Clarke Valve

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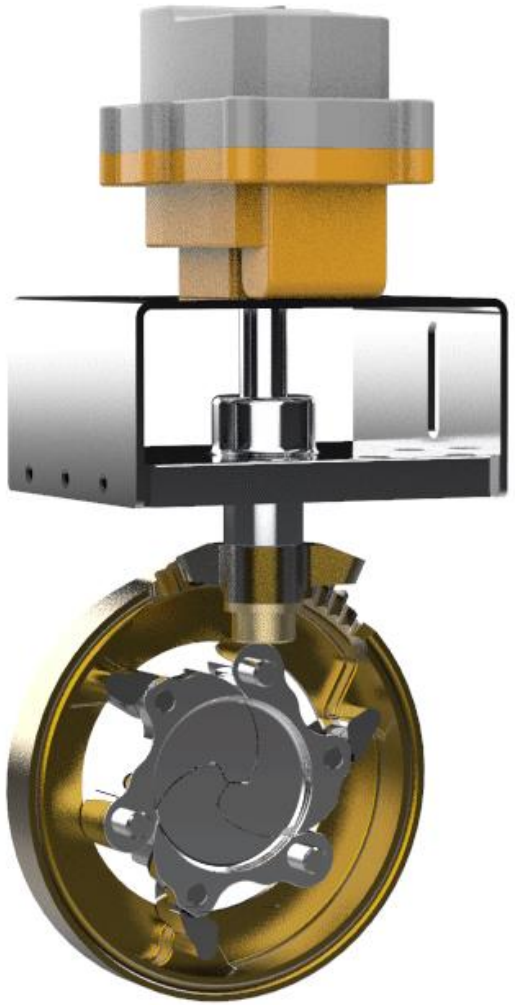
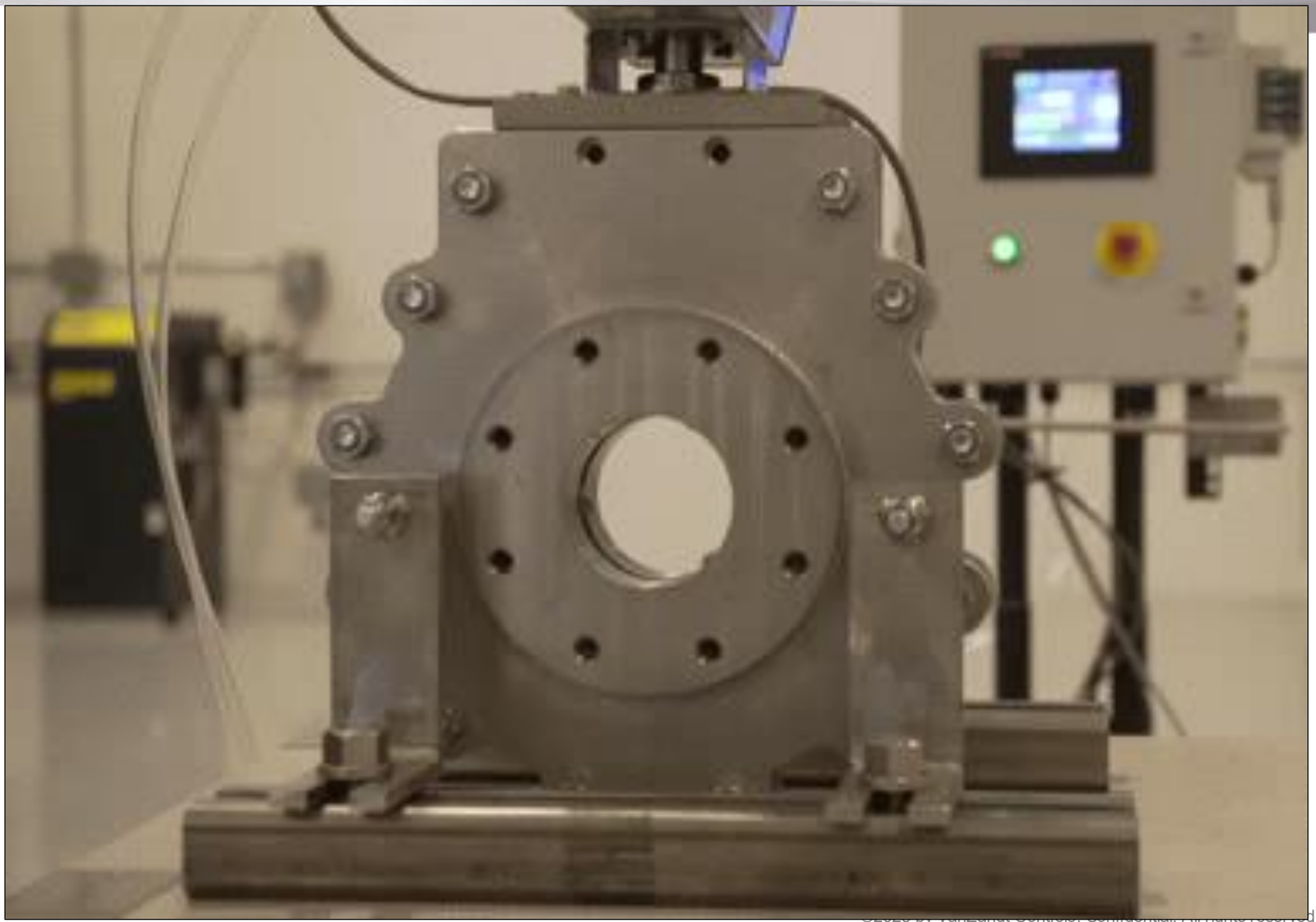
VANZANDT CONTROLS, LLC
Eagle AUTOMATION

- Product Overview
- Gas Lift Use Case
- Compressors Use Case
- Slurry Dump Produced Water Use Case

THE DILATING DISK VALVE™

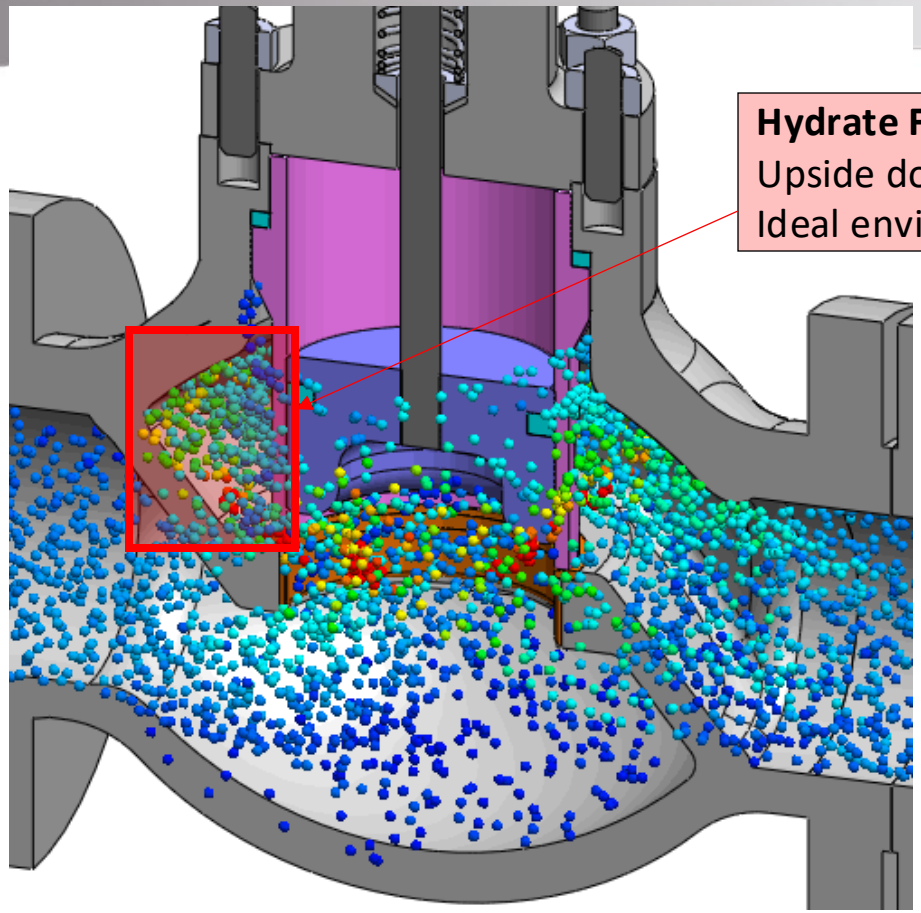
Very Low Friction Mechanism





THE DILATING DISK VALVE™ ADVANTAGE

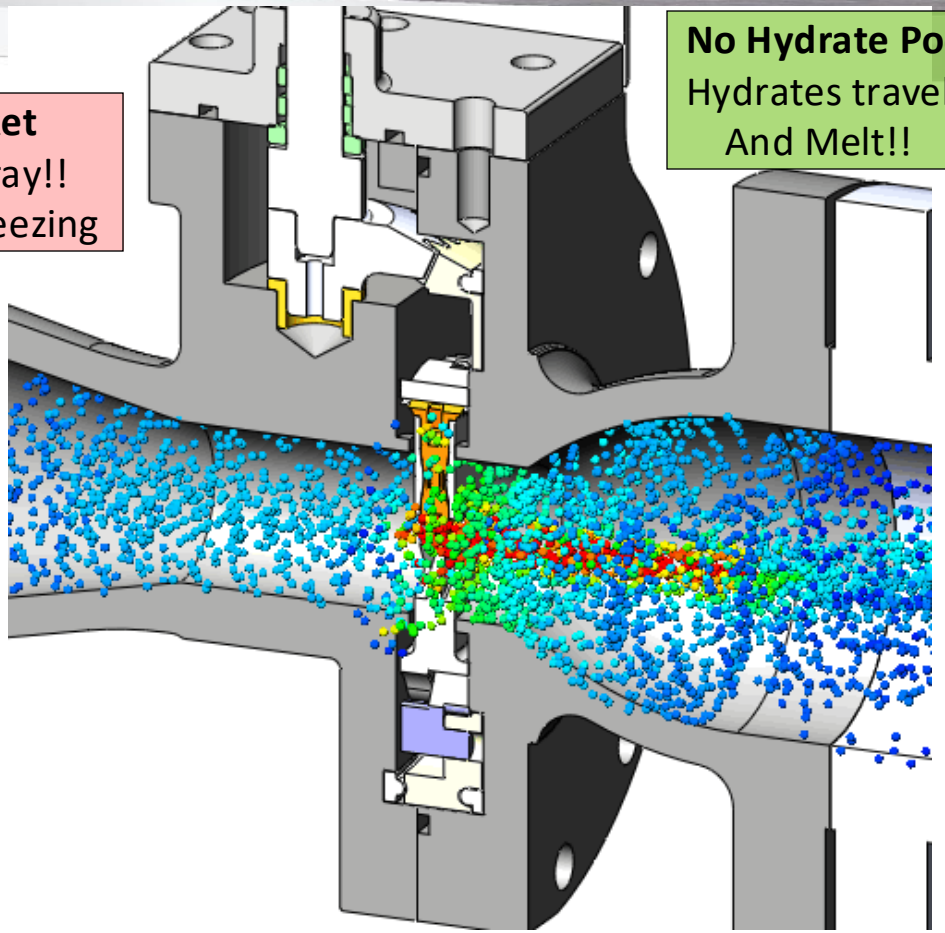
Precise Control, Longer Life, Low Noise



Hydrate Formation Pocket
Upside down Ice Cube Tray!!
Ideal environment for freezing

Impinging Flow Impacts
Via High Velocity Fluid [red]
Causing Erosion
Creating Noise

