

Tension Control

for Paper, Plastics, and Textiles

Controls tension
Measures diameter
Controls all types of brakes and clutches
Replaces ratio calculators
Works with load cells if required
Taper Tension option
Versatile economical and reliable
... For paper, plastic, metal and textiles
Displays actual diameter to ± 0.01 "
Features end of roll or minimum diameter presets
Easy to Install and interface with existing controls
Versatile, economical and reliable.
SONA-TROL is an efficient and low cost system for controlling tension and determining unwind and rewind diameters.
SONA-TROL Diameter measurement systems can be used to compliment load cell based tension control systems.
SONA-TROL Replaces diameter and ratio calculators and provides superior accuracy and provides diameter information at zero speed.
SONA-TROL combines sonar principles and technology with state of the art digital and analog electronics.
SONA-TROL is unaffected by material inconsistencies, dirt, lint and variations in line voltage.
SONA-TROL replaces electromechanical follower arms and diameter calculators. Tension is controlled precisely from the point where the material comes off a roll to ensure constant tension despite out of round rolls.
AO-2 Tension Control System



TC-6 TENSION Control

STANDARD Capabilities:
Displays roll diameter to ± 0.1 "
(± 0.01 " optional)
Displays actual tension in pounds
End of roll or minimum diameter presets
Adjustable distance zero offset
Adjustable gain
Adjustable receiver sensitivity
6" to 20' operating range
10' sensor head cable
Electrically isolated sensor head
Oil-tight JIC enclosure
OPTIONAL FEATURES:
Dual sensors for wide sensing area
Limit switch outputs (up to 20 per sensor)
Adjustable measurement repetition rate
Sensor array sequencer (up to 28 sensors)
Digital or analog readout of distance, height, or diameter of

Specifications:

Electrical Supply voltage 120 or 230 vac 25/12 mA
Pneumatic Input pressure up to 100 psi
Flow 23cv
Filtration Included
Lubrication not needed
Pneumatic output 0-100psi Max
Physical
Air input 1/4 inch NPT
Air output 1/4 inch NPT

objects

Readouts can be scaled to measure volume of liquids or solids in tanks.

Wide range of voltage outputs

0-90 volt DC clutch or brake output

0 to 10 or 4 to 20 ma current loop output

Sensor head cable to 150'

High resolution 3" to 24" and 5" to 48" sensor head

OTHER OPTIONS INCLUDE:

RMS and PID output

SONA-TROL Applications are Unlimited.....

Control Tension

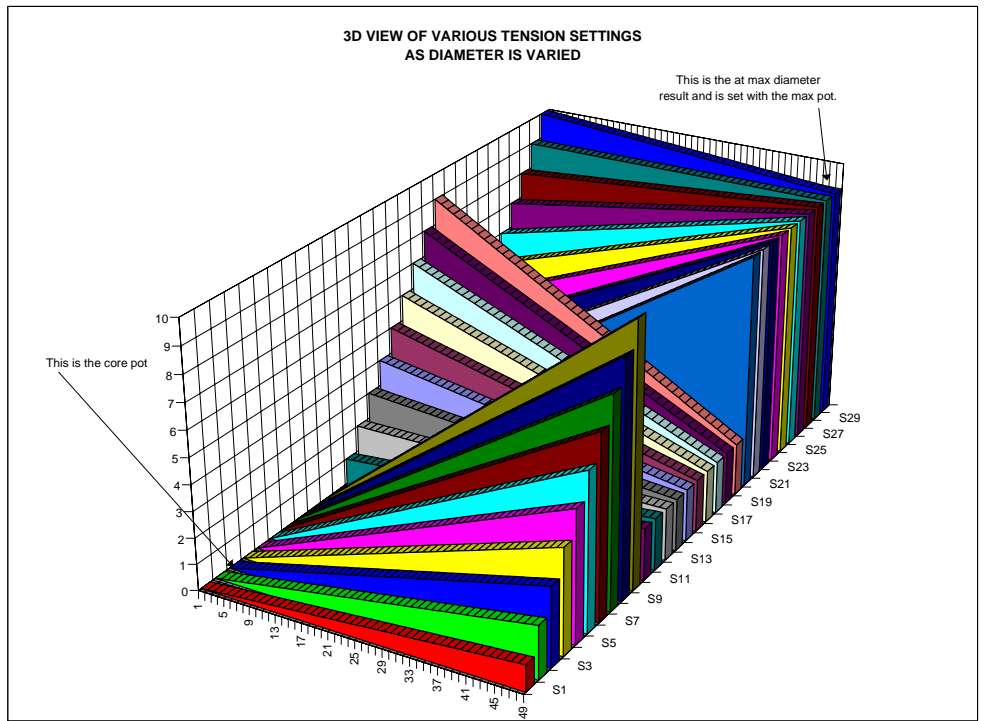
Distance Measurement

Diameter Measurement

Liquid Level Measurement

SONA-TROL replaces air switches, photo eyes, dancer arms, float switches, limit switches, and capacitance sensors. It is extremely reliable, economical, and easy to operate.

Ultrasonically senses strips down to 0.010" Wide.



AO-2

AO-2 Tension Control System

Features:

Maximum roll diameters up to 24 feet

Automatic Tension Control

Non Contact Roll Diameter measurement

End of roll detector

0-90 psi air output

Linear or optional 0-100% taper Adjustment of tension

Will not harm sensitive films, foils, or other materials.

Replaces follower arms and diameter calculators.

No load cells

Operates on 110v/50/60 hz power.

Also available with 0-90vdc, 0-10 volts, or 4-20 ma outputs .

Materials: Paper, film, foil, plastics metal, wire, chain, screen.

Sonatrol AO-2 can be used on any winding or unwinding application.

SONA-TROL DIAMETER TO TORQUE APPLICATION

THE OUTPUT OF THE SONA-TROL SENSOR CAN BE SENT INTO AN I/P CONVERTER OR ELECTRIC BRAKE OR CLUTCH CONTROLLER TO SET THE TORQUE PROPORTIONAL TO THE DIAMETER OF THE ROLL OF MATERIAL

EXCELLENT RESULTS HAVE BEEN OBTAINED WITH AIR, OIL, DC MOTOR, MAGNETIC PARTICAL,EDDY CURRENT AND FRICTION BRAKES AND CLUTCHES

