VALSCOPE

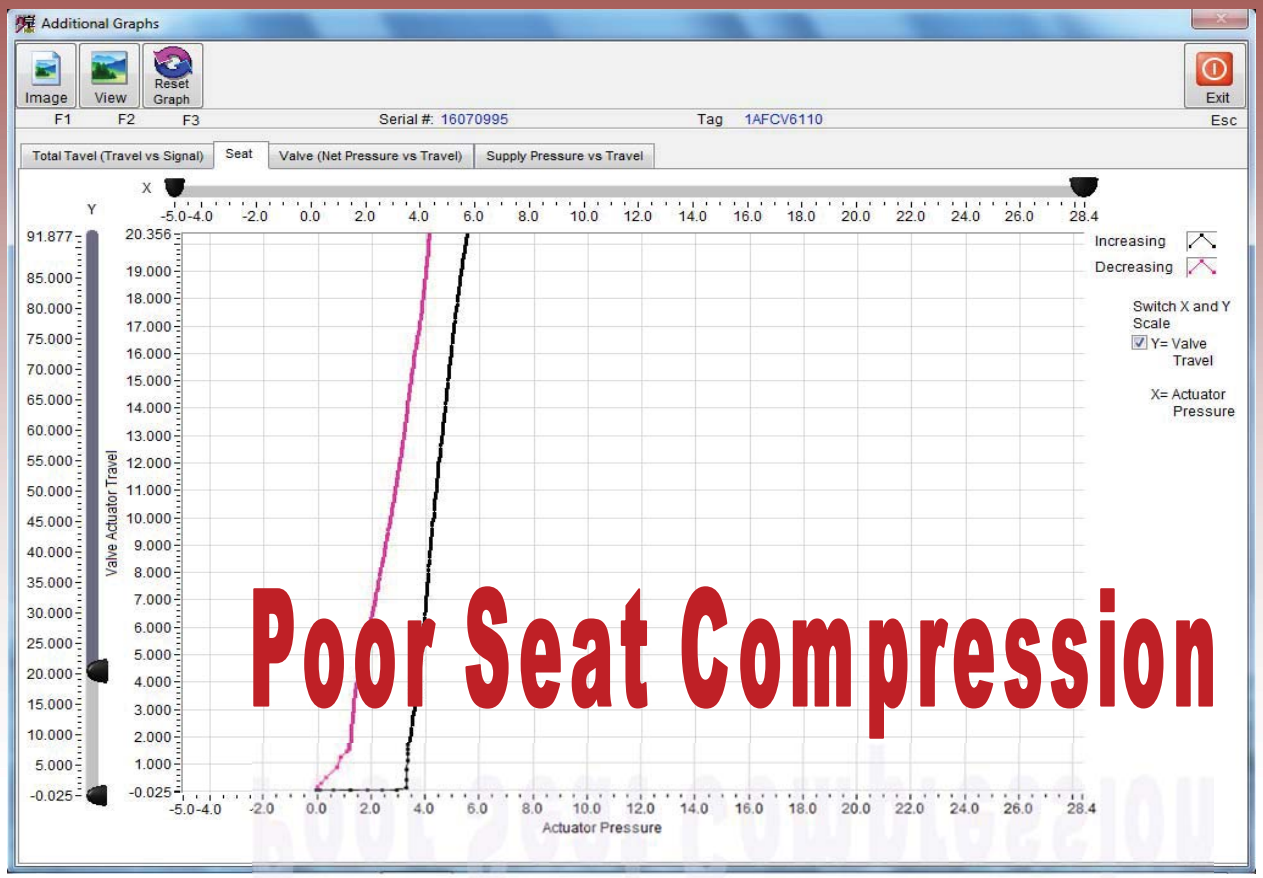
Control Distributors' GE® Masoneilan Authorized Repair Center service Professionals use ValScope-PRO® providing the industry's most advanced diagnostic capabilities!

ValScope-PRO® is the cutting edge control valve diagnostic tool capable of testing the health of virtually any control valve, from any manufacturer, whether it is equipped with older technology such as I/P's and Pneumatic Controllers as well as every Digital Valve Positioner on the market. It effectively troubleshoots problems and identifies opportunities to improve valve performance, saving time and money for our customers for years to come. ValScope-PRO® gives our customers the ability to decrease the high expense of allocating spare parts and opening valves for maintenance, and increase uptime by testing valves while they are still in place. ValScope-PRO® allows our MARC certified authorized service professionals to check and calibrate positioners, verify valve travel, and give an overall valve health report to aid planners, maintenance managers and engineers to plan more efficiently for future maintenance needs for that particular valve. Afterwards reports can be viewed through your own personal portal to VKViewer.

Features & Benefits

- Monitor the health status of virtually any valve providing real-time analysis saving valuable time and money
- Optimize uptime and save money by testing valves "in place" and saving the expense of removing them
- Reduce unnecessary removal of valves from service
- Return valves to service quickly
- Positioners can be checked and calibrated in-line
- Document results reported on VKViewer