Expensive Trims
To Minimize Cavitation
To Reduce Noise



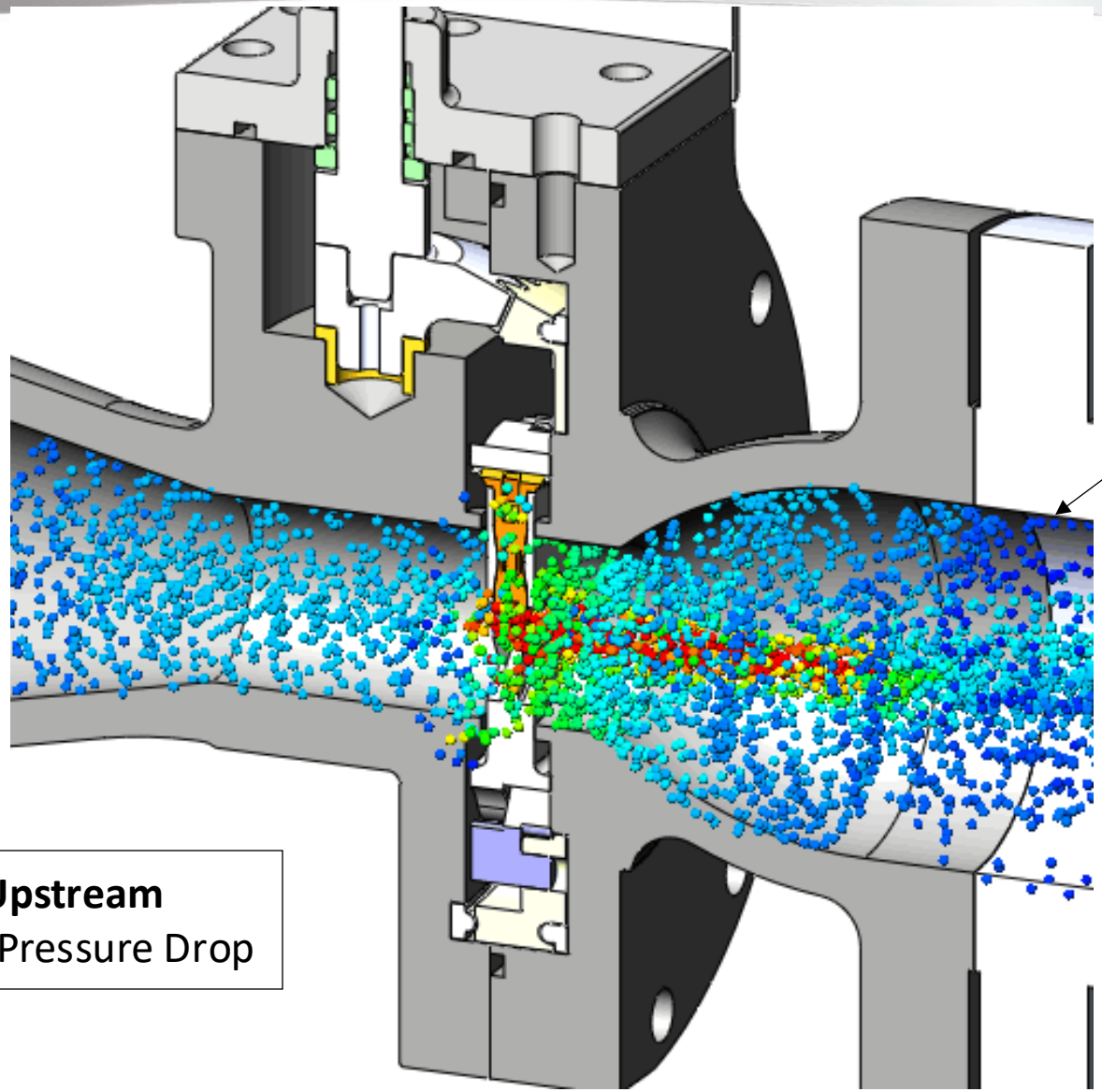
No Hydrate Pocket
Hydrates travel downstream
And Melt!!

Streamlined Flow
Thru Center of Valve Body
Minimizing Cavitation Damage
Reducing Noise

No Special Trims Needed

THE DILATING DISK VALVE™ ADVANTAGE

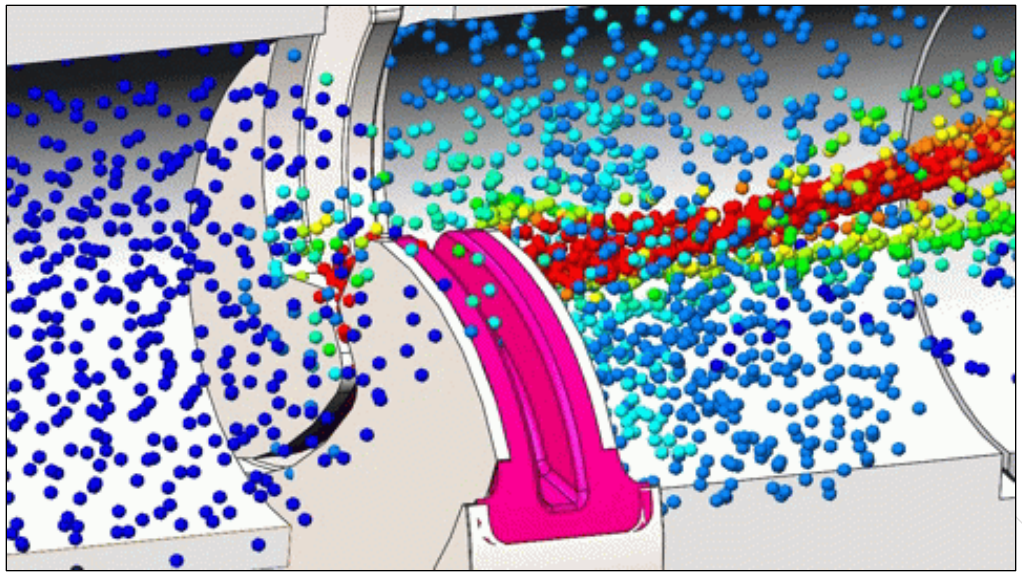
Fluid Dynamics Advantage



Nozzle Upstream
Creates Pressure Drop

Erosion Prevention, Low Noise
High Velocity Fluid [Red]
Flows thru the center of the Valve
Away from the Valve Body
Minimizes Cavitation Impacts

Faster Velocity & Pressure Recovery
Due to Expander downstream of Petals



THE DILATING DISK VALVE™ ADVANTAGE

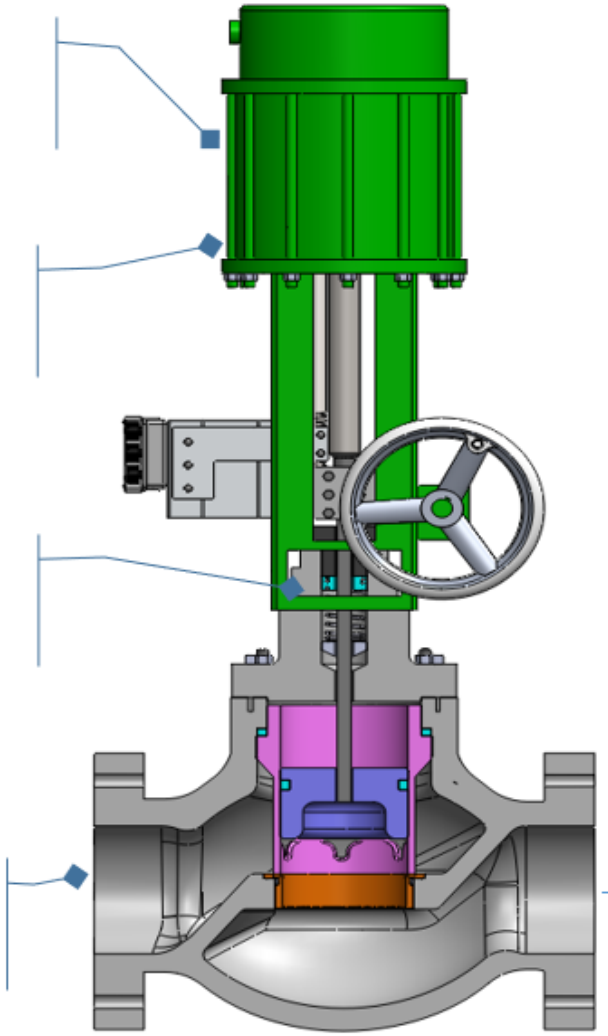
Comparison to Globe Valves

Large Actuator
Heavy and large footprint

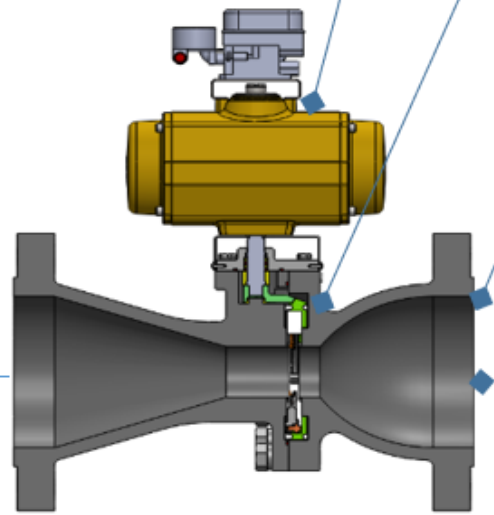
Higher GHG Emissions
Requires special packing to comply with API641 & ISO15848

High Lifecycle Cost
Capital, installation, operation, repair and maintenance

Restrictive Flow Path
Inefficient design



VS.



Small, Low Torque Actuator
Less weight and small footprint

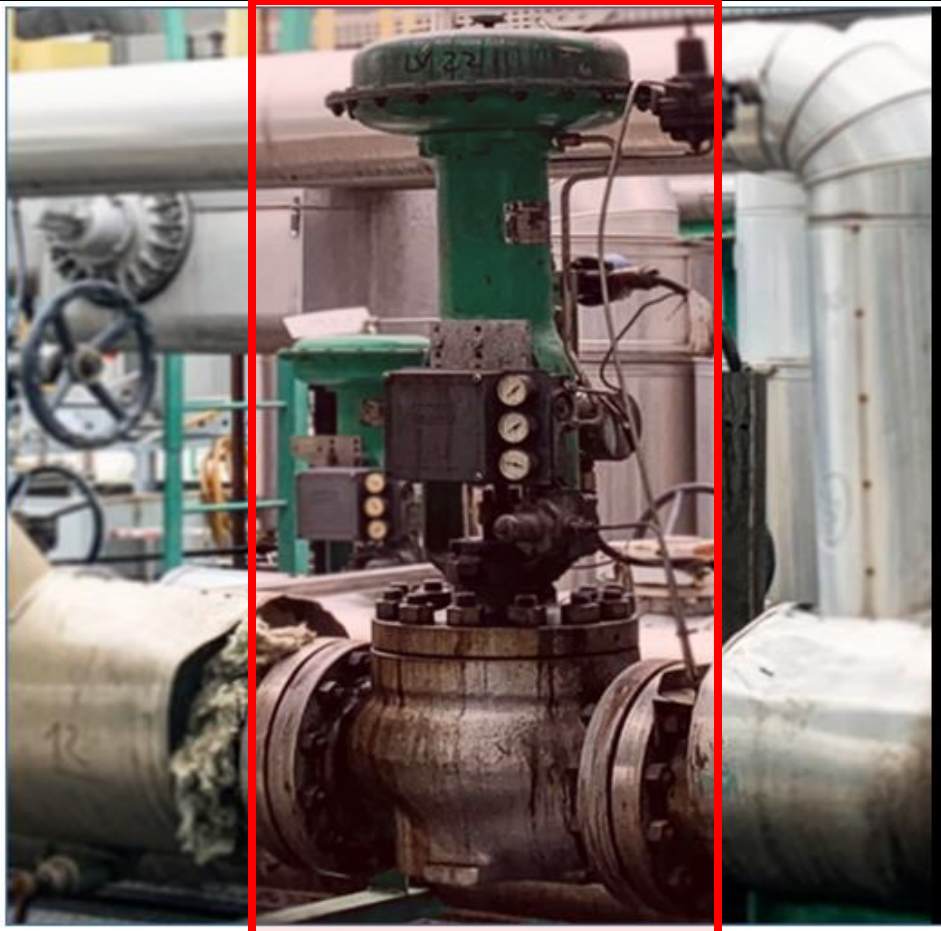
Lowest GHG Emissions
Exceeds API641 & ISO15848

Low Lifecycle Cost
Capital, installation, operation, repair and maintenance

Straight Flow
Precise throttling; Efficient design

THE DILATING DISK VALVE™ ADVANTAGE

Smaller Footprint with Lower Torque Requirements



Before
Fisher ED

After
DDV CV308

Customer:
ENI (Italy)

Industry:
Oil & Gas

Application:
Raw Oil

Year:
2020

Fluid:
Oil

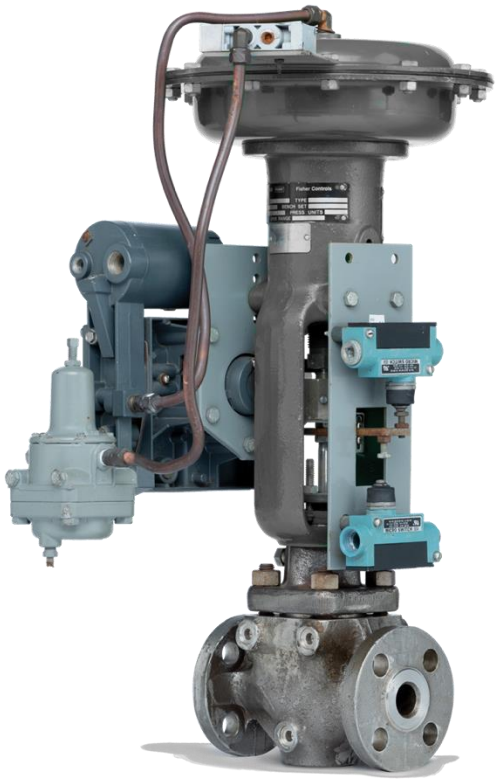
Process Conditions:
Temperature: 122 F
P (in): 290 psig
P (out): 217 psig

THE DILATING DISK VALVE™ ADVANTAGE

Reduced Planned Maintenance

SIGNIFICANT Planned Maintenance with GV
20 Planned Maintenance Events
Over 5 Year Horizon
Constant Stem Packing Tightening
Quarterly LDAR Inspections

REDUCED Planned Maintenance with DDV
Zero Planned Maintenance for 5+ years!!
No Stem Packing Re-tightening
No Quarterly LDAR Inspections Needed!!



