



Technology

Dispensing

Application: Undefined Branch / Market
Sub supplier: -

DESCRIPTION:

dispensing units are used in a lot of industrial processes (reaction molding machines, grease guns, potting gluing. In all these applications the cylinders drives a piston in a reservoir. The dispensed volume is proportional to piston travel.



SENSOR/S:

RH CAN open (Position + Velocity)

GB SSI synchronous

RH/EP analog



BENEFITS:

- ✓ The high linearity ensures that ratio between travel and volume is constant over the entire range.
- ✓ The high resolution allows dispensing small volumes even for reservoirs with large bore.
- ✓ The slip stick effect can be reduced by using the velocity output in the closed loop control.



CC Code: A9900



Technology

Hydro Forming

Application: Machine Tools, Metal working Machinery

Sub supplier: Hydraulic Cylinder Manufacturers

DESCRIPTION:

The cylinders are compressing water in a tube to form it into the die.

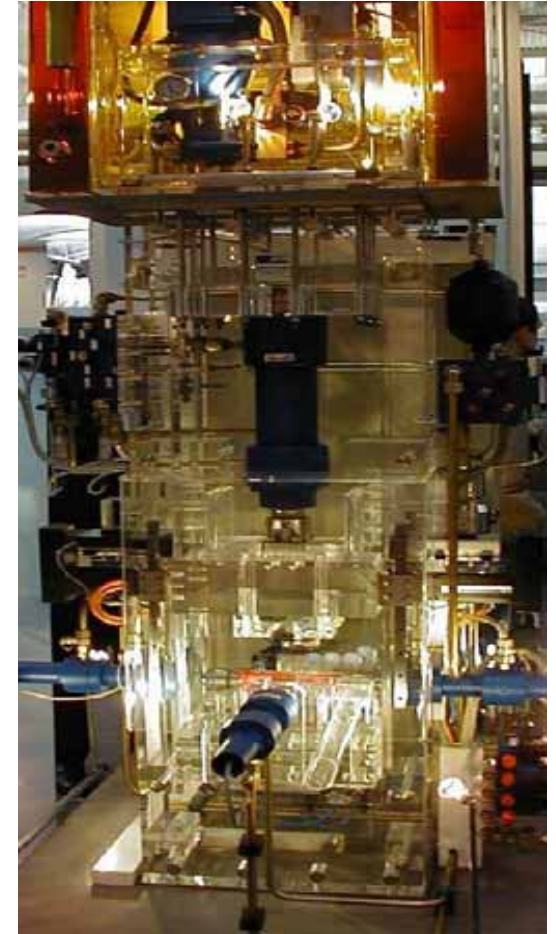
SENSOR/S:

RH SSI synchronous



BENEFITS:

- ✓ Synchronized motion is possible.
- ✓ due to the precise position control the final process pressure is accurate.





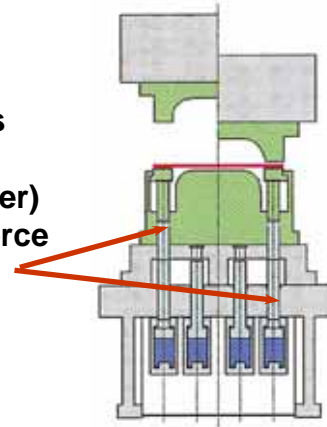
Sheet Metal Forming Press

Application: Machine Tools, Metal working Machinery

Sub supplier:

DESCRIPTION:

The diagram shows a press with die cushion for sheet forming. Intermediate (center) actuators with individual force and position control allow precise control of material flow.



SENSOR/S:

RH SSI synchronous

BENEFITS:

- ✓ The draw depth can be increased up to 50% vs. presses w/o separately controlled center sleeves
- ✓ Reduces machining of the forming blanks
- ✓ Even for complicate parts only simple pre-cut blanks are needed





Servo Welding Gun

Application: Machines and Tools for Welding

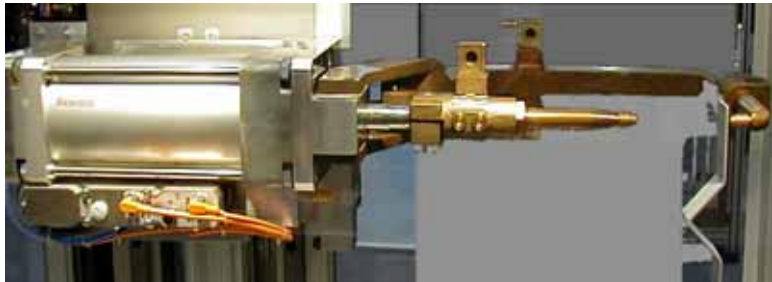
Sub supplier: Hydraulic Cylinder Manufactures

DESCRIPTION:

The weld gun electrodes move rapidly to contact the parts under position control. When the electrodes reached the position the system is switched to constant force (tip dressing controlled).

SENSOR/S:

GB CAN



BENEFITS:

- ✓ Programmable electrode positions with close loop control.
- ✓ Part thickness detection and control weld electrodes
- ✓ Control and detection of tip dressing requirements
- ✓ Noise reduction because of gentle touch down



Saw for Breezeblocks

Application: Marble, Stone / Ceramic, Glass

Sub supplier: -

DESCRIPTION:

The saw cuts breezeblocks (Ytong) with a wire to specified length.