ValScope-PRO® is the only diagnostic testing tool approved by GE® Masoneilan. Works on ALL valves and positioners including Fisher, Valtek, Copes Vulcan, CCI and etc.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View
Reset Graph
Exit
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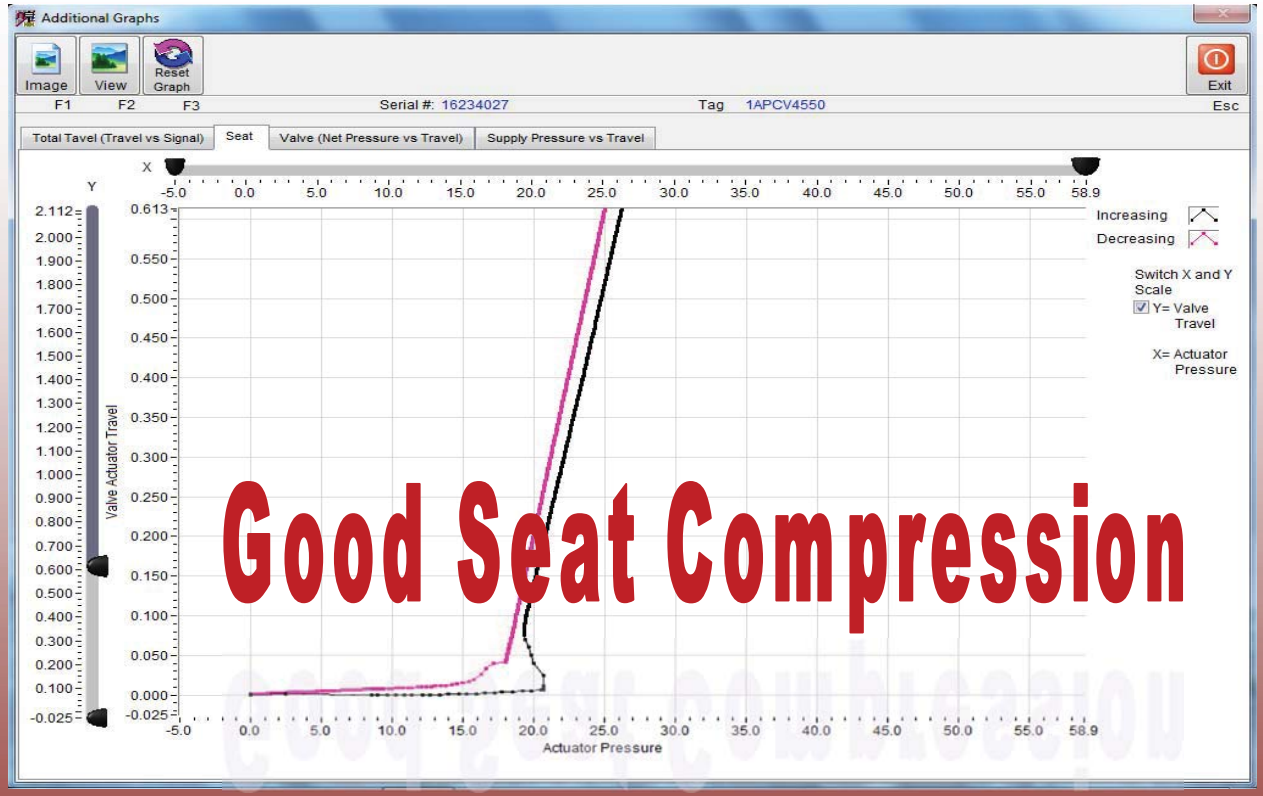
Total Tavel (Travel vs Signal)
Seat
Valve (Net Pressure vs Travel)
Supply Pressure vs Travel
X
Y
Valve Actuator Travel
Actuator Pressure
Increasing
Decreasing
Switch X and Y Scale
Y= Valve Travel
X= Actuator Pressure
Poor Seat Compression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Valve (Net Pressure vs Travel)
Supply Pressure vs Travel
X
Y
Valve Actuator Travel
Actuator Pressure
Increasing
Decreasing
Switch X and Y Scale
Y= Valve Travel
X= Actuator Pressure
Good Seat Compression

GE Energy

Profile

Date: Tue, Mar 10, 2015
Time: 1:59 PM

File Path: C:\Program Files\SofTek\Test Reports\GRP Unit 3 2015.03\ ProFZ0310150009@3BTCV 2422A.txt

Customer:	Customer PO #:
Serial #:	Return #:
Tag #:	Year of Installation:
Tested By:	Unit Name:
Location:	Plant Name:

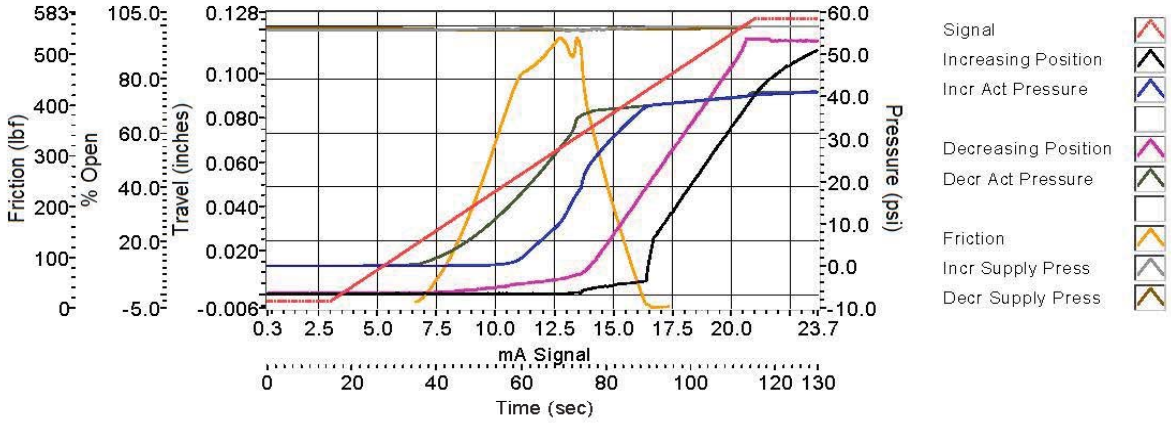
	Repair	Adjust	Replace
Valve:	☐	☐	☐
Packing:	☐	☐	☐
Trim:	☐	☐	☐
Actuator:	☐	☐	☐
Positioner:	☐	☐	☐
I/P:	☐	☐	☐
Accessories:	☐	☐	☐

As Found: ☐ As Left: ☐

Valve Mfgr: Dresser/Masoneilan
Valve Model: 18400
Actuator Size [in2]/Model: 6
Valve Type: Linear
Body Size: 1.5
Body Type: Globe
Pressure Class: 600
Seat [Trim] Dia: 1.50
Packing Mat'l: Other
Packing Configuration: N/A