0 ***Clarke Valve***
Planned maintenence required over 5 years

20 ***Globe Valve***
Planned maintenence Events required over 5 years

Tightening the stem packing and performing LDAR (leak detection and repair) every quarter

CLARKE VALVE
Dilating Disk Control Valve: Globe Valve Class

Zero Emissions [2 PPM]
Certified for 10 years
Patented Spring-enhanced Stem Seal
No packing or tightening
Valves: largest source of Upstream emissions
Safety: For High H2S Applications

Flow Pushed Thru the Center
High velocity fluids don't come near pipe wall
Impurities don't hit valve body
Cavitation is fluid-bound
Minimal wear
Doubles flow for same size valve

Easier Field Maintenance
Rebuild entire valve in less than 60 minutes
Minimal tools
Minimal spare parts required

Outstanding Performance
Control of a **Globe** Valve
CV of a **Vee Ball** Valve

¼ Turn, Low Torque
Three interlocking petals
300-500 in-lb to Open
500-2000 in-lb to Close
Due to Perpendicular forces
Smaller actuation, lower cost

High CV
Per Valve Size

Precise Control
Low Stiction

Small Footprint
Low Weight

Larger Rangeability
Application Flexibility
10-100% Open Operation
Versus Globe Valve's 30-70% Range

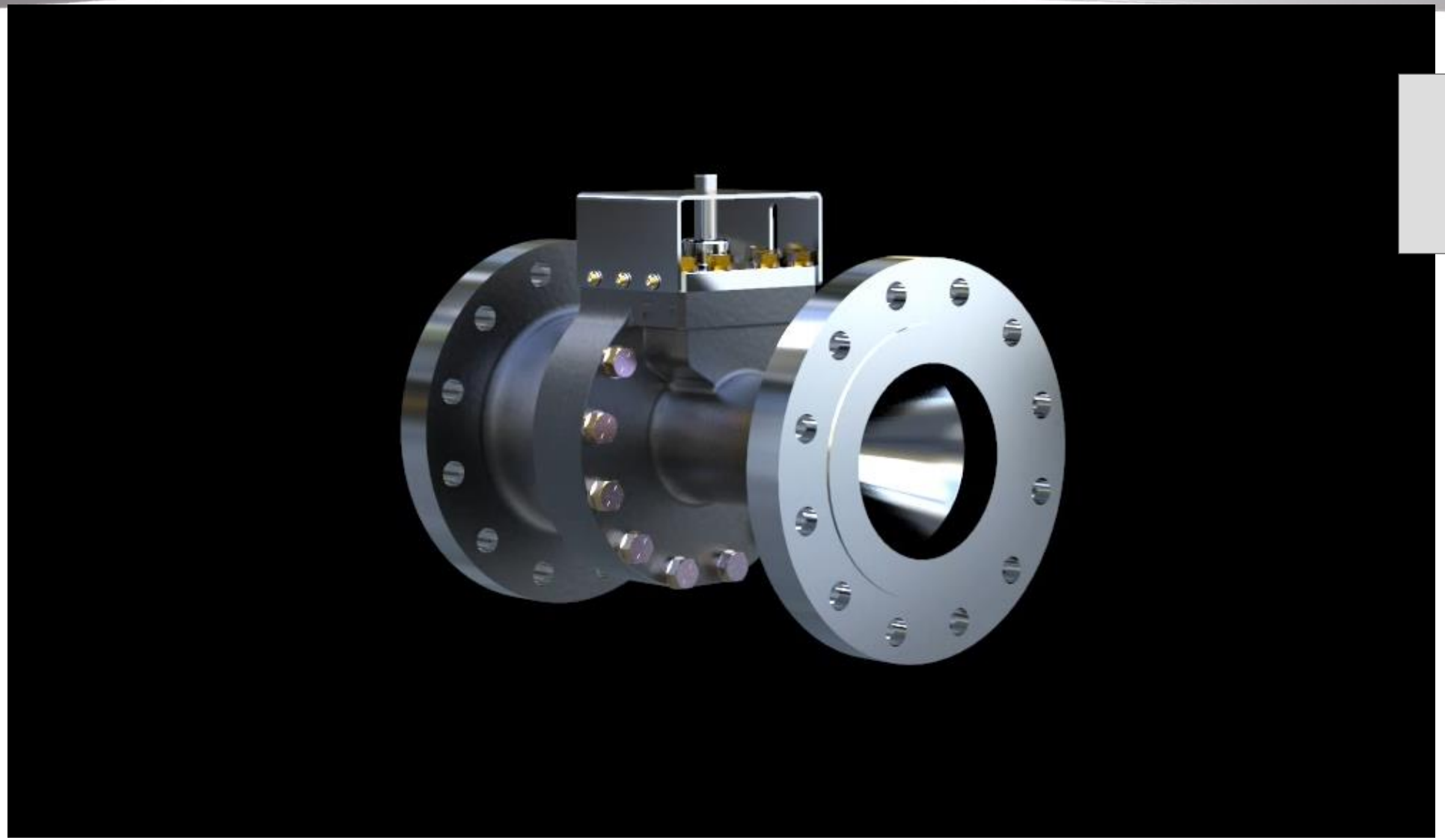
VIDEOS
Operations Videos

Clarke Valve
Overview Video
[Need on-line connection]
[0:57]

Clarke Valve
Emissions Overview Video
[2:08]

Clarke Valve
Operations Video
[Need on-line connection]
[0.19]

VIDEOS
Assembly Videos



Clarke Valve
Assembly Video
[Need on-line connection]
[2.34]

CUSTOMER SUCCESS
Dilating Disk Control Valve: Globe Valve Class

XTO
Testing the valve for slurry dump application
Potential volume of +1600 valves/yr

Chevron
Testing the valve for slurry dump application
Potential volume of +1600 valves/yr

EOG & Permian Resources
Evaluating Hydrate formations Reduction
Verus traditional globe Valves
Doing side-by-side in gas lift injection
Same as Oxy

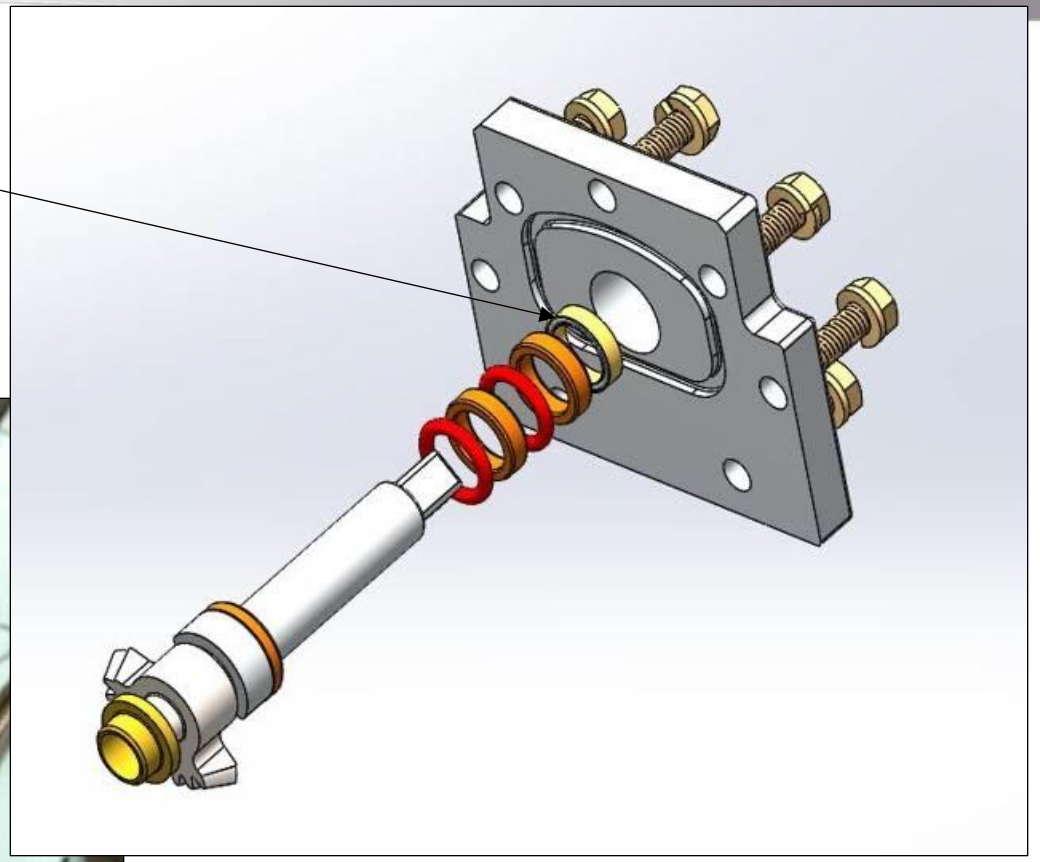
Energy Transfer
Suction Control & Recycle CVs
Valves installed in 2024

Oxy
Huff n Puff EOR
Suction Control
Gas Buster
Slurry Dump
Standardized on Gas Lift since 2022

Verdun
Suction Control valves
Installed in 2024

SPRING ENHANCED SEAL
No Packing or Tightening

Patented Spring-Enhanced Stem Seal
Yellow Seal at Top of Spring Stack
Facilitates Zero Emissions [2 PPM]
No Packing or Tightening
Valves: largest source of Upstream emissions

