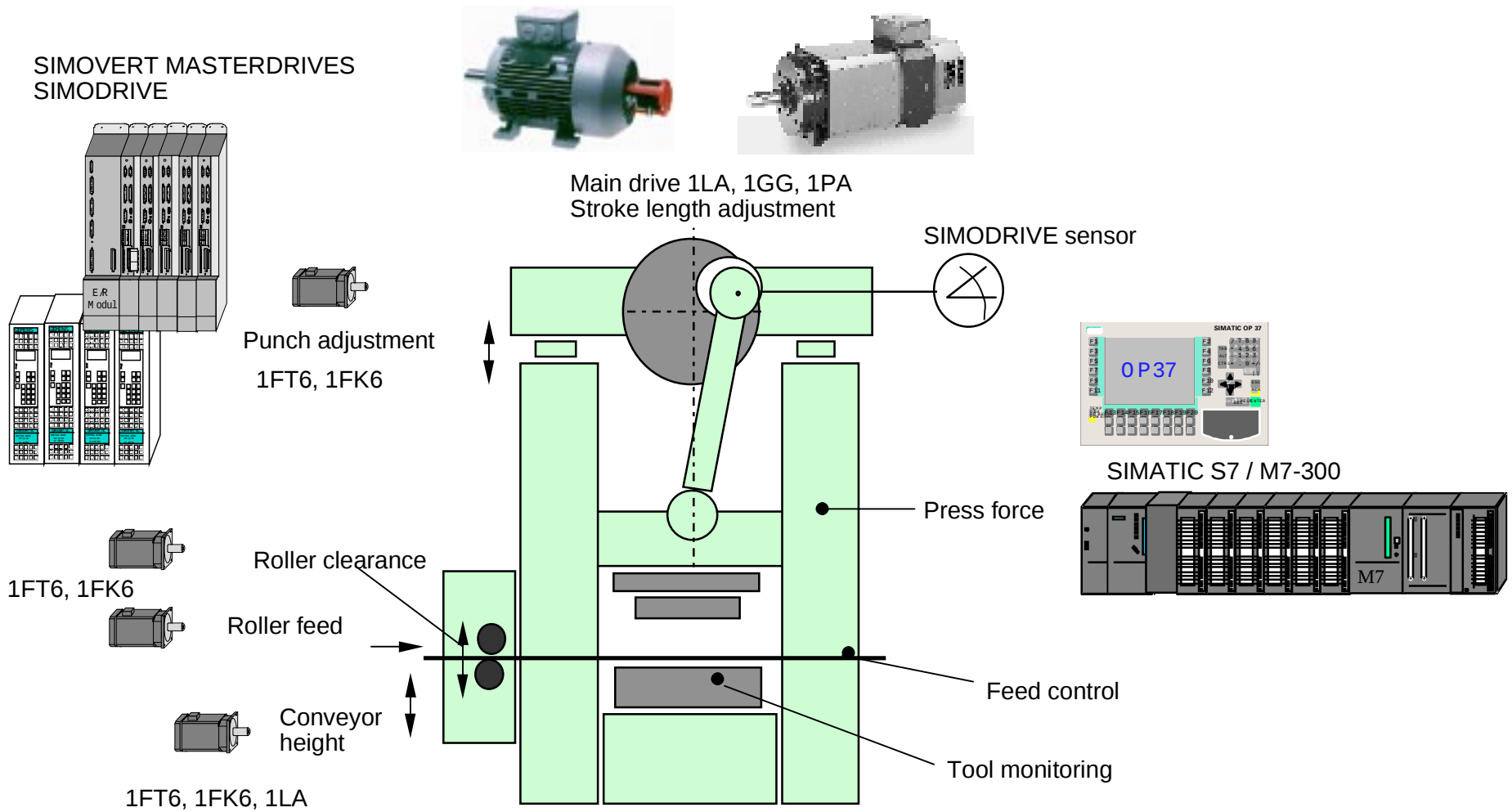


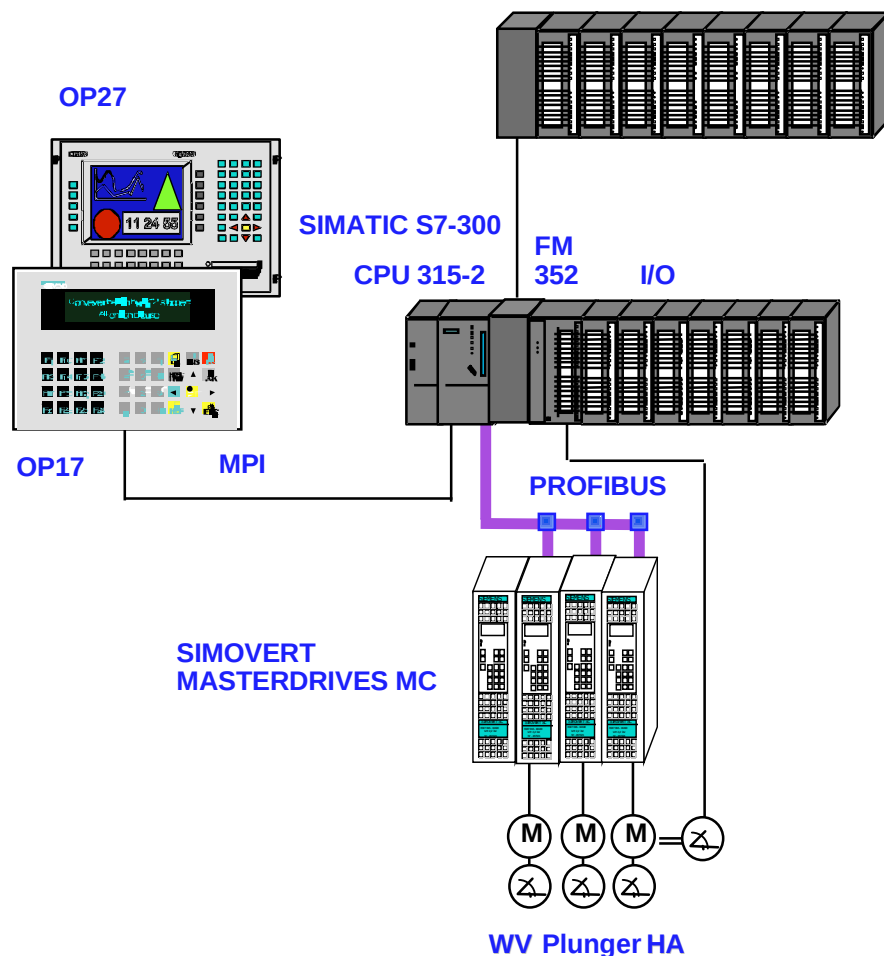
# Mechanical universal presses

## Components



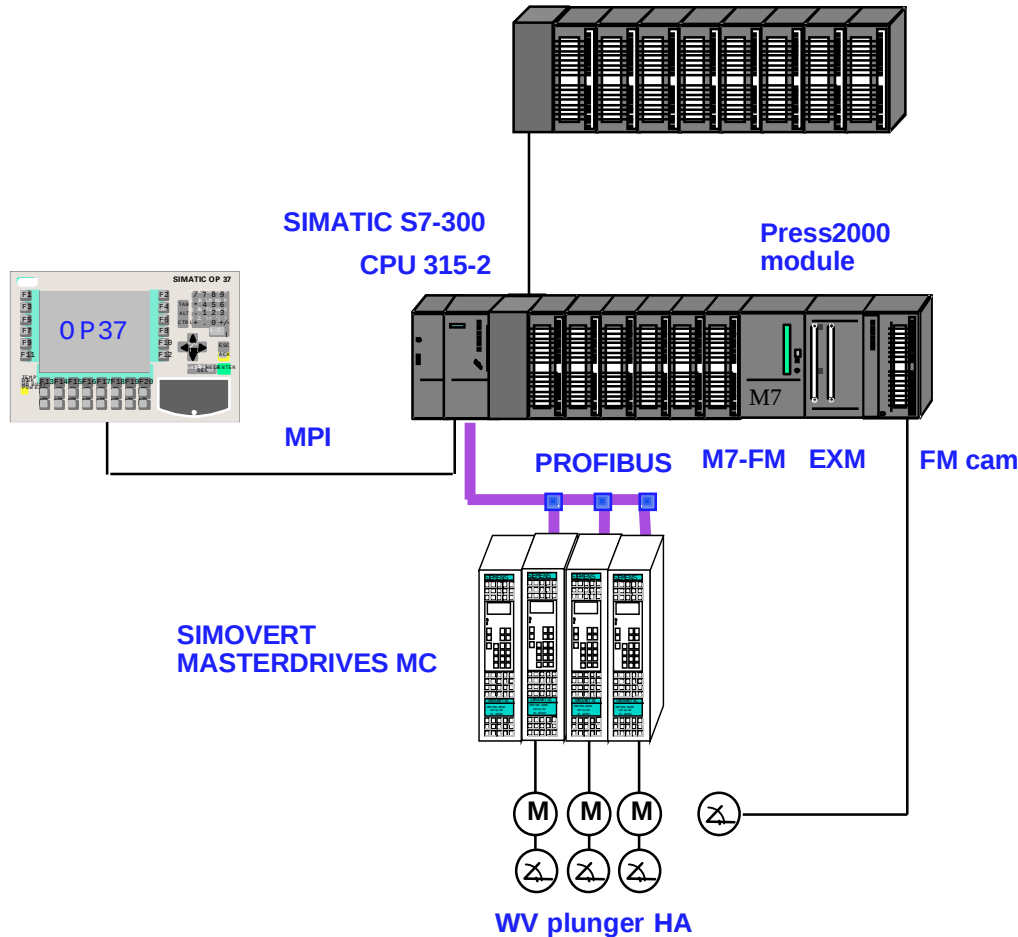
# Press2000 S

## Standard solution with CPU 315-2 and SIMOVERT MASTERDRIVES MC



- ❑ Press2000-SW in SIMATIC S7
  - Main drive control in S7
    - Control via PROFIBUS