Actuator Type: Diaphragm
Air Action: Air to Open
Fail Mode: Close
Spring: None
Nom. Stroke [in/deg]: 0.25
Spring Range: 38-45
Positioner: SVI II AP
Signal Source: 4 - 20 mA
I/P Model: None
Handwheel Orientation: None

Hold Time (sec): 15
Ramp Time (sec): 100
Start Ramp (mA): 3.6
Stop Ramp (mA): 20.4

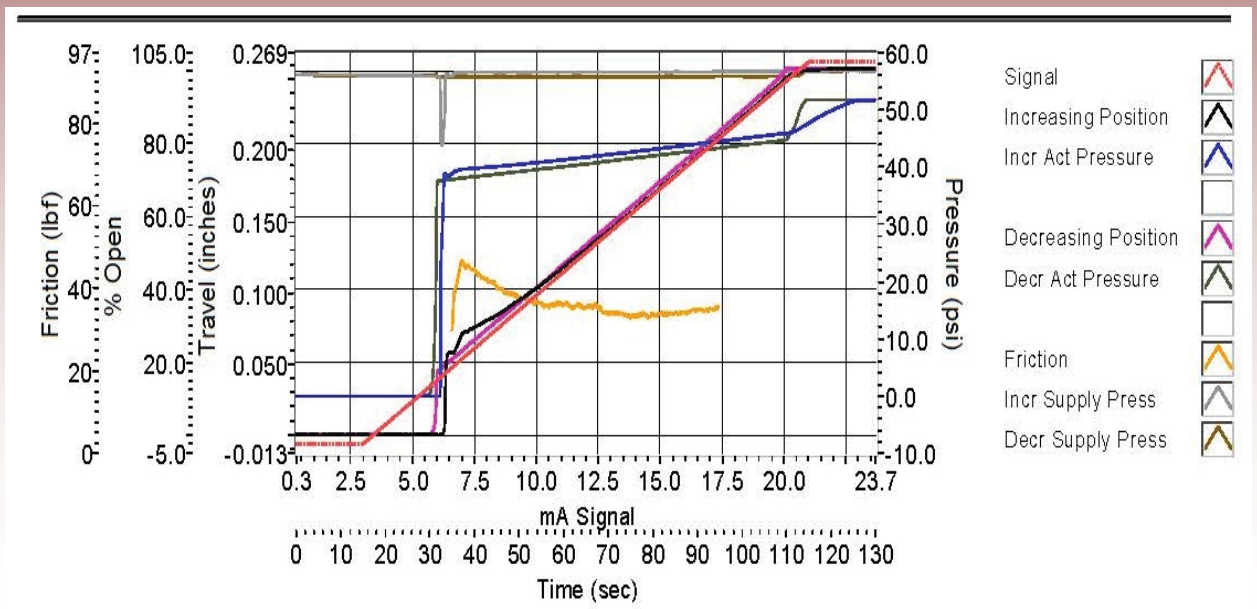


Valve Description/Testing Comments:
REHEAT DESUPERHEATER CV--

Diagnostics Conclusion And Notes:

Analysis	Data
Travel (in)	0.122
Seat Contact (mA)	6.27
Full Open (mA)	24.28
Nominal Displacement (mA)	0.00
Dynamic Error (max %)	34.9
Dynamic Error (mean %)	9.0
Friction (max) (lbf)	533.3
Friction (mean) (lbf)	255.2
Bench Set (min) (psi)	18.86
Bench Set (max) (psi)	41.14
Spring Rate (lbs/in	65045.5
Force (lbf)	-4
Actuator Pressure (psi)	4
Seat Contact I/P (p	
Full Open	
% Friction (Max)	0.6
% Friction (Avg)	-60.7