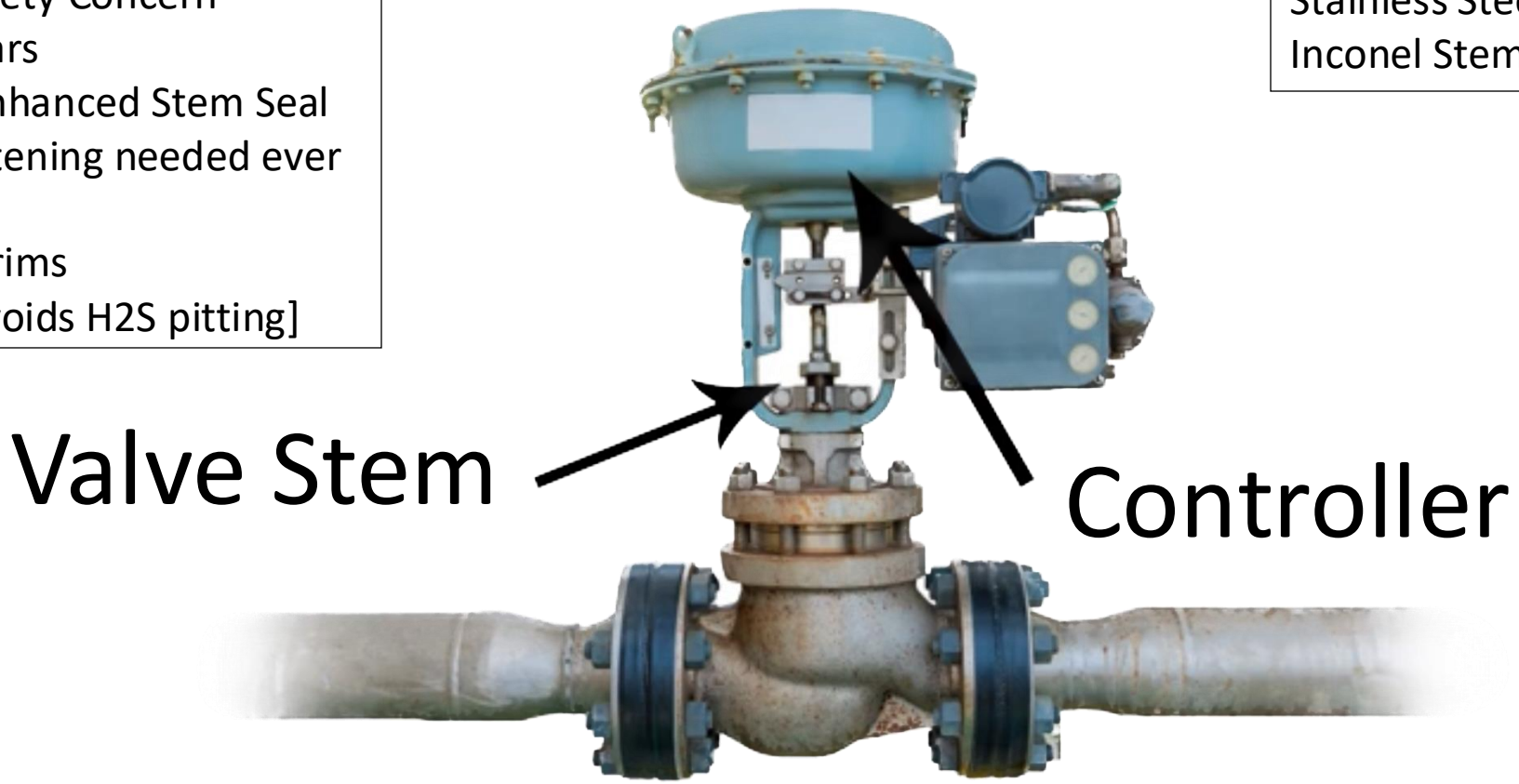


METHANE EMISSIONS AND/OR H2S LEAKAGE

Valves & Controllers Are Key Source

Zero Emissions [2 PPM] for High H2S
Resolves Major Safety Concern
Certified for 10 years
Patented Spring-enhanced Stem Seal
No packing or tightening needed ever
Materials Utilized:
- Stainless Steel Trims
- Inconel Stem [avoids H2S pitting]

Materials Utilized
Stainless Steel Trims
Inconel Stem [avoids H2S pitting]



LOW EMISSIONS BUILT IN
Optional With Competitors with Poorer Performance

Typical Low Emissions Packing
22 Parts
Added Cost & Labor
Routine Adjustments required
API 624 [Rising Stem]: 500 ppmv allowed!!
ISO 15848-1: **up to 100 ppmv allowed!!**

Clarke Valve Out-of-the-Box
7 Parts
No Added Cost
No Adjustments Needed
API 624 [Rising Stem]: 16 ppmv measured
ISO 15848-1: **2 ppmv guaranteed!!**

Competitor's Low E Kit

WHY HIGHER CV?
Versus Competitive Technologies

No Solid Structures or Obstructions in the Flow Path

No Turbulent areas and areas of Differential Pressure within the Flow Path
- Due to Higher and Lower Velocity Zones
- Will have a Negative Impact on CV

No Turbulent areas are created by solid obstructions
- Such as the Over/Under Structure of a Globe or a Flat Disk in a Choke

V-ball has a Lower CV than a DDV

Because the Cavity of the Ball contains Turbulent Pressure Boundaries
- That Impact the Fluid Trying to Go Downstream
- 20” V-ball = 10.75” DDV port with 20” end connections

Circular Port Shape in the Centerline of the Flow Path

Creates Ideal Pressure Boundaries Throughout the Entire Flow Path

Circular Port Diameters can be Increased/Decreased based on required CV
- 0.25” = CV2
- 0.62” = CV20
- 1.00” = CV71
- 2.00” = CV308
- 4.00” = CV1345

Narrow Mechanism Retraction Slots for Petals

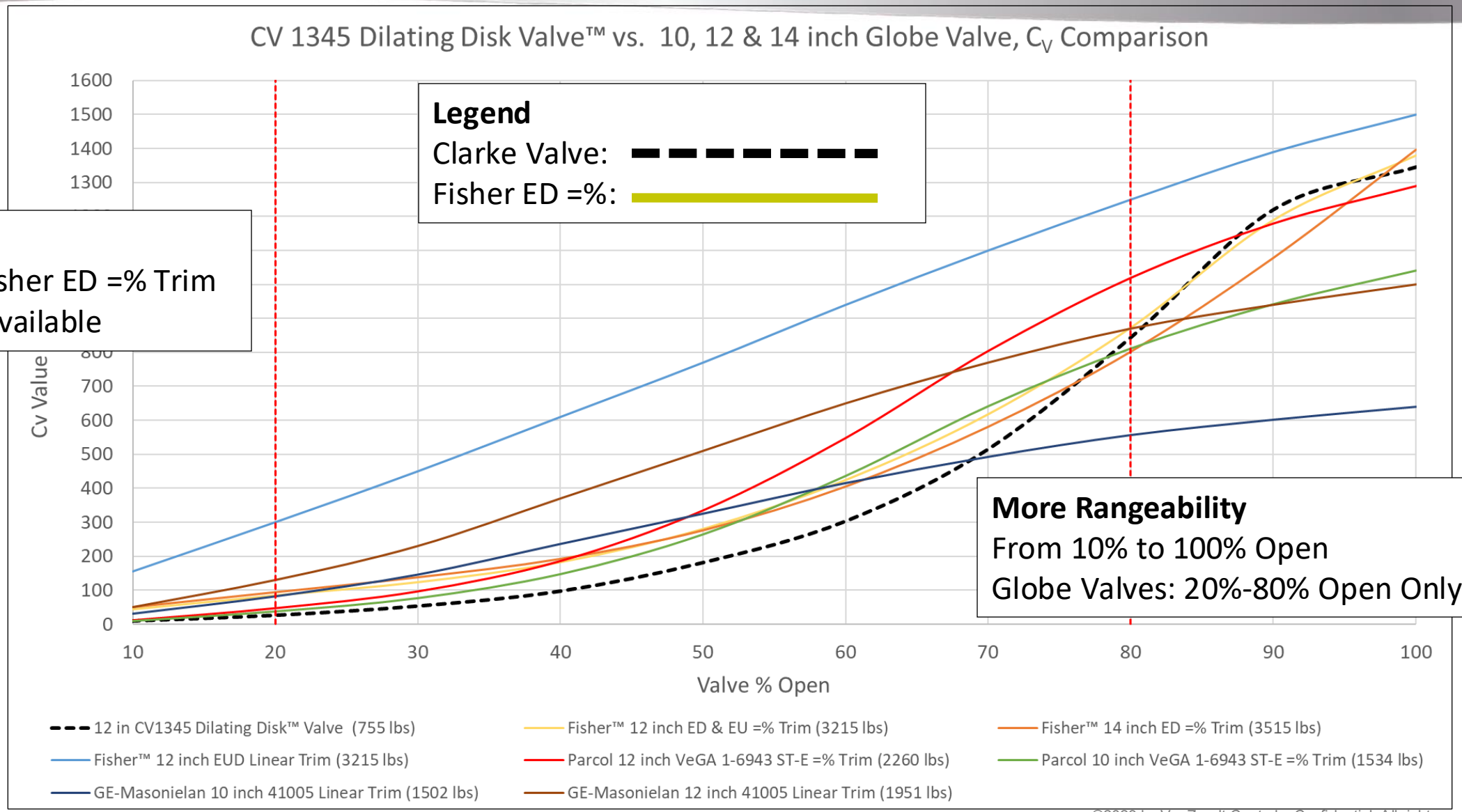
Prevents the Wetted Area of the Valve Body
- From having a Major Impact on CV
- Since the Fluid will take the Path of Least Resistance
  - Which is Downstream

FLOW CHARACTERISTICS
Inherently High Flow Rate

Designed to Operate at 100% Open
Much Higher Flow Rates
GV's maximum is 80% Open

FLOW CHARACTERISTICS
Behaves Similar to a Globe Valve

Equal % Valve
Most Similar to Fisher ED =% Trim
Linear % Option available



More Rangeability
From 10% to 100% Open
Globe Valves: 20%-80% Open Only

CLARKE VALVE
Five Product Families, Multiple Variants

VANZANDT CONTROLS, LLC
Eagle AUTOMATION

Ideal Application Profile
Temperature Range: -40F to 500F
Single Stage Pressure Drop
Carbon Steel, Stainless Steel

Clarke Input Needed if:
Severe Service
- Two-phase
- Cryogenic
- High Cavitation

Pressure Range: ASME 2500 & up
Temperature Range: >500F
Size: >12”
CV: >1345

CV2
Bore: 0.187”
Size: 0.25”-1”
CL150 - CL1500

CV20
Bore: 0.622”
Size: 0.5”-3”
CL150-CL1500

CV71
Bore: 1.049”
Size: 1”-4”
CL150-CL1500

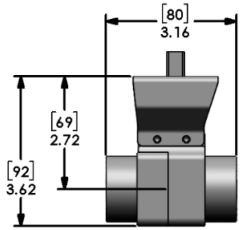
CV308
Bore: 2.067”
Size: 2”-6”
CL150-CL600

CV1345
Bore: 4.026”
Size: 6”-12”
CL150-CL600

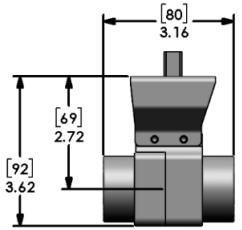
Shutoff Rating
Class IV: Metal-to-Metal seats
Class IV: PTFE Soft seats