    - Deceleration angle calculation
    - OT cutoff via FM 352
    - Stroke adjustment via deceleration angle specification
  - Simple tool position safety
  - Simple press force monitoring
- ❑ Cam control module FM 352
  - 32 cam tracks
  - of which 12 are high-speed cam outputs
- ❑ SIMOVERT MASTERDRIVES MC
  - Positioning functionality in the converter
  - Roller feed functions in the converter
  - Control signals/programs via PROFIBUS
- ❑ Servomotors 1FT6/1FK6
  - 1-encoder system for incremental/absolute encoders
- ❑ Main motors 1PH7
  - 9.5 kW to 160 kW

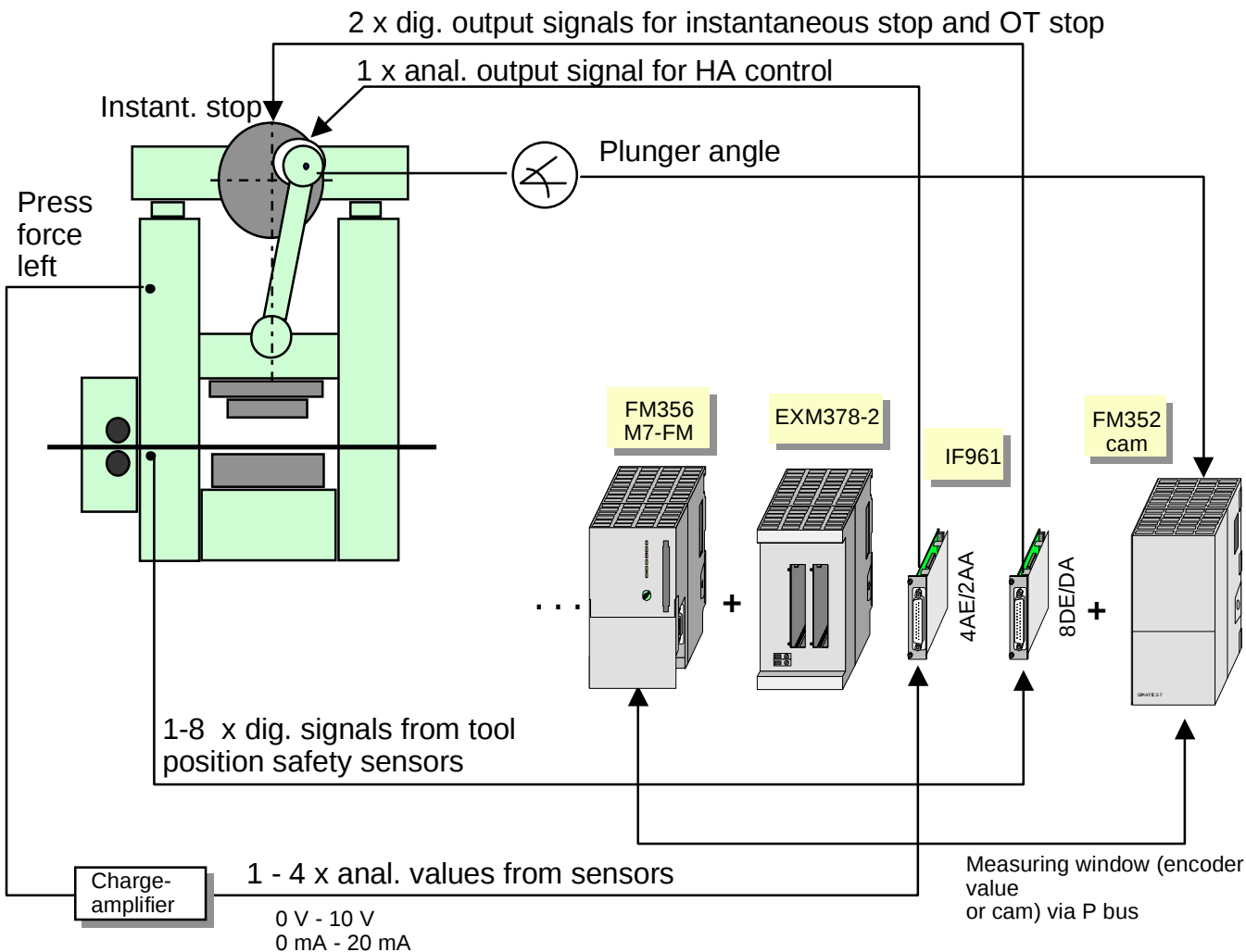
# Press2000 High-performance solution with Press2000 module and SIMOVERT MASTERDRIVES MC