SENSOR/S:

RF P101 (multi position)

Stroke: 8 m

BENEFITS:

- ✓ The high linearity of the sensors allows the stones to be sawn to an accuracy of 1 mm.
- ✓ High linearity ensures precise right-angled cuts.
- ✓ Only one MTS sensor is needed for each side. Our competitor requires two sensors per side.





Technology

Servo Actuator

Application: Multiple

Sub supplier: Hydraulic Cylinder Manufactures

DESCRIPTION:

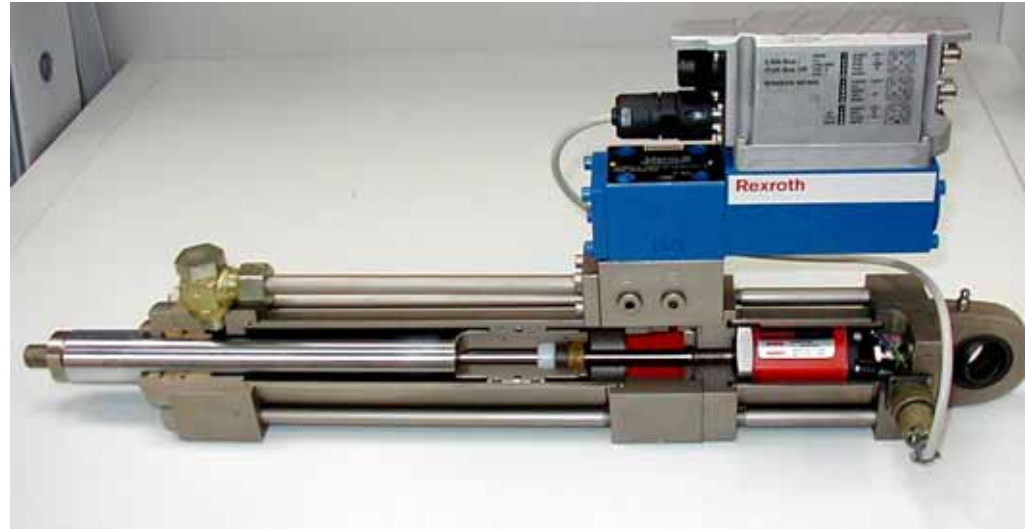
The servo-valve, the controller and the displacement sensor are mounted direct on the actuator.

SENSOR/S:

RH SSI synchronous

BENEFITS:

- ✓ Accurate position
- ✓ High speed, fast reaction time, due to the short distance between valve and cylinder.
- ✓ Easy maintenance.
- ✓ Precise position feedback (resolution 5 μm).
- ✓ Simpler installation and commissioning.





Technology

Trash Truck

Application: Municipal Equipment / Waste collection vehicles

Sub supplier: Hydraulic cylinder manufacturer

DESCRIPTION:

The garbage cans are gripped by the side loader and emptied into the garbage truck. The driver (right hand drive) initiates the gripping and the rest of the cycle is automated. Two hydraulic cylinders with

The integrated MH Sensors control the movement. An electronic closed loop control system optimizes velocity and position to avoid dumping the container too early.

SENSORS:

MH-C-0200M-S01-3-V11

MH-C-0500M-S01-3-V11

BENEFITS:

- ✓ Short cycle time.
- ✓ One man operation of the trash truck.
- ✓ Noise reduction and lower fuel consumption.
- ✓ Higher safety of operation.





Technology

Re-Calibration of a Milling Machine with Hexapods or Tripods spindle

Application: Metal Working Machinery

Sub supplier:

DESCRIPTION:

Servomotor or hydraulic actuators are used. Typically the sensor is mounted (permanently or only for calibration at or near the spindle's fixed production reference point(s).

The spindle is then used to move the magnet to several positions and correction values are calculated and stored in a linearization table by the PLC for correction during production. Calibration is done periodically for each actuator.

In hydraulic machines the sensor is installed directly in the cylinder

SENSOR/S:

RPS SSI or RH SSI Synchronous (in cylinder)

BENEFITS:

- ✓ Easy to do (can be done now by the end user)



CC Code: A1039
CC Code: -



Technology

Steering by Wire

Application: Construction Machines

Sub supplier: Hydraulic Cylinder Manufactures

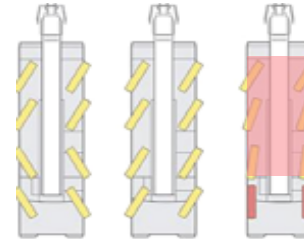
DESCRIPTION:

All axels steering allows tighter turning radius. Steering by wire is necessary to obtain the correct angle for each axis. For wheel's direction feedback a rugged sensor is needed.



SENSOR/S:

MH (in the future MH redundant too)



BENEFITS:

- ✓ Less tire wear.
- ✓ Easier steering.
- ✓ Rear axle the steering can be active at highway speeds mechanical systems are limited to 16 or 25 km/h).
- ✓ In-cylinder mounting provides the best solution for protection of the sensor.