Hard Face Coatings Available
Nano Ceramic
Tungsten Carbine/Stellite

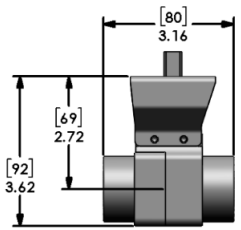
CLARKE VALVE
CV2 Product Family



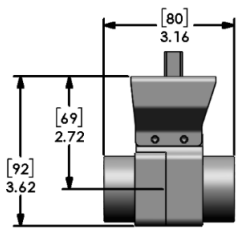
.25" NPT ASSM
[2-kg] 3-lbs



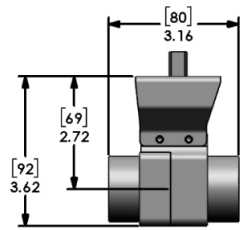
.5" NPT ASSM
[2-kg] 3-lbs



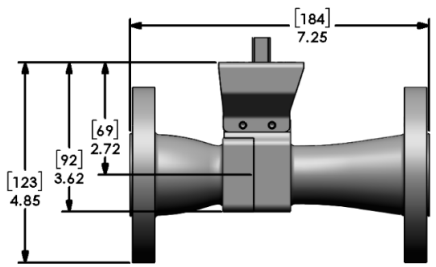
.5" SW ASSM
[2-kg] 3-lbs



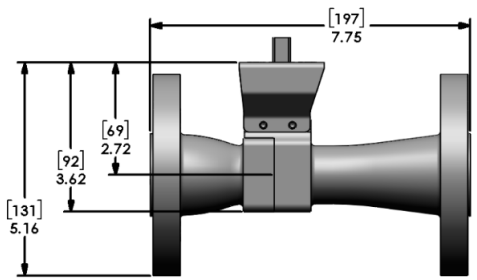
1" NPT ASSM
[2-kg] 3-lbs



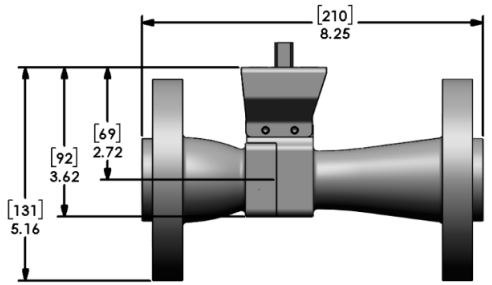
1" SW ASSM
[2-kg] 3-lbs



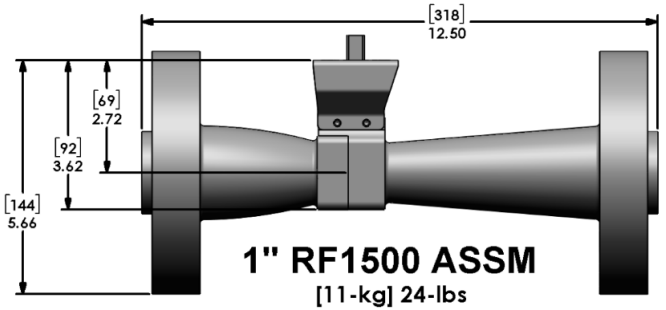
1" RF150 ASSM
[4-kg] 8-lbs



1" RF300 ASSM
[5-kg] 11-lbs



1" RF600 ASSM
[6-kg] 13-lbs

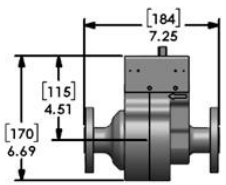


1" RF1500 ASSM
[11-kg] 24-lbs

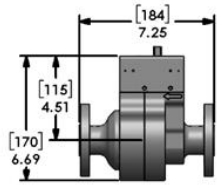
CV2 PRODUCT FAMILY

DIMENSIONS ARE SHOWN IN: [MILLIMETERS] INCHES

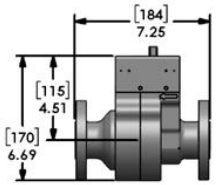
CLARKE VALVE
CV20 Product Family



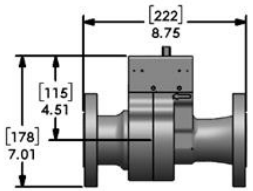
0.5" RF150
[9-kg] 19-lbs



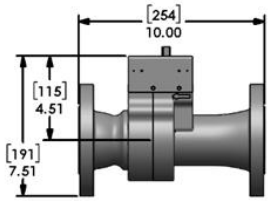
0.75" RF150
[9-kg] 20-lbs



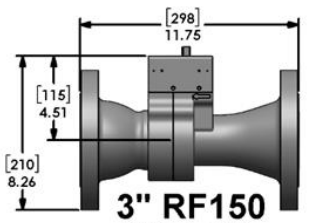
1" RF150
[10-kg] 21-lbs



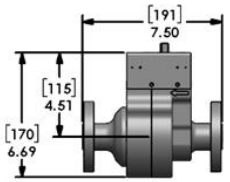
1.5" RF150
[12-kg] 26-lbs



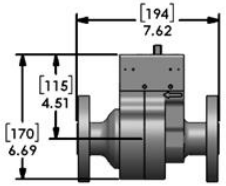
2" RF150
[15-kg] 32-lbs



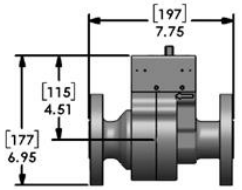
3" RF150
[21-kg] 45-lbs



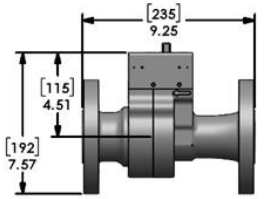
0.5" RF300
[9-kg] 20-lbs



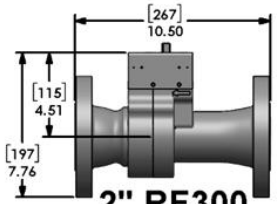
0.75" RF300
[10-kg] 22-lbs



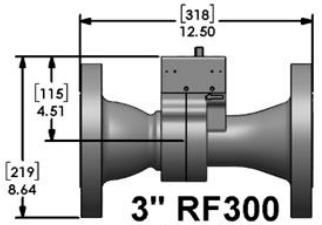
1" RF300
[11-kg] 24-lbs



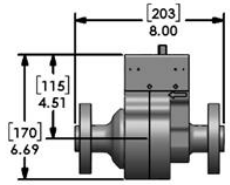
1.5" RF300
[14-kg] 31-lbs



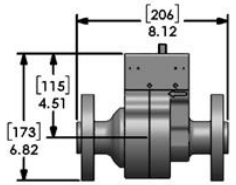
2" RF300
[16-kg] 36-lbs



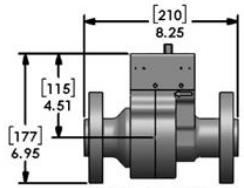
3" RF300
[24-kg] 53-lbs



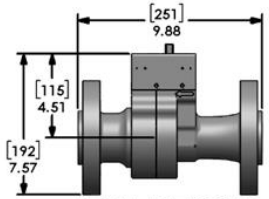
0.5" RF600
[10-kg] 21-lbs



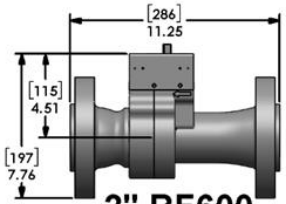
0.75" RF600
[11-kg] 23-lbs



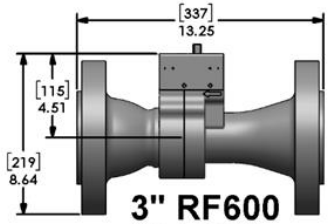
1" RF600
[12-kg] 25-lbs



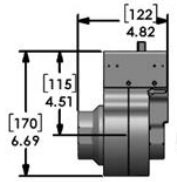
1.5" RF600
[15-kg] 33-lbs



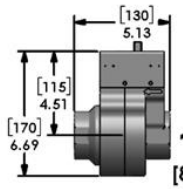
2" RF600
[18-kg] 39-lbs



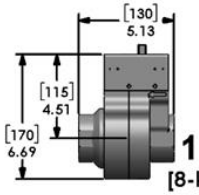
3" RF600
[27-kg] 59-lbs



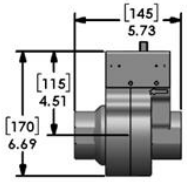
0.5" UNV
[8-kg] 17-lbs



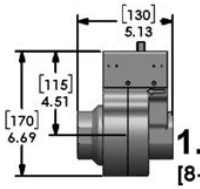
1" NPT
[8-kg] 19-lbs



1" SW
[8-kg] 17-lbs



1.5" NPT
[8-kg] 17-lbs

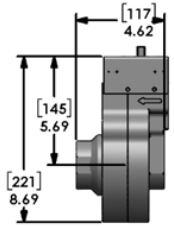


1.5" SW
[8-kg] 17-lbs

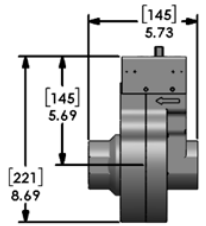
CV20 PC 150 / 300 / 600 PRODUCT FAMILY