Positioner- Not Linear

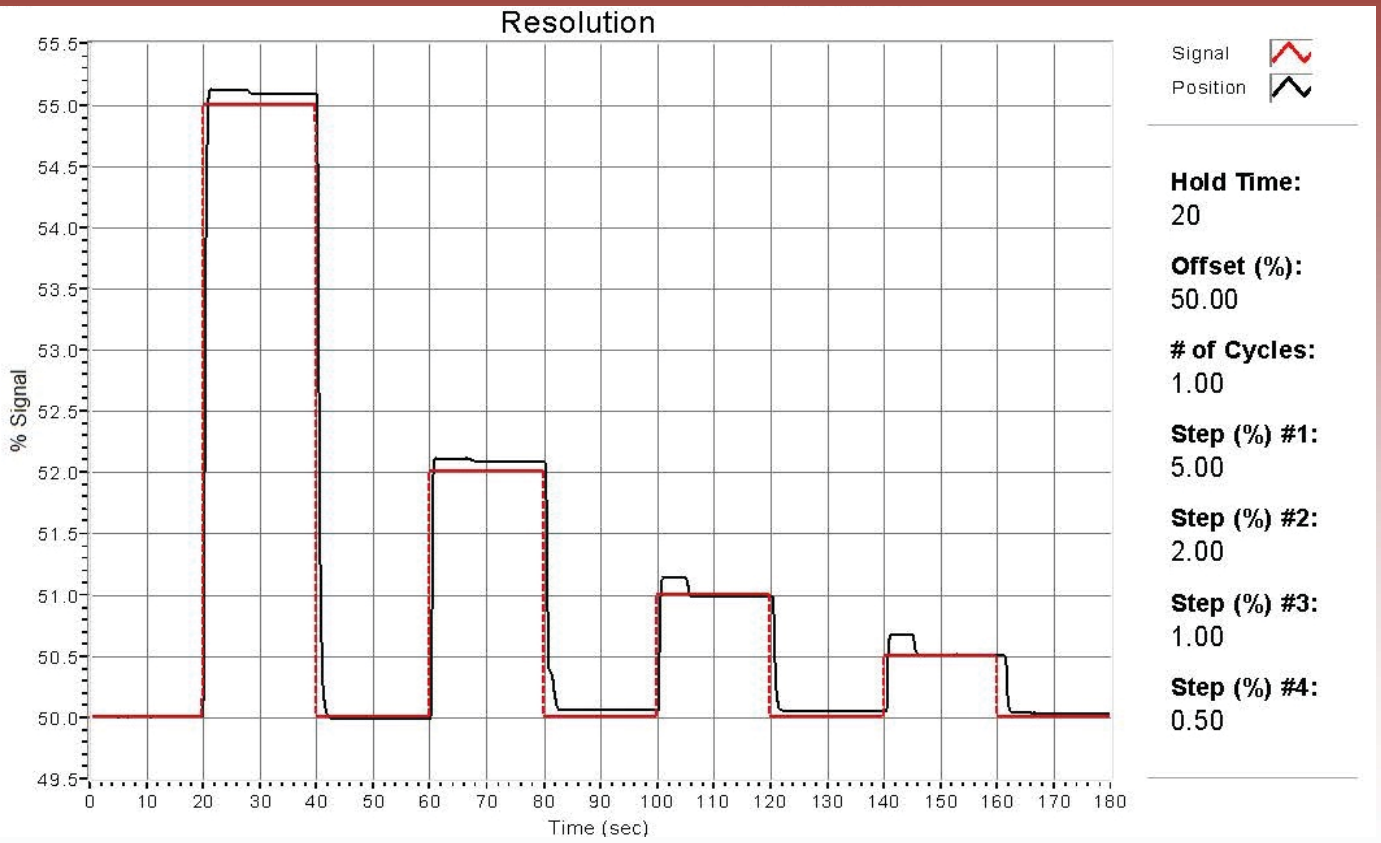


Valve Description/Testing Comments:
REHEAT DESUPERHEATER CV--

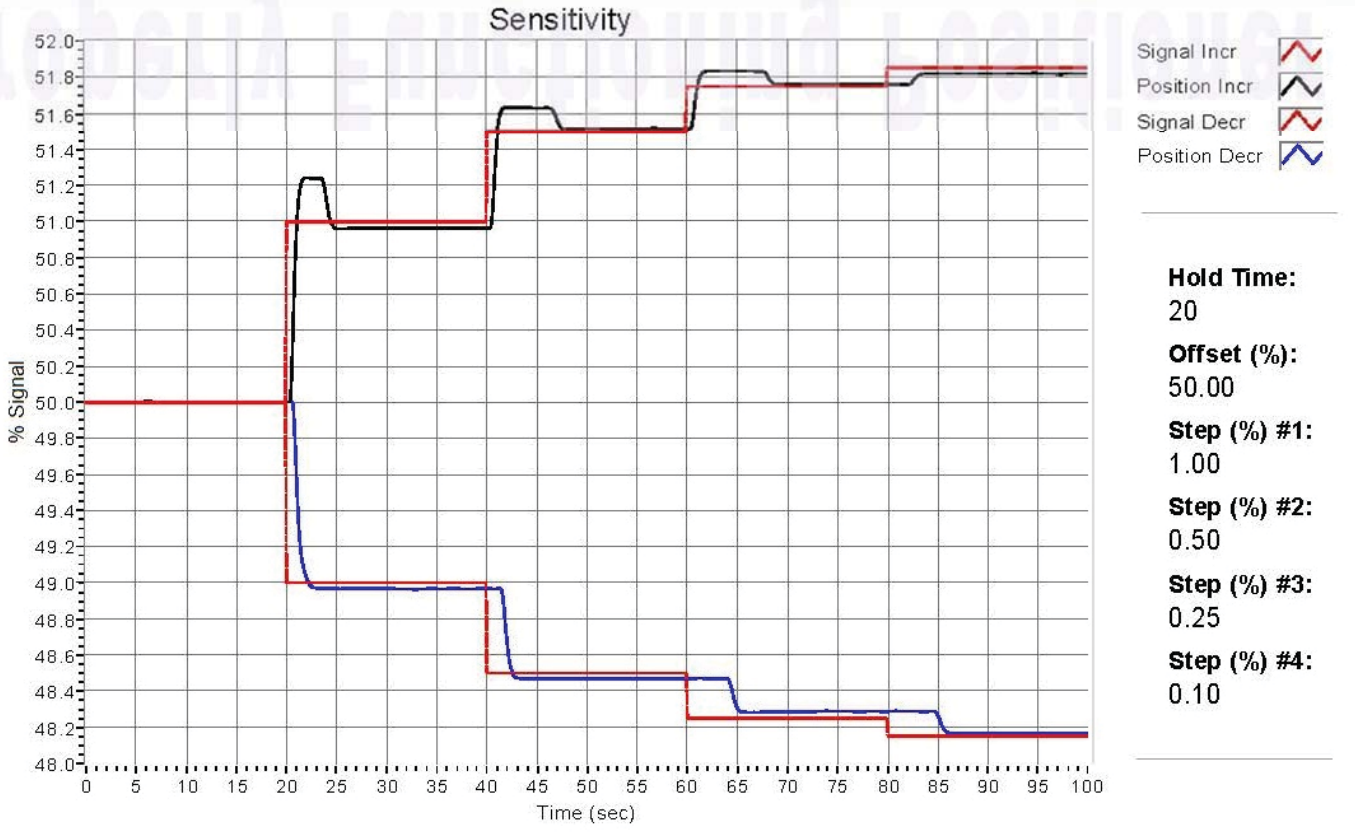
Diagnostics Conclusion And Notes:

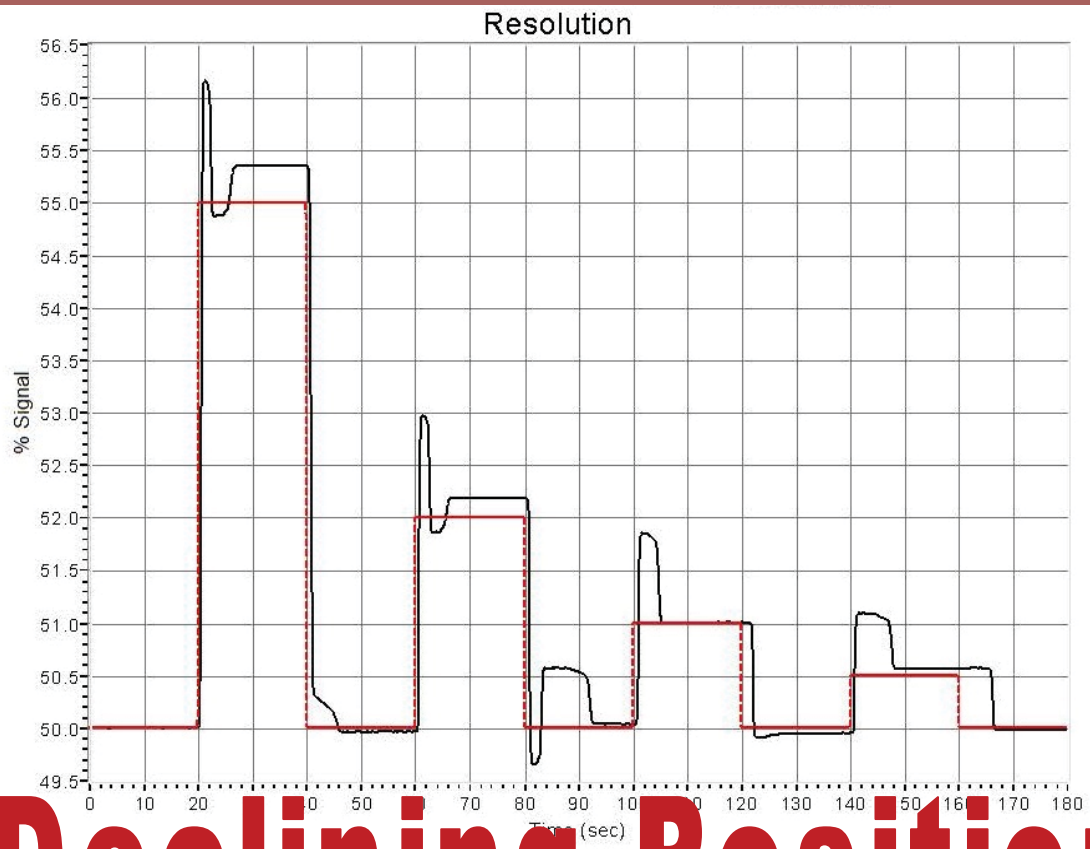
Calibrated Positioner Good Linearity

Analysis	Data
Travel (in)	0.256
Seat Contact (mA)	6.03
Full Open (mA)	20.23
Nominal Displacement (mA)	19.52
Dynamic Error (max %)	18.4
Dynamic Error (mean %)	1.3
Friction (max) (lbf)	47.1
Friction (mean) (lbf)	36.5
Bench Set (min) (psi)	6.49
Bench Set (max) (psi)	6.68
Spring Rate (lbf/in)	236
Force (lbf)	332
Actuator Pressure (psi)	61.8
Seat Contact I/P (psi)	N/A
Full Open I/P (psi)	N/A
% Friction (Max)	11.2
% Friction (Avg)	8.7