- Press2000 software on SIMATIC M7
- Main drive control
  - Analog control
  - Deceleration angle calculation and specification for OT cutoff via FM 352
  - Stroke adjustment via deceleration angle specification
- Tool position safety
- Press force monitoring
- Cam control module FM 352
  - 32 cam tracks
  - of which 12 are high-speed cam outputs
- SIMOVERT MASTERDRIVES MC
  - Positioning functionality in the converter
  - Roller feed functions in the converter
  - Control signals/programs via PROFIBUS
- Servomotors 1FT6/1FK6
  - 1-encoder system for incremental/absolute encoders
- Main motors 1PH7
  - 9.5 kW to 160 kW

# Press2000

## Press functions with the Press2000 module



### Main drive control:

- Speed control
- OT stop
- Closed-loop/open-loop positioning

### Cam controller:

- 32 cam tracks for 128 cams

### Tool position safety:

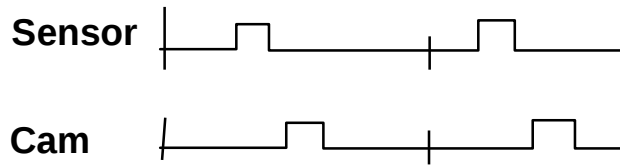
- 8-channel
- Response time approx. 2 ms to 3 ms

### Press force monitoring:

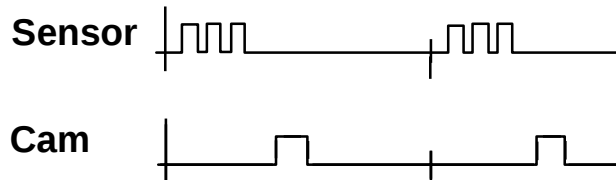
- 4-channel
- Min., max., cumulative, differential
- Envelope curve control

## Press2000 technology functions: Tool position safety / monitors (1)

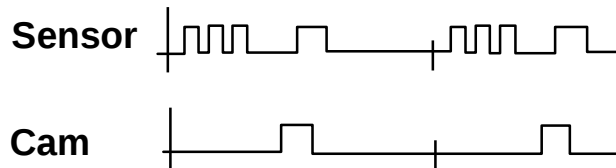
- ❑ **Static monitoring**
- ❑ **Dynamic monitoring (cam sensor)**