DIMENSIONS ARE SHOWN IN:
[MILLIMETERS]
INCHES

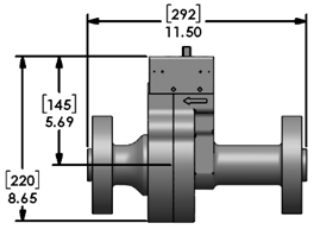
CLARKE VALVE
CV20 Product Family



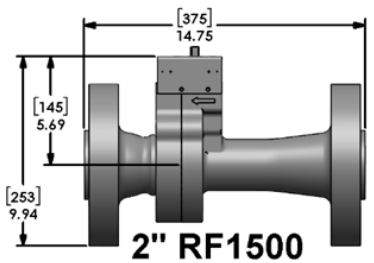
0.5" UNV
[14-kg] 31-lbs



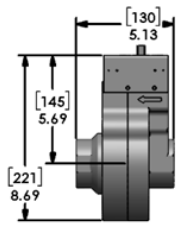
1.5" NPT
[14-kg] 31-lbs



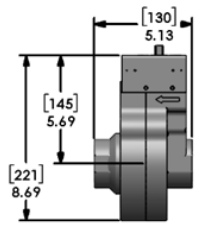
0.75" RF1500
ISA - LONG
[21-kg] 45-lbs



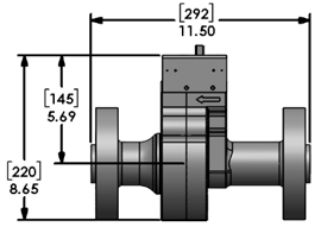
2" RF1500
ISA - LONG
[38-kg] 84-lbs



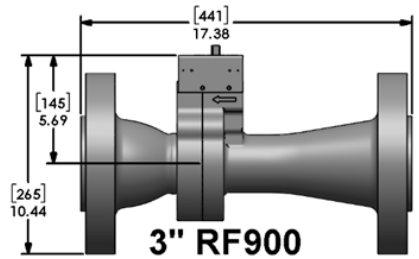
1" NPT
[14-kg] 31-lbs



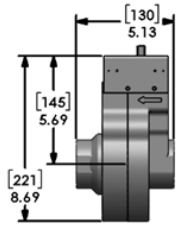
1.5" SW
[14-kg] 31-lbs



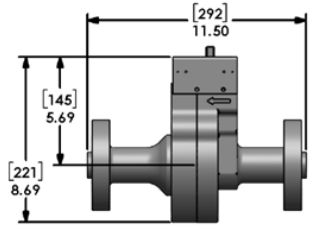
1" RF1500
ISA - LONG
[23-kg] 50-lbs



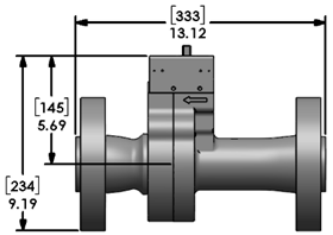
3" RF900
ISA - LONG
[48-kg] 105-lbs



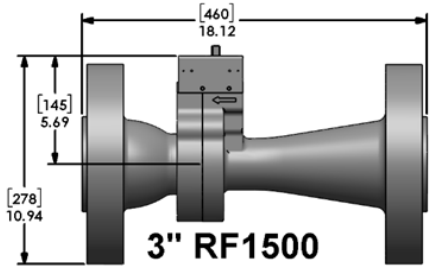
1" SW
[14-kg] 31-lbs



0.5" RF1500
ISA - LONG
[19-kg] 42-lbs



1.5" RF1500
ISA - LONG
[29-kg] 63-lbs

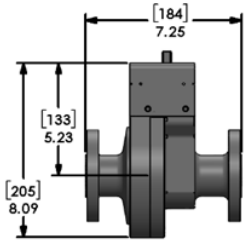


3" RF1500
ISA - LONG
[59-kg] 129-lbs

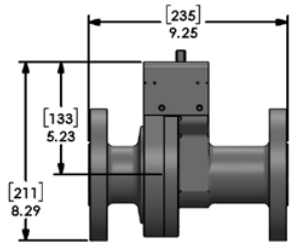
CV20 PC 1500 PRODUCT FAMILY

DIMENSIONS ARE SHOWN IN:
[MILLIMETERS]
INCHES

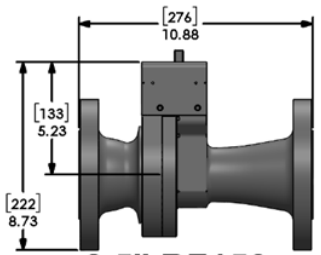
CLARKE VALVE
CV71 Product Family



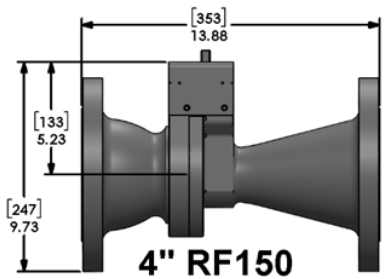
1" RF150
[12-kg] 25-lbs



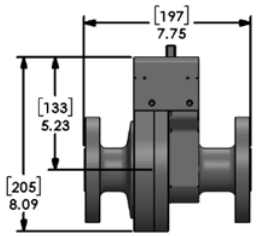
1.5" RF300
[17-kg] 36-lbs



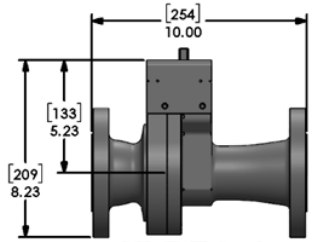
2.5" RF150
[19-kg] 42-lbs



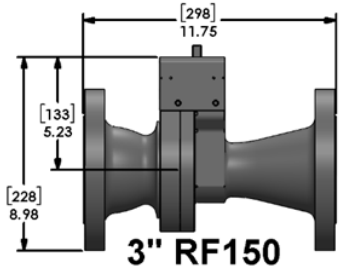
4" RF150
[29-kg] 62-lbs



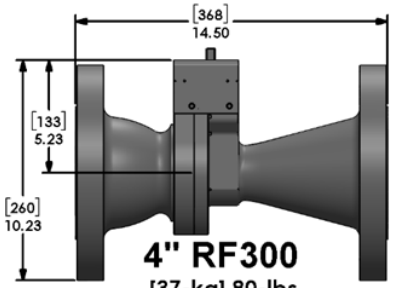
1" RF300
[13-kg] 28-lbs



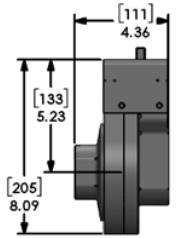
2" RF150
[16-kg] 35-lbs



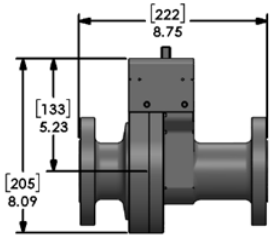
3" RF150
[22-kg] 48-lbs



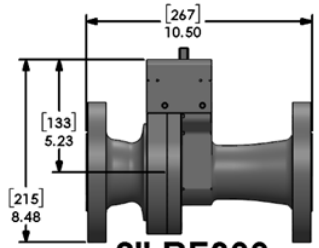
4" RF300
[37-kg] 80-lbs



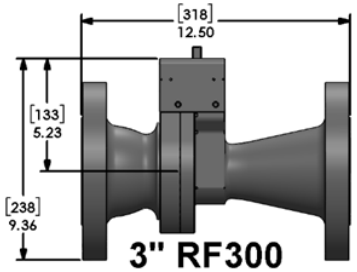
1" UNV
[10-kg] 21-lbs



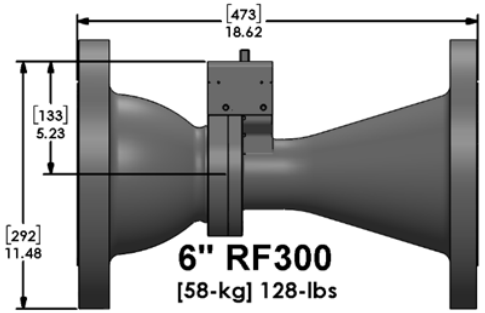
1.5" RF150
[14-kg] 31-lbs



2" RF300
[18-kg] 39-lbs



3" RF300
[26-kg] 57-lbs

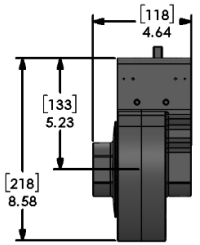


6" RF300
[58-kg] 128-lbs

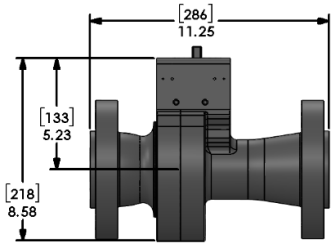
CV71 PC 300/150 PRODUCT FAMILY

DIMENSIONS ARE SHOWN IN:
[MILLIMETERS]
INCHES

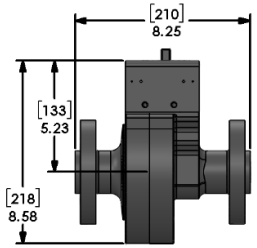
CLARKE VALVE
CV71 Product Family



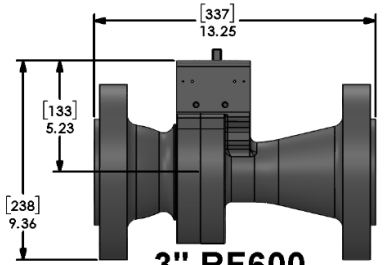
1" UNIV
[13-kg] 28-lbs



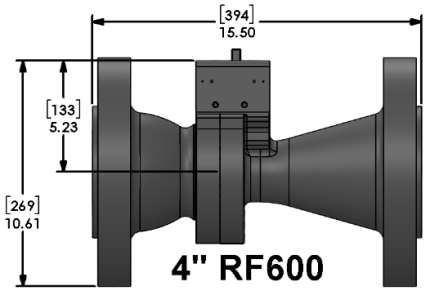
2" RF600
[24-kg] 52-lbs



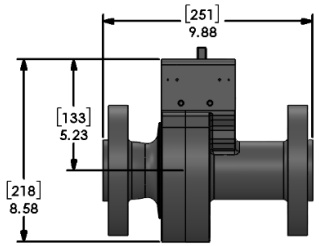
1" RF600
[17-kg] 36-lbs



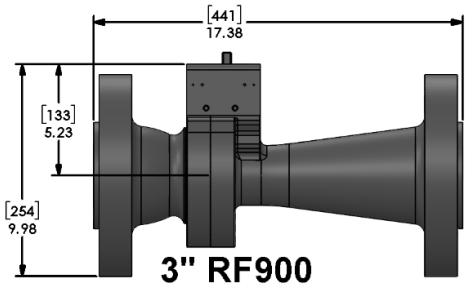
3" RF600
[34-kg] 73-lbs



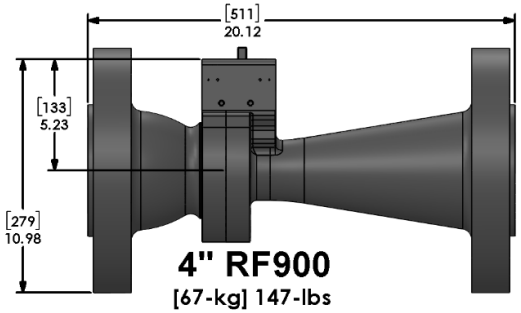
4" RF600