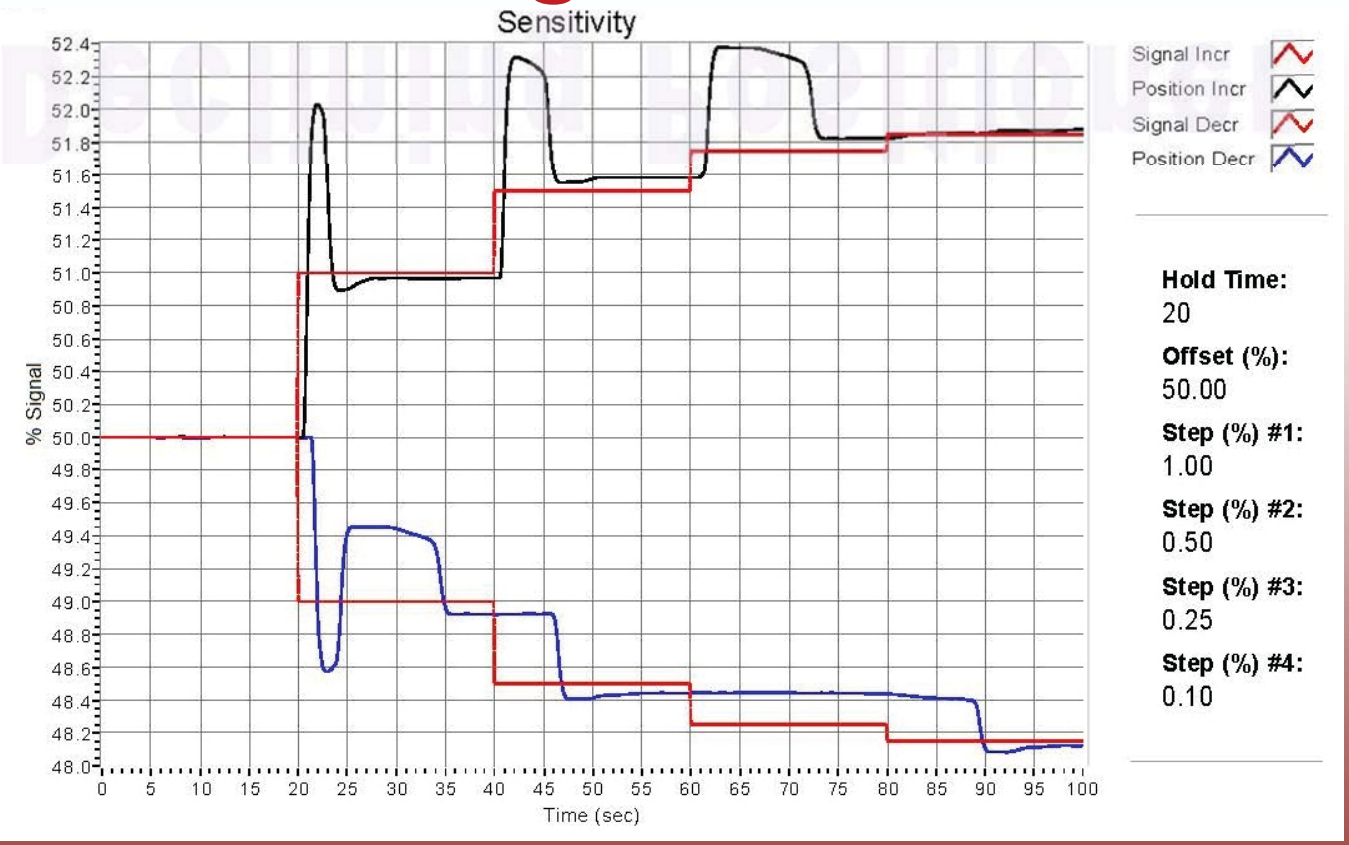


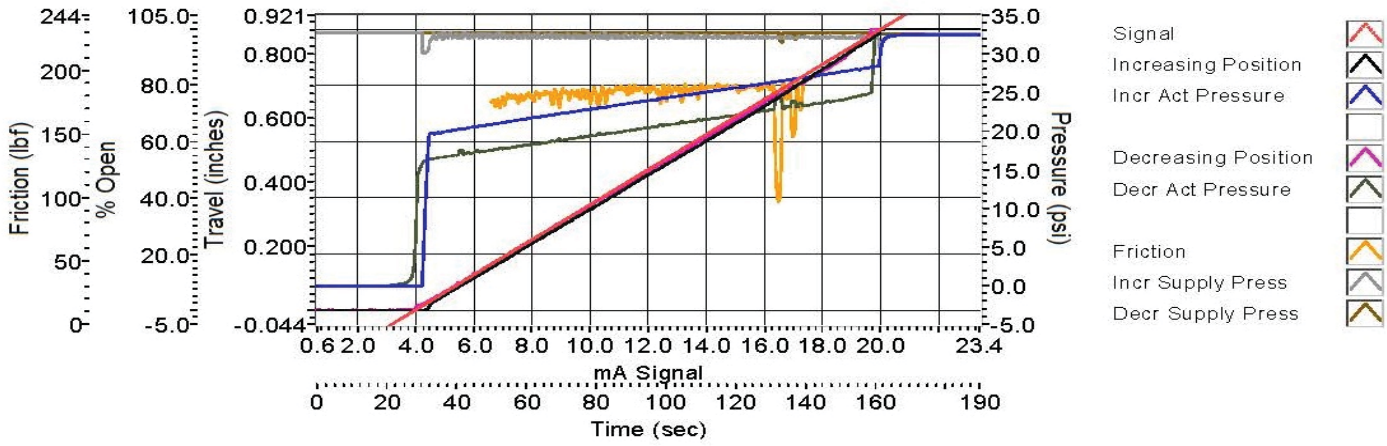
Properly Functioning Positioner





Declining Positioner



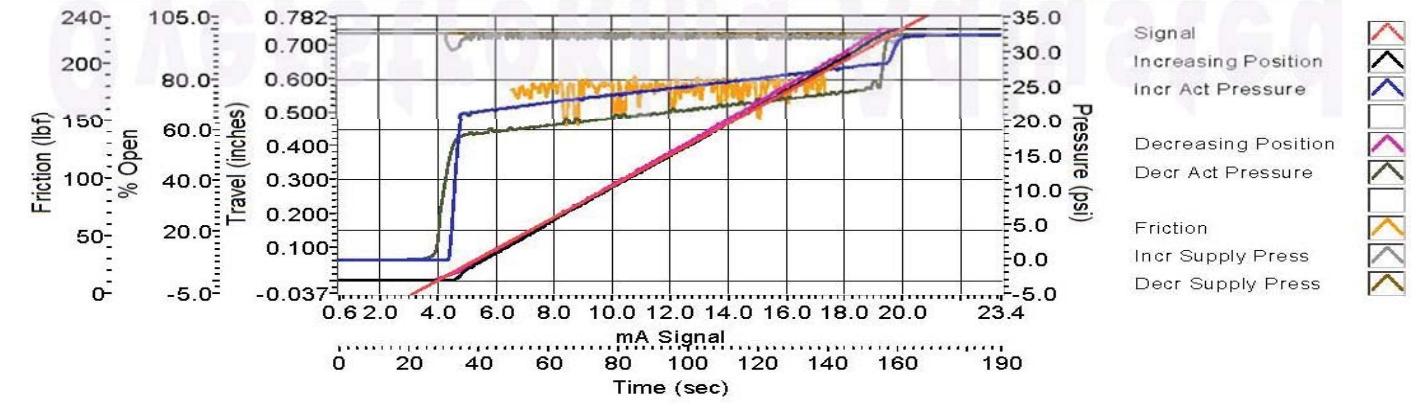


Valve Description/Testing Comments:
--As Found

Diagnostics Conclusion And Notes:

Analysis	Data
Travel (in)	0.877
Seat Contact (mA)	3.89
Full Open (mA)	20.15
Nominal Displacement (mA)	17.96
Dynamic Error (max %)	3.5
Dynamic Error (mean %)	0.8
Friction (max) (lbf)	193.7
Friction (mean) (lbf)	180.9
Bench Set (min) (psi)	19.19
Bench Set (max) (psi)	29.23
Spring Rate (lbs/in)	1094.7
Force (lbf)	2187
Actuator Pressure (psi)	32.5
Seat Contact I/P (psi)	N/A
Full Open I/P (psi)	N/A
% Friction (Max)	23.1
% Friction (Avg)	21.5