CC Code: A1822
CC Code: A3310



Suspension Adjustment

Application: Construction Machines

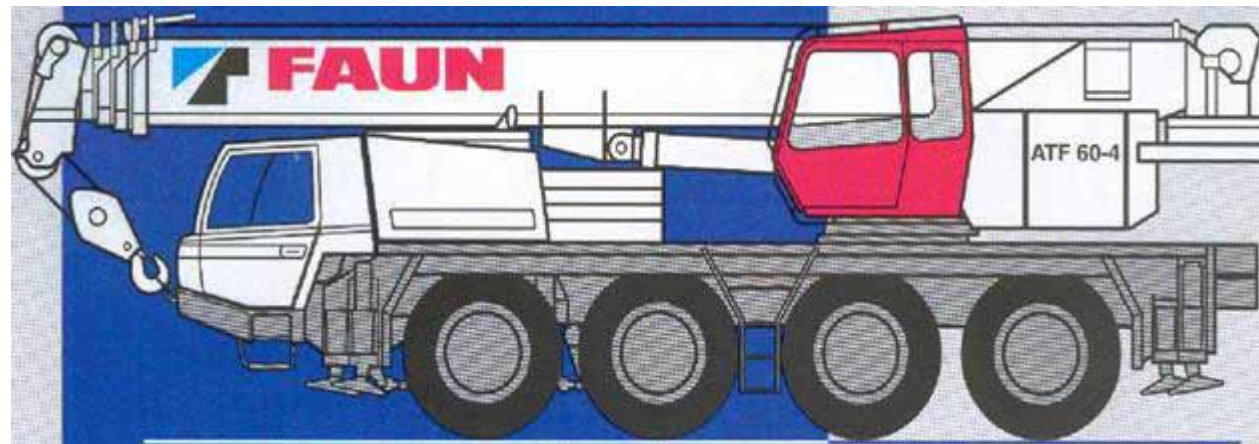
Subs supplier:

DESCRIPTION:

Limit switches on the chassis were used to reset each axis suspension when the vehicle moves from off-road to on-road and chassis height is lowered for travel. An MTS displacement sensor at each axis replaces the limit switch.

SENSOR/S:

MH



BENEFITS:

- ✓ The suspension's adjustment can be done more quickly.
- ✓ The load can be equally distributed.
- ✓ Axle loading and chassis attitude can be continuously controlled.

CC Code: A1822
CC Code: -



Technology

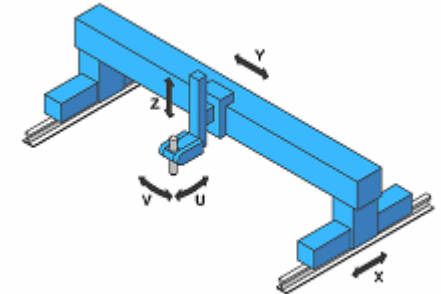
Plasma Cutting

Application: Metal working

Sub supplier: -

DESCRIPTION:

Plasma XY cutters are now capable of precise angle cuts and complex patterns. The more sophisticated machines use 6 coordinated axis.



SENSOR/S:

RP CAN (Position + Velocity)

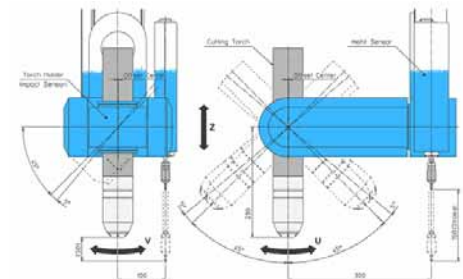
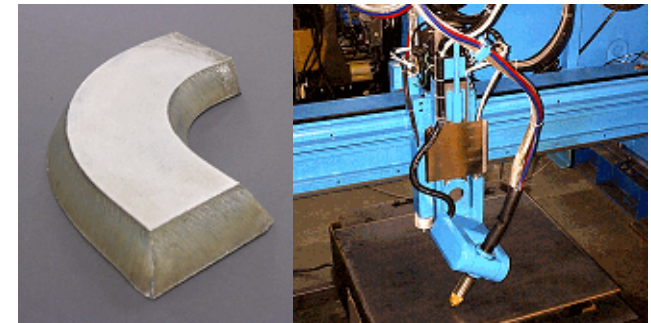
RP/EP analog

BENEFITS:

- ✓ Absolute sensor allows quick start .
- ✓ The high resolution allows precise positioning and axis coordination.
- ✓ Fast measurement allows good velocity control
- ✓ Cost is lower than glass scales.

Software by:

(株) テクエイト (TECH 8)



CC Code: A9900



Technology

Excavator angle

Application: Off Road equipment

Sub supplier:

DESCRIPTION:

The automated excavators require precise angular position for computer assisted loading of excavated material when the truck is not fully visible to the operator

SENSOR/S:

RHF (Flexible) CAN or Analog

BENEFITS:

- ✓ Rugged flexible sensor is easy to install.
- ✓ Absolute reading eliminates indexing.

Software by:

(株) テクエイト (TECH 8)

