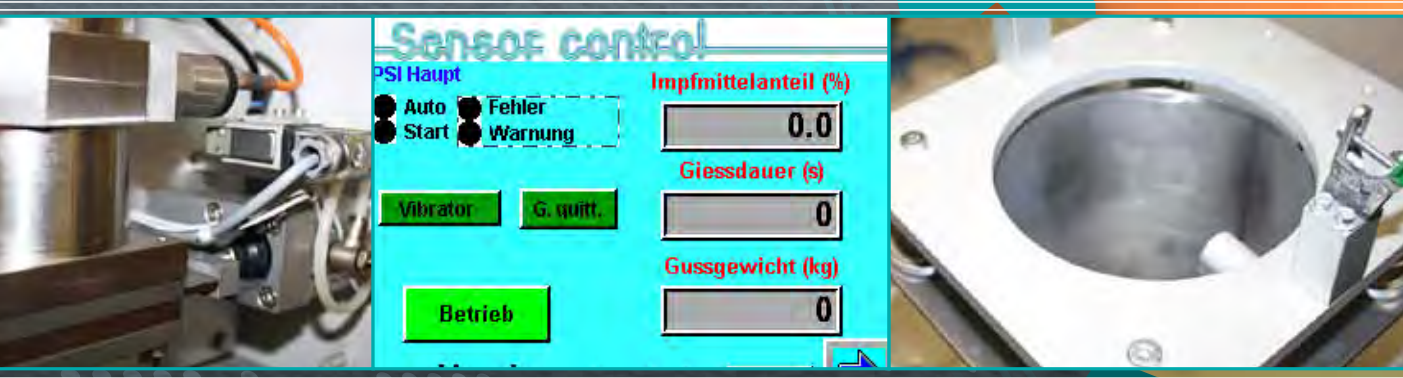


POURING STREAM INOCULATION IN-STREAM INOCULATION

ACCURATE – DEPENDABLE – USER FRIENDLY



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PSI

APPLICATION

The PSI system was developed to meter inoculation materials directly into the molten iron stream

The earlier conventional method of ladle inoculation has lost its significance in the modern foundry with higher volume production.

Inoculation is defined as the addition of nucleation affecting materials (such as silicon, magnesium, sulfur etc.) into the iron melt.

These additions influence, in a controlled manner, the solidification process or the structure of the metal (Crystallization)

It is recommended to add the inoculants at the latest possible moment, such as when pouring the mold.

The amount of inoculant used is based on the type of iron and varies from 0.1 to max. 0.6% of the casting weight.

The additions are determined primarily from

- Pouring Weight
- Pouring Time
- Pouring Rate

A dependable system must meet these considerations and must be quickly adaptable to the specific casting program.

TECHNICAL DATA:

Weight:	approx. 80 kg	Electronic:	Rittal CP with CPU and E/A Modules
PLC System:	5,7" Touch QVGA 500MHz	Hopper capacity:	7,6l (other sizes are possible)
Dosing unit:	with storage hopper and tube	Power supply:	230 V AC 10 A
		Air supplying :	6 - 10 bar

ADVANTAGES/ FEATURES

- Simple separation of the connection between control and Inoculation equipment.
- Hopper and metering system in stainless steel for robust and long life application
- Capacity of the hopper individually adjustable.
- Flow control by light sensor
- Indication and adjustment of the inoculant flow rate in grams per second.
- Easy to understand controls and calibration
- Quick switching between different flow capacities.
- Early warning signal for refilling of the empty hopper.
- Dependable process control by monitoring the cylinder travel.
- Simple replaceable fill pipe.
- Quick installation onsite because of compact design and the utilization of standard enclosures.
- No special assistance needed for startup and commissioning.