[53-kg] 117-lbs



1.5" RF600
[21-kg] 46-lbs



3" RF900
[47-kg] 103-lbs

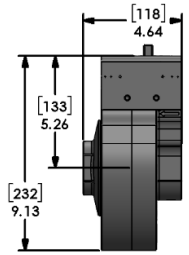


4" RF900
[67-kg] 147-lbs

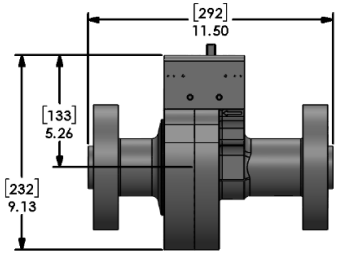
CV71 PC 900/600 PRODUCT FAMILY

DIMENSIONS ARE SHOWN IN:
[MILLIMETERS]
INCHES

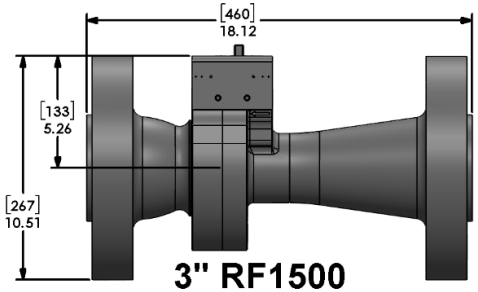
CLARKE VALVE
CV71 Product Family



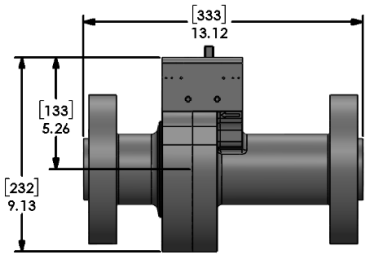
1" UNIV
[20-kg] 45-lbs



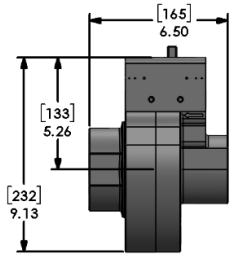
1" RF1500
[30-kg] 66-lbs



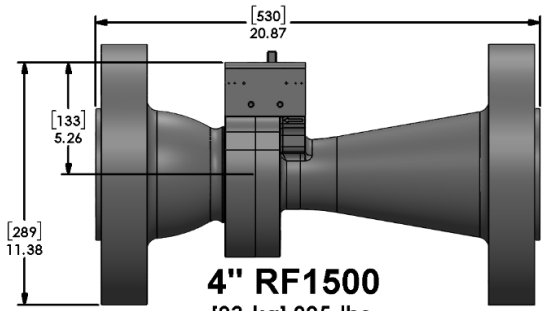
3" RF1500
[68-kg] 149-lbs



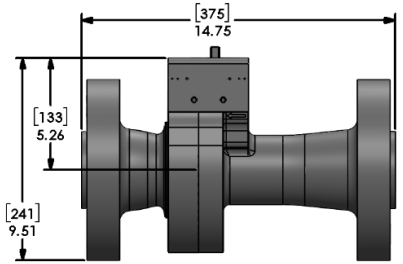
1.5" RF1500
[37-kg] 81-lbs



2" NPT
[23-kg] 49-lbs



4" RF1500
[93-kg] 205-lbs

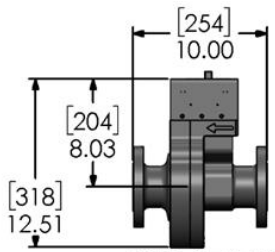


2" RF1500
[47-kg] 103-lbs

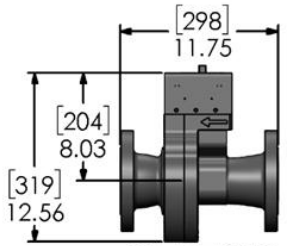
CV71 PC 1500 PRODUCT FAMILY

DIMENSIONS ARE SHOWN IN:
[MILLIMETERS]
INCHES

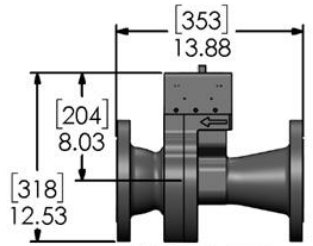
CLARKE VALVE
CV308 Product Family



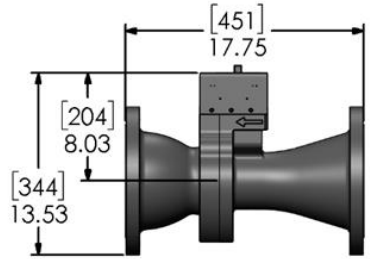
2" RF150
[34-kg] 75-lbs



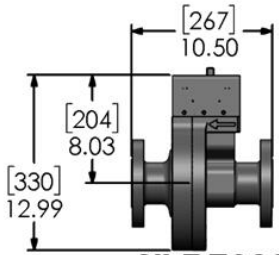
3" RF150
[40-kg] 87-lbs



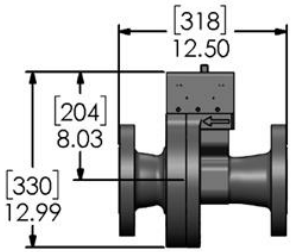
4" RF150
[45-kg] 99-lbs



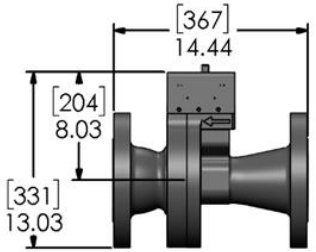
6" RF150
[60-kg] 131-lbs



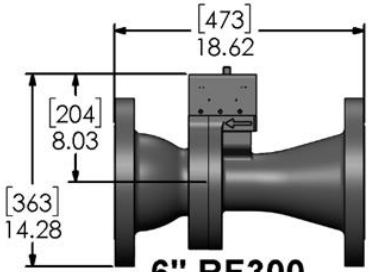
2" RF300
[38-kg] 83-lbs



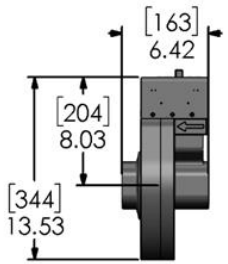
3" RF300
[46-kg] 100-lbs



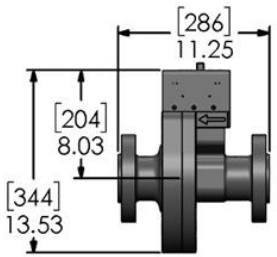
4" RF300
[55-kg] 122-lbs



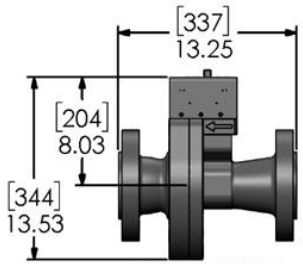
6" RF300
[78-kg] 172-lbs



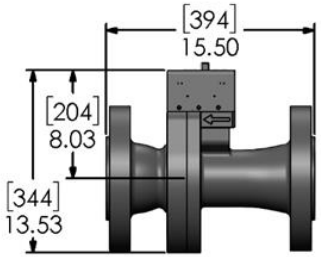
2" UNIV
[40-kg] 87-lbs



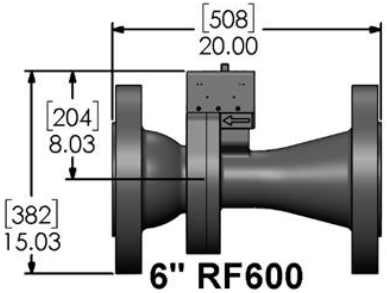
2" RF600
[49-kg] 107-lbs



3" RF600
[58-kg] 127-lbs



4" RF600
[77-kg] 170-lbs

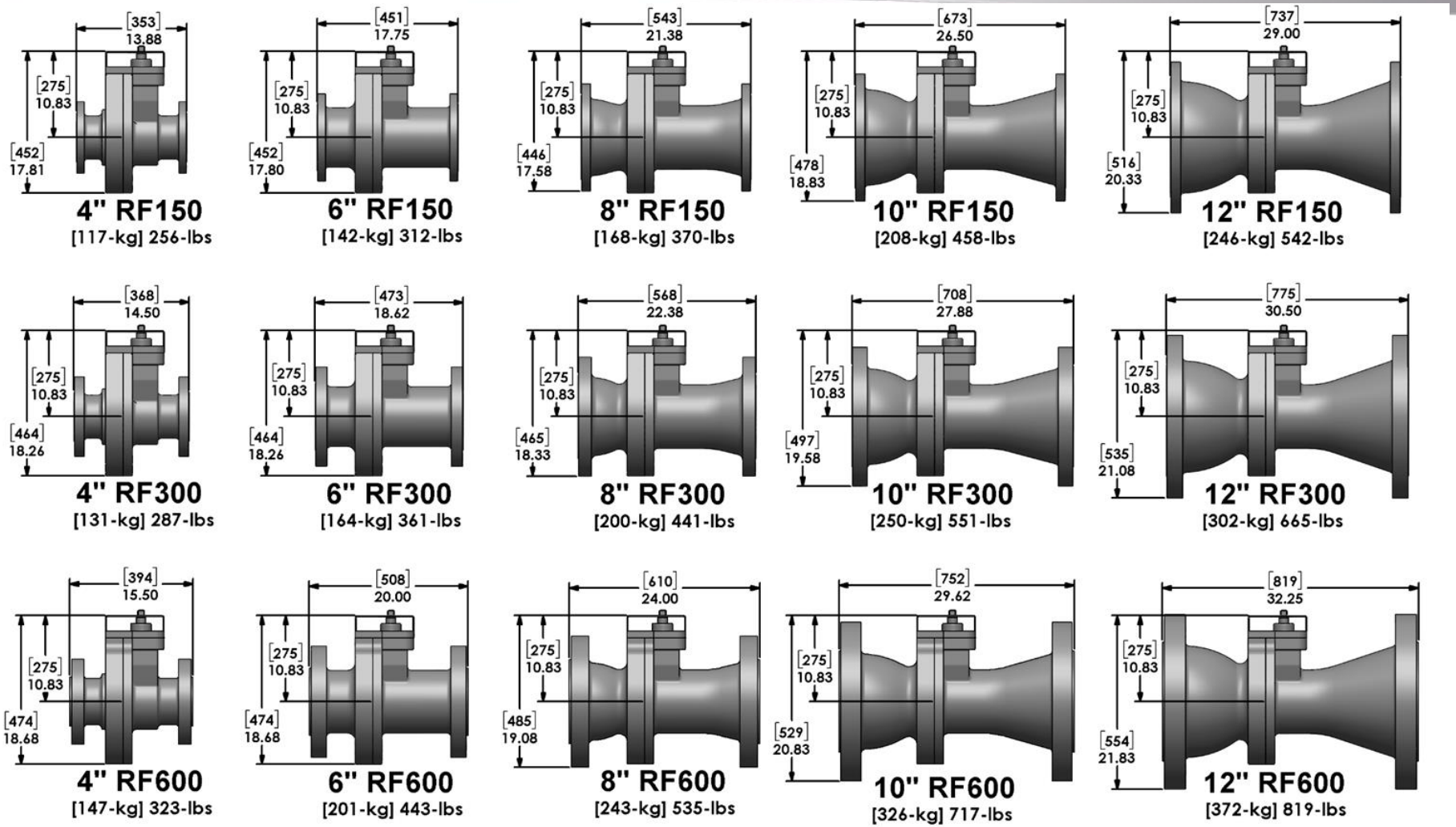


6" RF600
[113-kg] 248-lbs

CV308 PRODUCT FAMILY

DIMENSIONS ARE SHOWN IN: [MILLIMETERS] INCHES

CLARKE VALVE
CV1345 Product Family



CV1345 PRODUCT FAMILY

DIMENSIONS ARE SHOWN IN: [MILLIMETERS] INCHES

GAS LIFT USE CASE

Permian Producer Side-by-Side Comparison

VANZANDT CONTROLS, LLC
Eagle AUTOMATION

Permian Producer

Experience:
400+ Installed

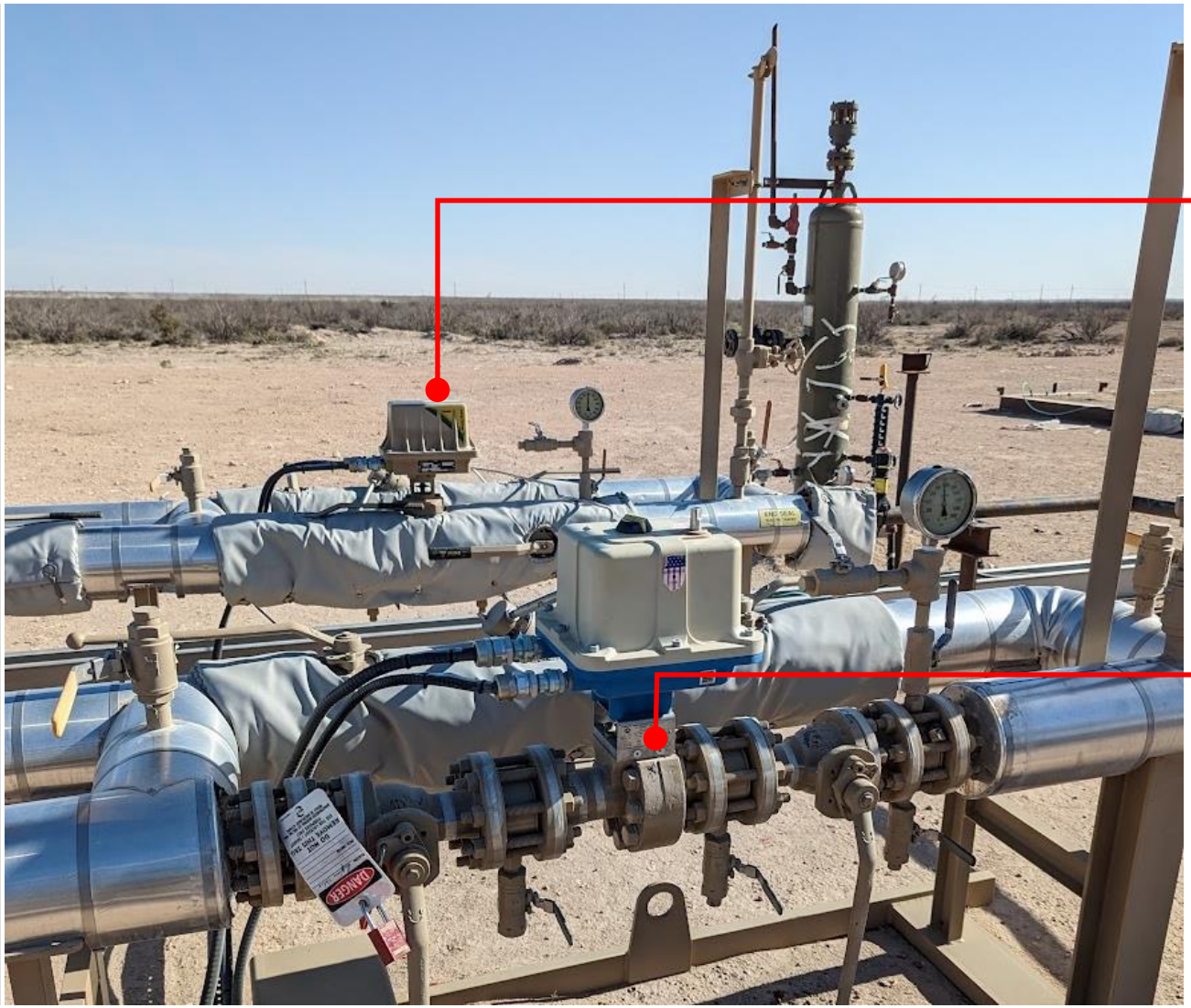
Application:
Gas Lift

Year:
2021

Service:
Injection Control Valve

Production Rate:
2000 BPD

Process Conditions:
Temperature: 70 F
Flow Rate: 1200 MCF/Day
P (in): 1200 psig
P (out): 1100 psig

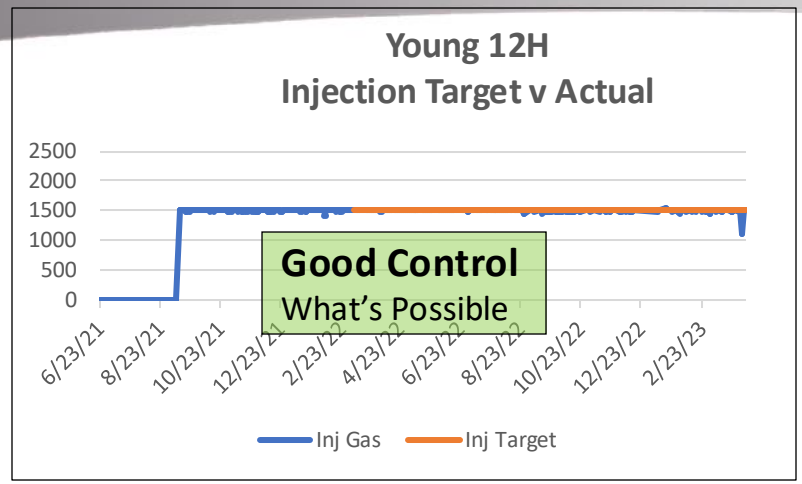


GAS LIFT USE CASE

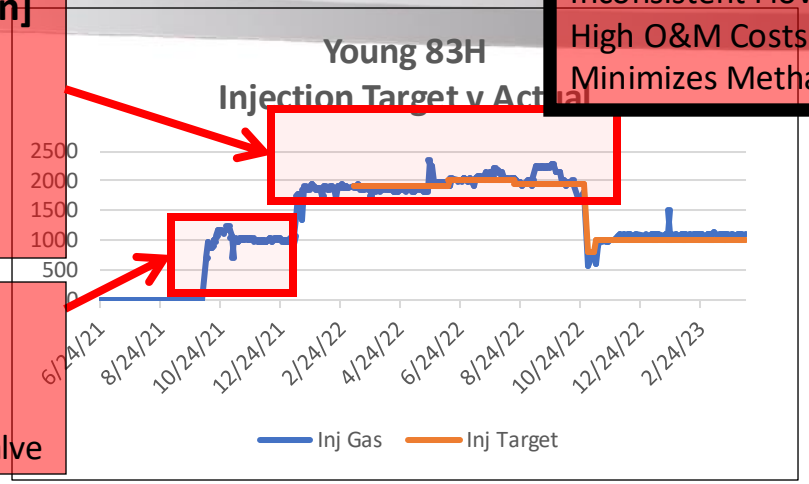
Performance Comparison versus Globe Valve