Overstroking Adjusted



Valve Description/Testing Comments:
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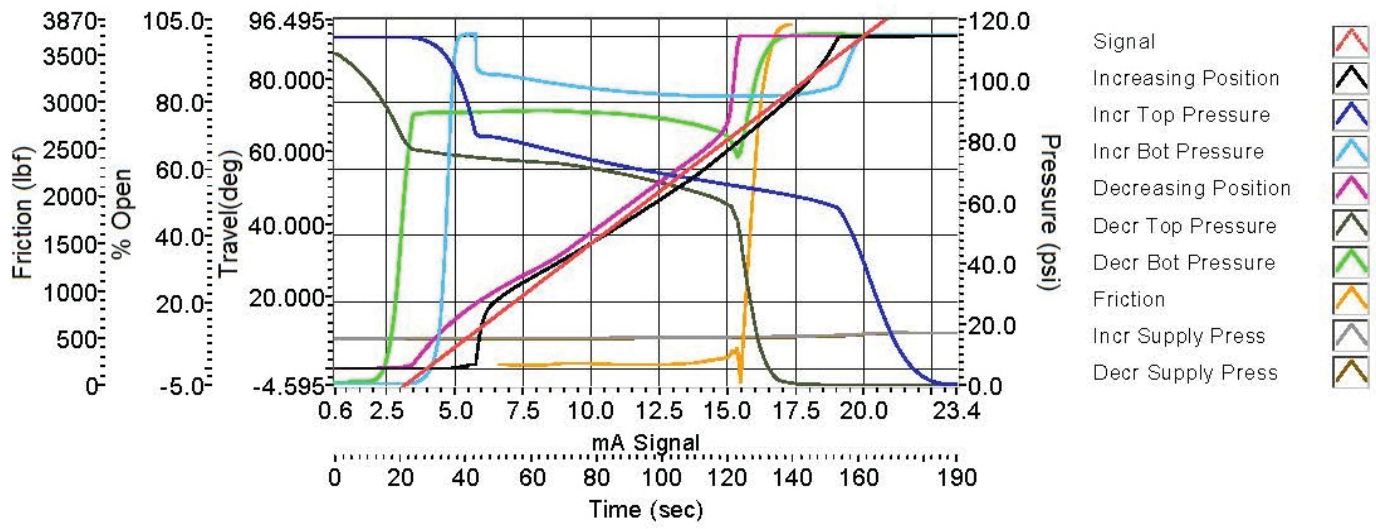
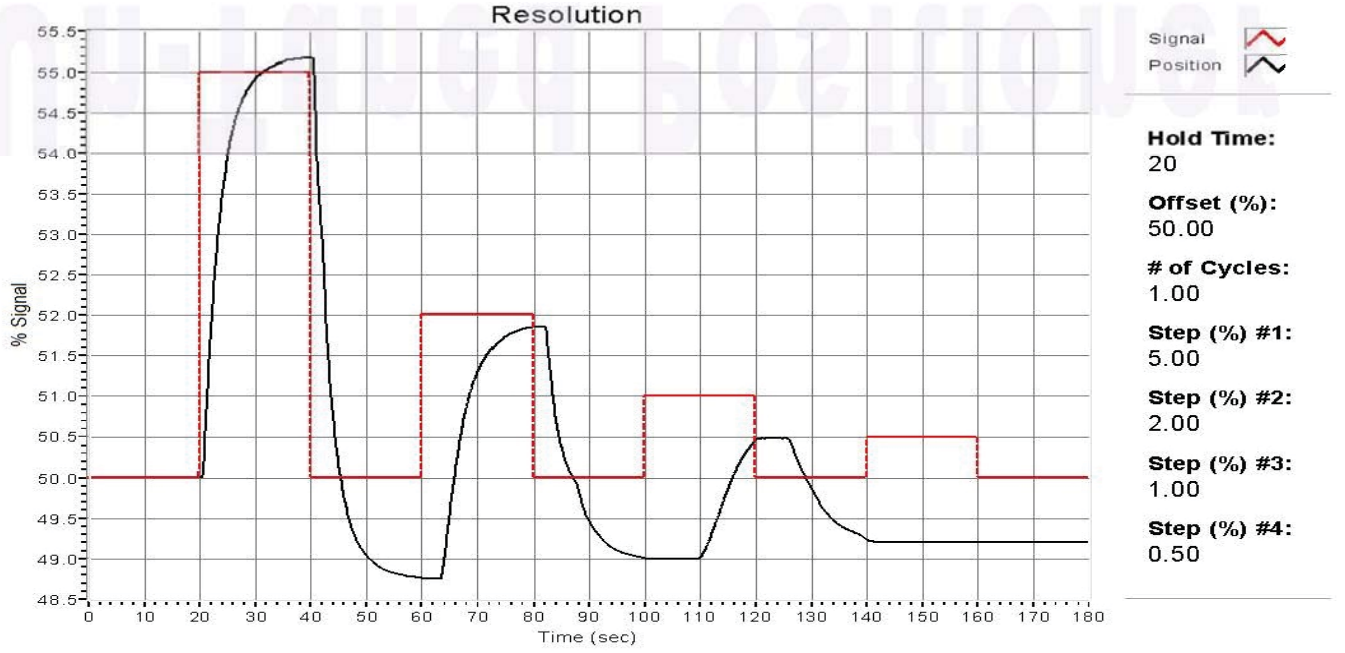
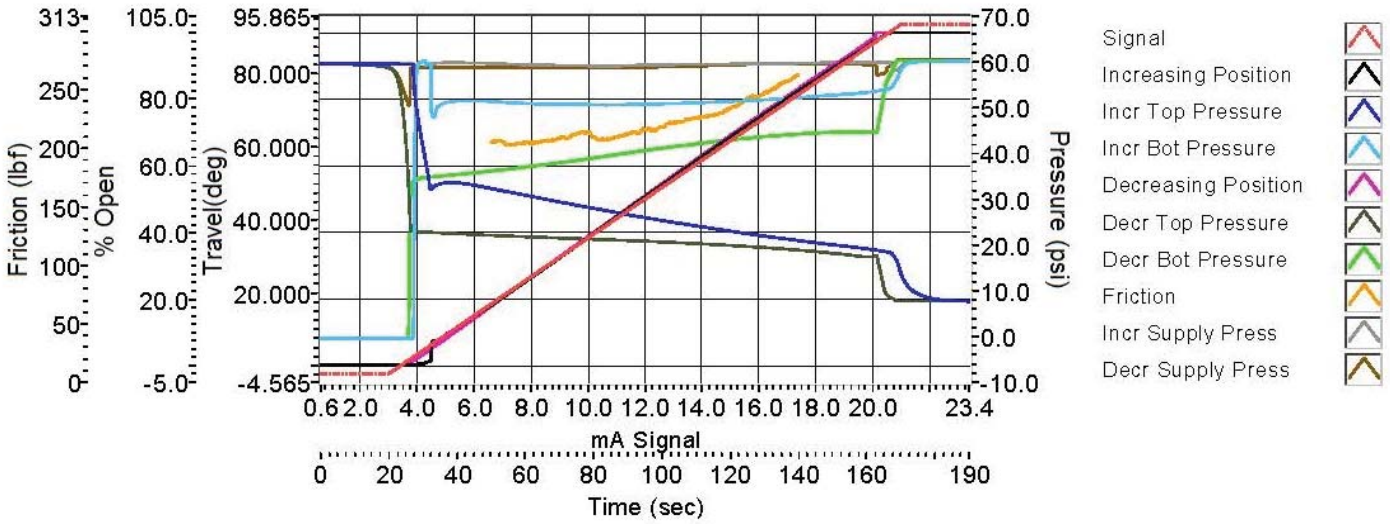
Diagnostics Conclusion And Notes:

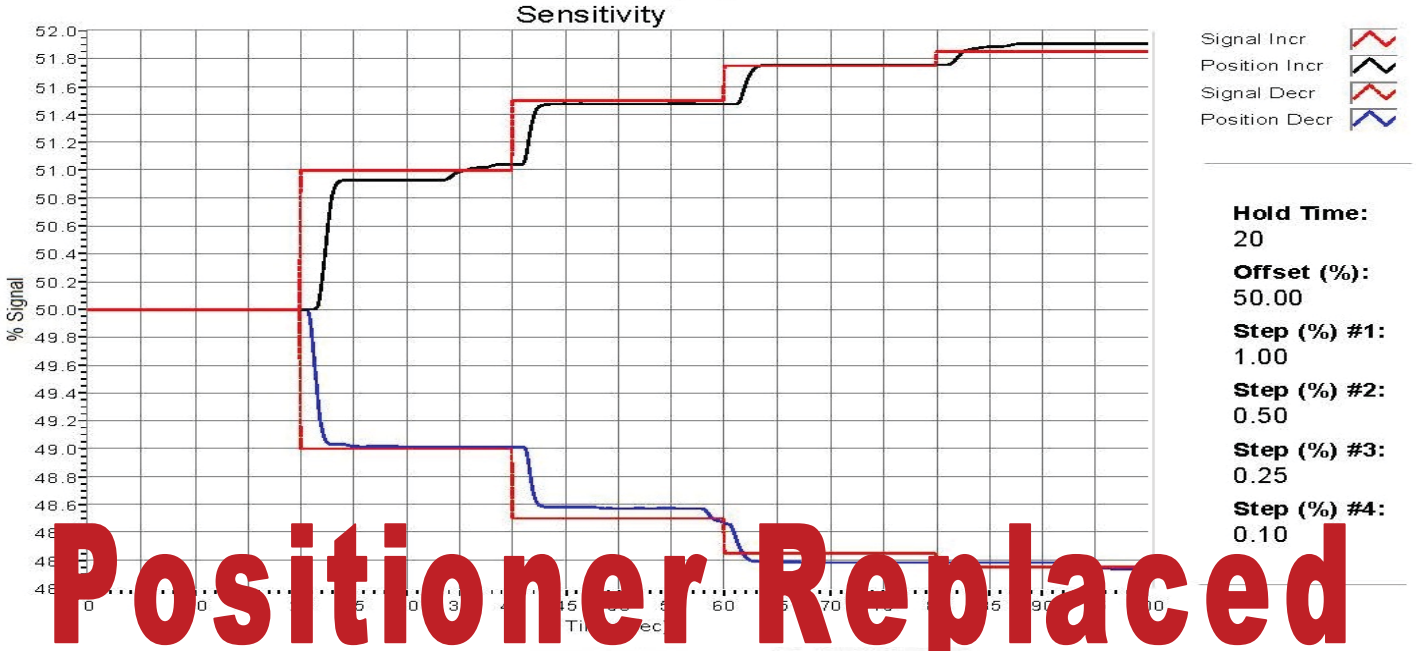
Analysis	Data
Travel (in)	0.745
Seat Contact (mA)	4.21
Full Open (mA)	19.62
Nominal Displacement (mA)	0.00
Dynamic Error (max %)	2.7
Dynamic Error (mean %)	0.9
Friction (max) (lbf)	190.1
Friction (mean) (lbf)	177.2
Bench Set (min) (psi)	19.47
Bench Set (max) (psi)	28.31
Spring Rate (lbs/in)	1057.5
Force (lbf)	2307
Actuator Pressure (psi)	32.3
Seat Contact I/P (psi)	N/A
Full Open I/P (psi)	N/A
% Friction (Max)	22.6
% Friction (Avg)	21.1



Un-Tuned Positioner







Positioner Replaced