- ❑ **Dynamic monitoring with counting function**

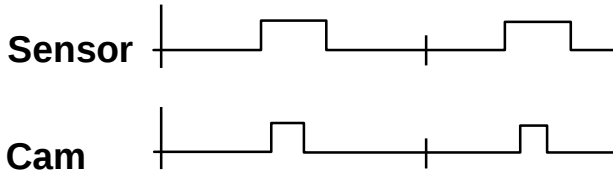


- ❑ **Dynamic monitoring with counting function and position control**

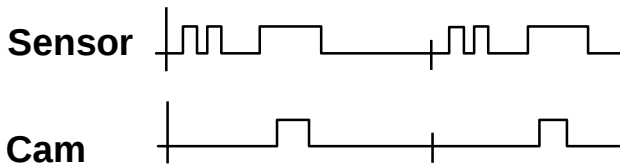


## Press2000 technology functions: Tool position safety / monitors (2)

### ☐ Position control sensor over cam



### ☐ Counting with position control sensor over cam



## **Press2000 technology functions:**

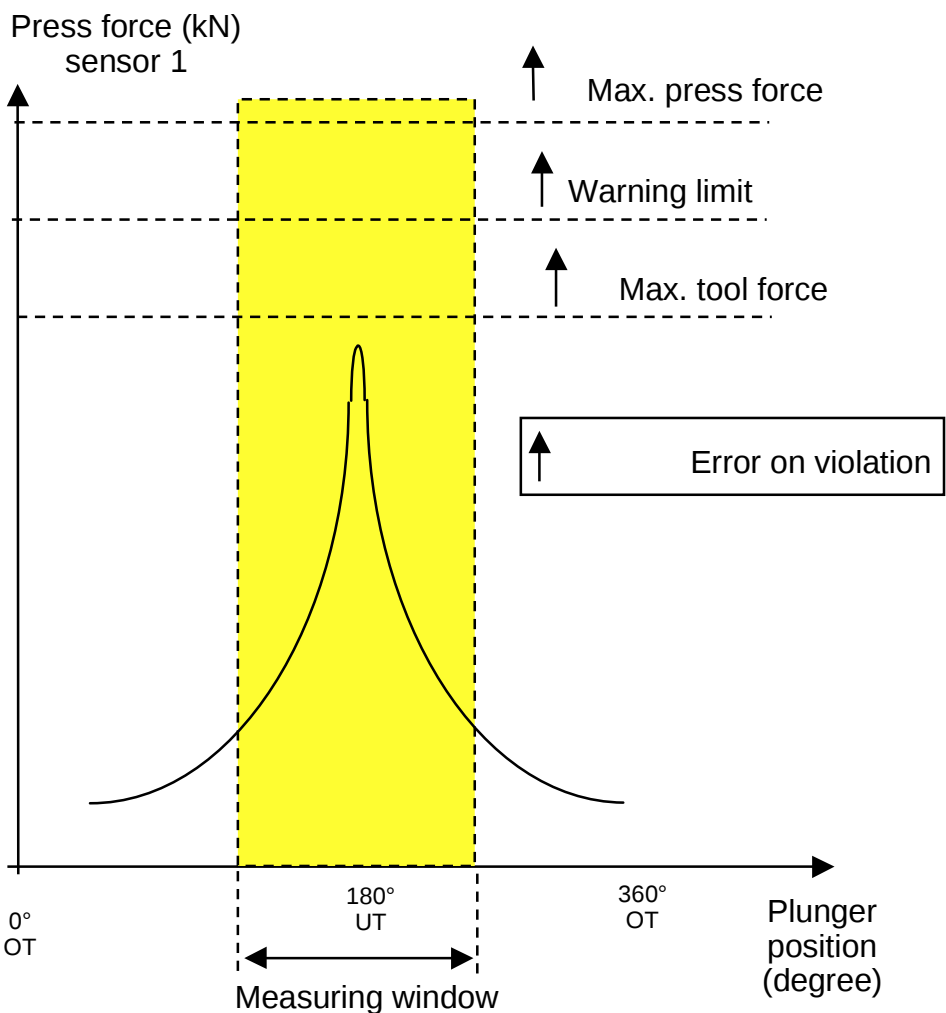
### **Press force monitoring**

- ☐ **Monitoring of up to 4 channels**
- ☐ **Machine- / tool protection via limit-value checks**
- ☐ **Minimum, maximum and warning limit**
- ☐ **Cumulative- and differential force monitoring**
- ☐ **Storing of machine overloads**
- ☐ **Recording and displaying of press force characteristic \***
- ☐ **Envelope curve control\***

\* Prerequisite: Press2000 module, OP25/OP37 graphic display unit

Press2000  
Methodes of press force monitoring

Limit-value checks



Envelope curve control

