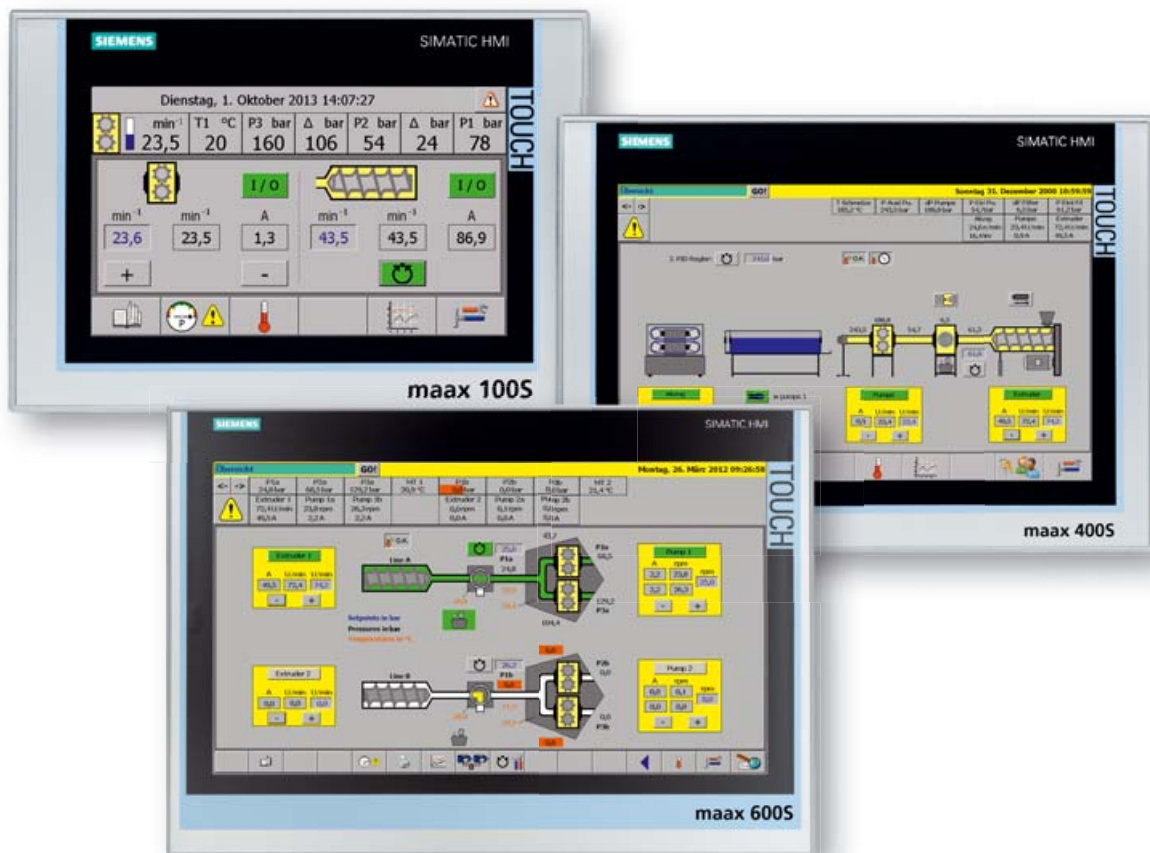


# maax<sup>®</sup> 100S / 400S / 600S

## Automation solution



It simplifies operation, control and adjustment of the operating parameters. This guarantees optimum protection and operation of the gear pump and screen changer. Process and operational reliability of the entire system is increased.

The maax<sup>®</sup> 100S automation system is the ideal solution for integrating melt pumps and screen changers. maax<sup>®</sup> 400S is for upgrading coextrusion lines. The maax<sup>®</sup> 600S automation system is the ideal solution for equipping complete and complex extrusion and compounding plants.

### Your benefits

- Simple and clear operation of the line-start and stop procedures
- Increased productivity, by saving recipes in parameter lists
- Rapid and precise control of extruder and pump speed, depending on application
- Integrated temperature control of system components
- Quick error detection by plain text messages
- Scalable visualisation of various operating parameters in a trend display
- Additional for maax<sup>®</sup> 100S/400S/600S: configurable System and Software configuration

# maax® 100S / 400S / 600S

Automation solution

## Features

- Convenient and safe operation via colordisplay with touch function and keys
- Temperature zones maax® 100S: max. 16
- Temperature zones maax® 400S: max. 32
- Temperature zones maax® 600S: max. 48
- Online language changeover

## Method of operation

- Automatic run-up to initial start speed
- Pressure controlled operation from start
- Integrated filter monitoring
- Quick and precise control of pump admission pressure
- Optional for maax® 400S/600S: with process data logging

## maax® 100S, 400S and 600S offers upon request

- All electrical equipment incl. the automation system supplied
- Supply and construction of all required mechanical assemblies and parts including connectors, flanges, bases, etc.
- Supply and integration of melt filtration systems
- Installation of electrical and mechanical assemblies
- Process technology optimization and guidance
- Commissioning incl. operator training
- "Round-the-clock" service with short response times

## maax® 100S, 400S and 600S as a component of expac®

As a system supplier, Maag offers complete assemblies for your extrusion plant comprising extrex® gear pump, screen changer, maax® 400S, and drive unit. As a sum total of the individual parts, the expac® system enhances the productivity of your process. The experience gained Maag allows all components to be wisely networked, hence achieving an optimised solution and significantly increasing operational reliability. Integrated statistical functions and process data storage enable a transparent quality management system. Plant flexibility is also enhanced by the effect of additional tolerances, e.g. on pump admission pressure over the setpoint value (pump admission pressure control).

Technical specifications:	maax® 100S	maax® 400S	maax® 600S
<b>Analogue inputs 0-10V:</b>	8	8	16
<b>Analogue outputs 0-10 V for drive actuation:</b>	3	4	3
<b>Melt pressure measurements:</b>	3	6	13
<b>Melt temperature measurement:</b>	1	2, at heating zone or analogue input	10, at heating zone or analogue input
<b>Types of temperature sensor:</b>	Thermoelement Typ J	Thermoelement type J, K, R, S, T, PT 100, 0/4-20 mA	Thermoelement type J, K, R, S, T, PT 100, 0/4-20 mA
<b>Configurable control circuits:</b>	1 (Pump inlet pressure)	2 (1x pump inlet pressure, 1x freely config)	2 (1x pump inlet pressure, 1x freely config)
<b>Interfaces:</b>	MPI Profibus, USB, Profinet/Ethernet	2x Ethernet, 4x USB, RS232, Profibus DP, Profinet, DVI	2x Ethernet, 4x USB, RS232, Profibus DP, Profinet, DVI
<b>Monitor:</b>	Siemens Comfort Touch Panel TP700	Siemens Comfort Touch Panel TP1200	Siemens Industrial Thin Client ITC1900
<b>Auxiliary power:</b>	24 VDC, -15% to +20%, approx. 3 A	24 VDC, 20.4V-28.8V, approx. 2.5 A	24 VDC, 20.4V-28.8V, approx. 2.5 A
<b>Operating/storage temperature:</b>	0 to +50°C / -20 to +60°C	0 to +50°C / -20 to +60°C	0 to +50°C / -20 to +60°C
<b>Formula storage:</b>	Internal Flash memory, memory card	Internal Flash memory, USB, network	Internal Flash memory, USB, network