Power monitor

mida

Touch Probes

Transmission Systems

Laser

Software

Toolsetting Arms

Tool & Process Monitoring

Accessories

MARPOSS

POWER MONITOR

The CS2PW system continuously monitors the effort exerted by the machine tool during the machining process.
This monitoring is based on the measurement of the power absorbed by a drive or spindle.

The CS2PW monitors the following in real time:

- Tool breakage
- Tool wear
- Tool presence
- Overloading
- Loss of load
- Adaptive control of procedures

The benefits arising from the use of the Marposs Power Monitor compensate for the initial investment made by considerably increasing machine productivity and consequently lowering production costs.

Quality

The continous monitoring of the tool state and the measurement precision obtained from the Marposs Power Monitor make it possible to improve production processes and, as a consequence, the geometry of the work piece.

Versatility

The availability of various interface solutions ensures that the Marposs Power Monitor may be integrated on all types of machine tool.
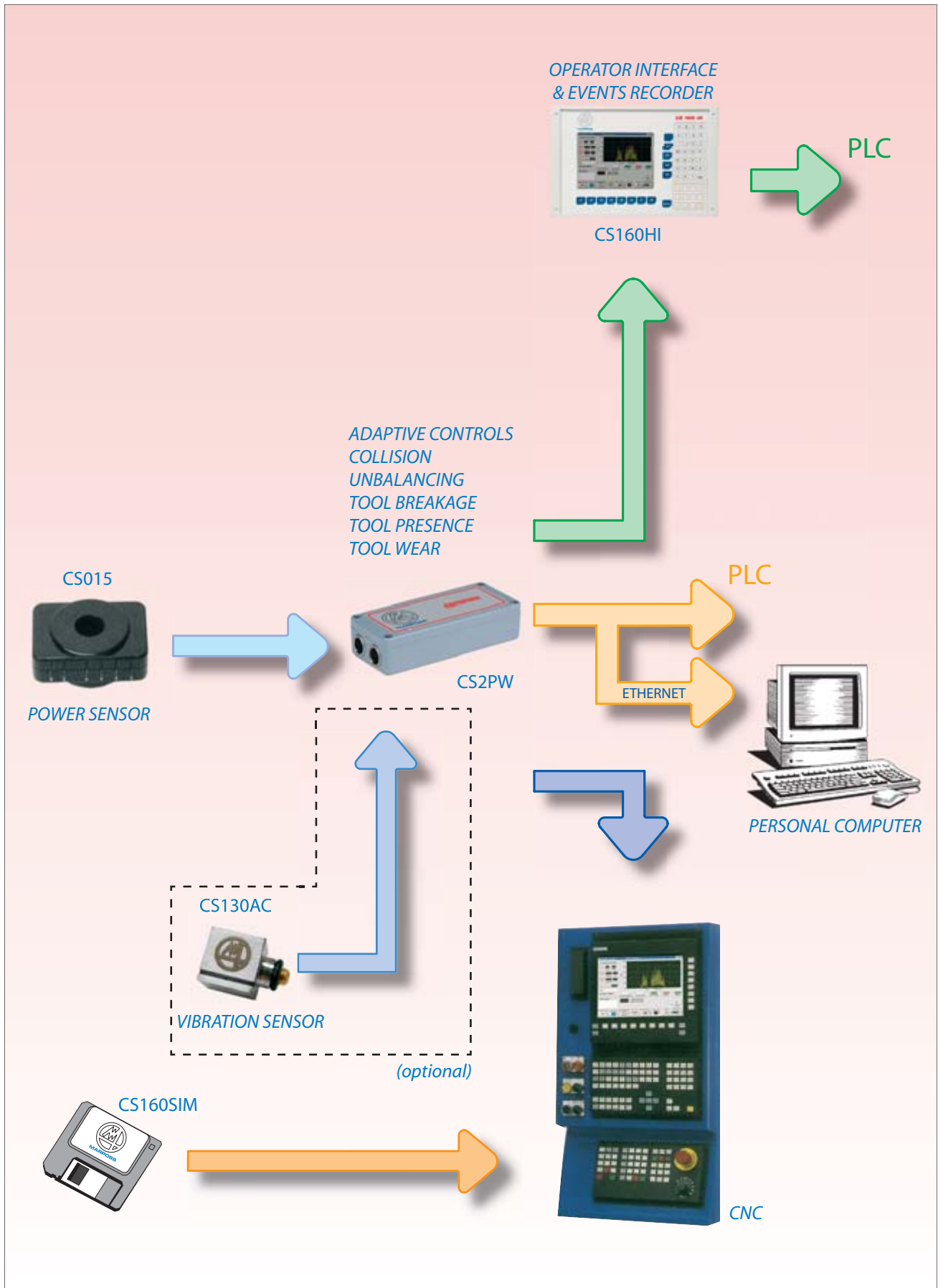
Benefits

- Reduction of dead times in the manufacturing process
- Maximum use of the tool
- Better quality of the manufactured item

Typical applications

- Drilling
- Milling
- Grinding
- Tapping
- Adaptive Control

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The system

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OPERATOR INTERFACE & EVENTS RECORDER

CS160HI

PLC

ADAPTIVE CONTROLS
COLLISION
UNBALANCING
TOOL BREAKAGE
TOOL PRESENCE
TOOL WEAR

CS015

POWER SENSOR

CS2PW

PLC

ETHERNET

PERSONAL COMPUTER

CS130AC

VIBRATION SENSOR

(optional)

CS160SIM

CNC

Power sensors

Marposs power sensors measure the power absorbed by the spindle. The use of these sensors makes for easy and fast installation both on new and existing machinery (retrofitting).
This type of sensor is particularly effective in processes where the tool or part rotate.

Parameters which can be controlled:
- Tool wear and tear
- Tool presence
- Adaptive control of procedures
- Overloading
- Loss of load

CS130AC

The CS130AC is a compact, high precision accelerometer. Its small size makes it very easy to install without altering the vibrating mass to be controlled. It can also be mounted inside High speed spindles, motors, pumps etc.
The Marposs accelerometer is particularly suitable for monitoring vibration caused by rotating and spindle parts.

Monitoring without sensors or external hardware

Marposs CS2SIM is a tool monitor composed entirely of software, installed directly in the Numerically Controlled System as an OEM application. This system can read drive and spindle power values directly from the machine. It sends and receives data (alarms, cycle selection, etc) directly to and from the N.C. or PLC using OPC protocol software.

The benefits of using this type of monitor are:
- Extremely reliable measurement of the power being controlled
- Total absence of external hardware - the elimination of electronics and wiring
- Reduction of installation time

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Programming and management of the CS2PW device

The CS2PW is easy to program using the software provided. It may be installed directly in the Numerically Controlled System or on an external PC.

(Windows 95 or Windows XP Support)

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**www.marposs.com
www.midaprobing.com**