Fisher D4
Inconsistent Flow Control
High O&M Costs due to Freezing
Minimizes Methanol Usage

Well Freezes [Hydrate Formation]
Over Injecting
Lowered Production
Not enough space for Fluids
For 10 months!!
Excessive Methanol Usage



Good Control
What's Possible

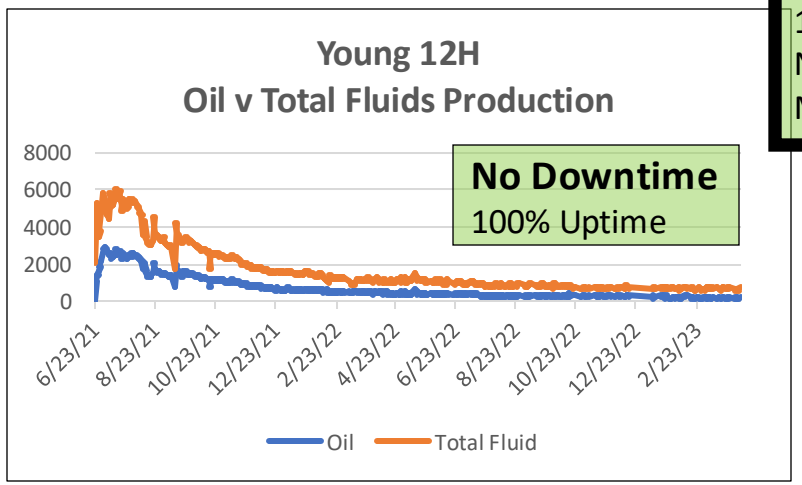


Poor Control
During Well Kickoff
Most Critical Time
Irreversible Damage to Valve

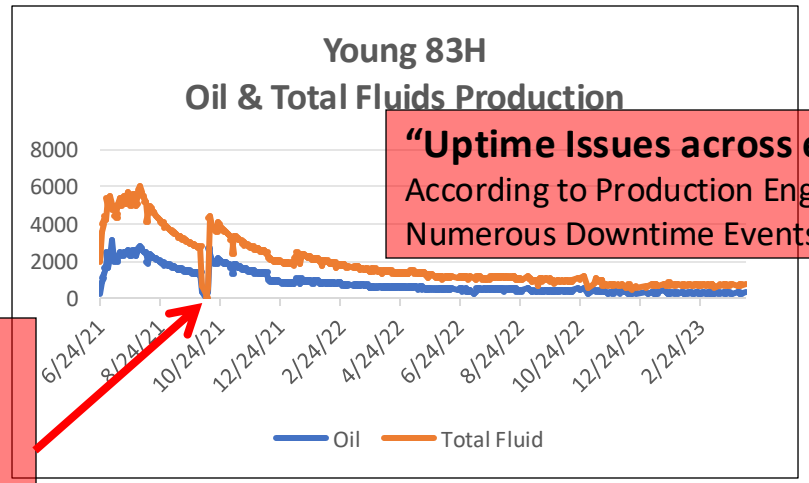
Clarke Valve

Clarke Valve
Precise Flow Control
Zero O&M Costs, No Freezing
100% Uptime
No Shutdown Events
Minimizes Methanol Usage

Fisher D4



No Downtime
100% Uptime



"Uptime Issues across entire Basin"
According to Production Engineer
Numerous Downtime Events

Downtime Event
6 Days
$1.15M Lost Production
$50-100k Repair Cost, typical

GAS LIFT USE CASE

Production Uptime = Excellent Payback

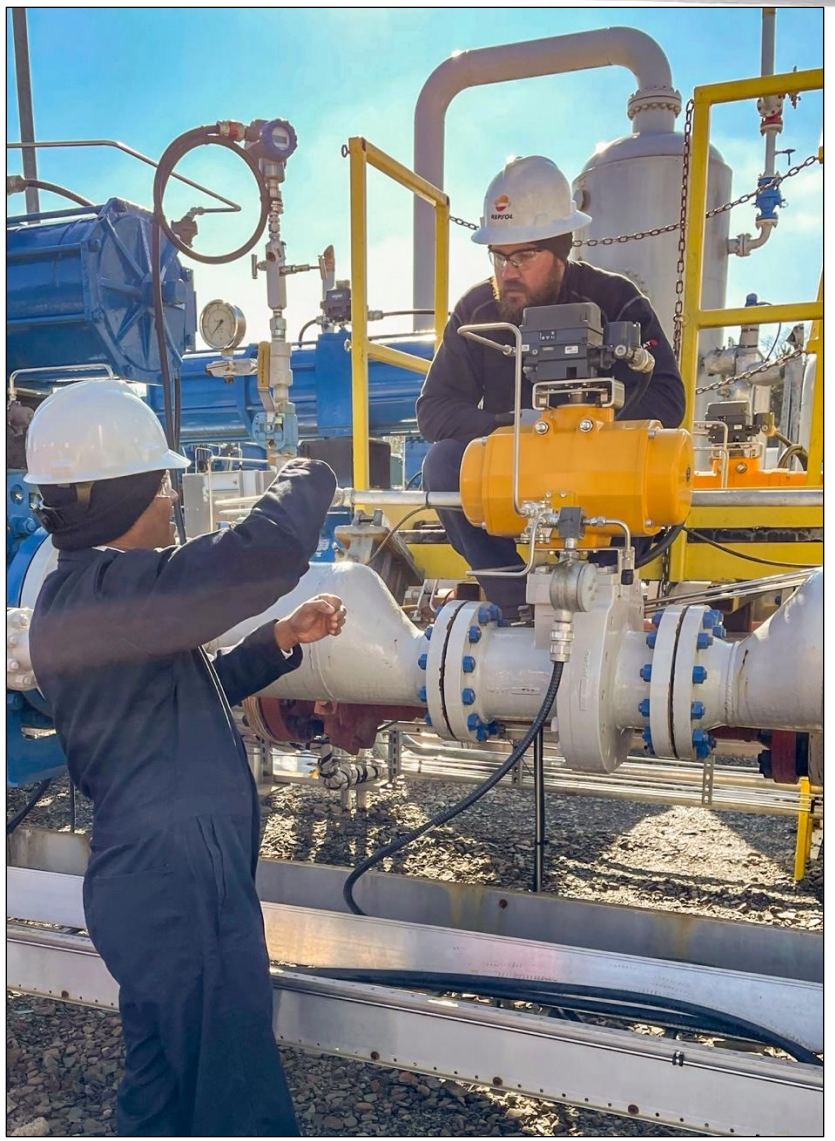
	Clarke Valve	Fisher D4	Incremental Value
Availability [%]	100%	90%	10%
Availability [Days]	365	328.5	36.5
Revenue [$$/yr]	**$64,240,000**	**$57,816,000**	**$6,424,000**

Average Production [BPD]	2200
Crude Oil WTI [$$/BPD]	$80
Repair Costs	$ 50,000

Plus Repair Costs
Must Pull the Well
$50-100K

COMPRESSOR STATION USE CASE

Suction & Recycle Control Valves



Customers:
Repsol, Verdun, Energy Transfer, Western Midstream

Industry:
Oil & Gas Onshore

Application:
Suction Control Valve

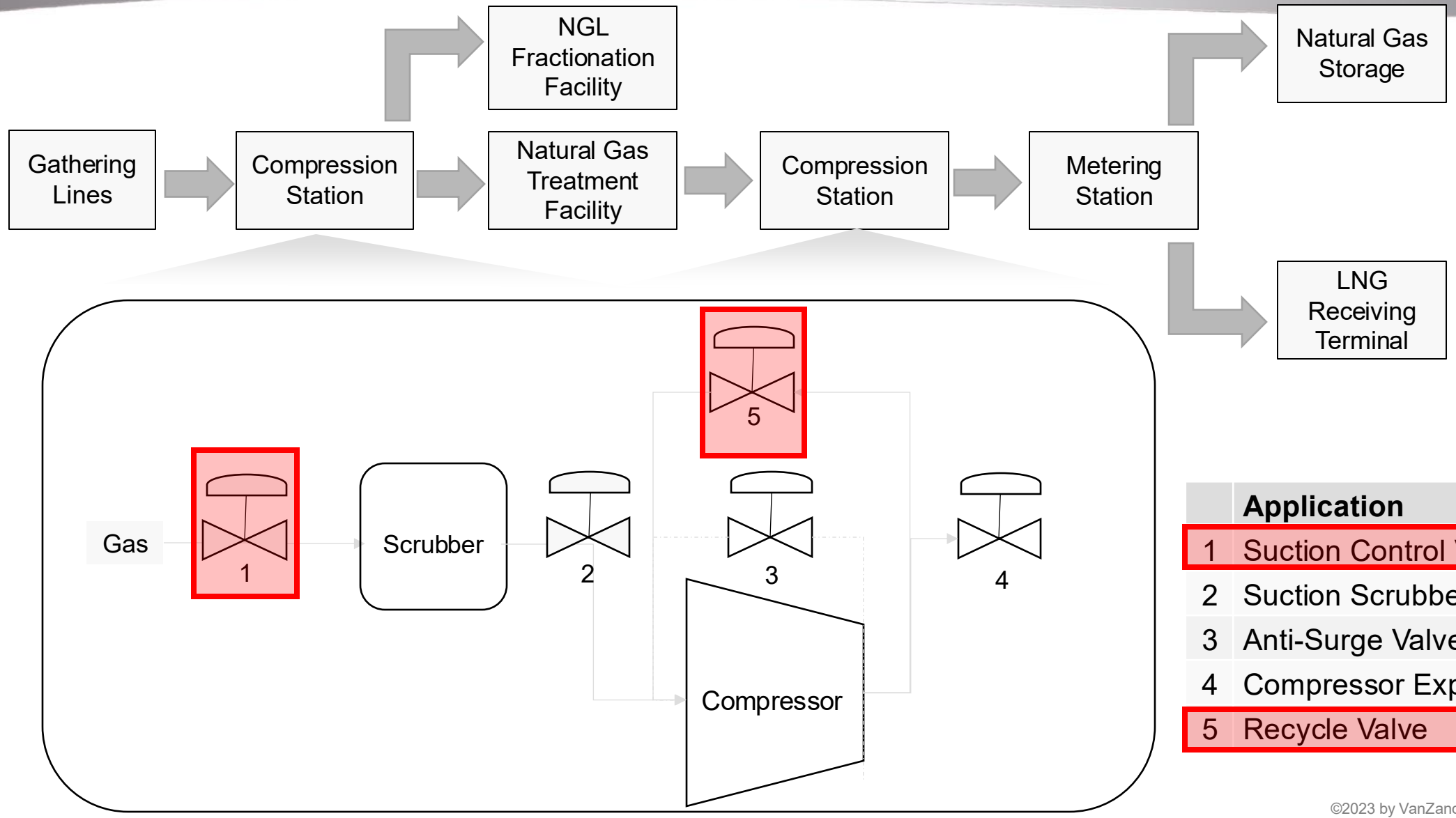
Start Year:
2021

Fluid:
Natural Gas

Process Conditions:
Temperature: 50 F (10 C)
P (in): 90 psig (6.2 barg)
P (out): 87 psig (5.9 barg)

COMPRESSOR STATION USE CASE

Target Locations for Clarke Valve



	Application
1	Suction Control Valve
2	Suction Scrubber Level Control
3	Anti-Surge Valve
4	Compressor Export Control Valve
5	Recycle Valve

COMPRESSOR STATION USE CASE

Discharge Back Pressure Control Valve

VANZANDT CONTROLS, LLC
Eagle AUTOMATION

Back Pressure Valve for Gas Compressors

Precision Control

Very Low Stiction
Fast Response Times
Minimizes Compressor Trips
And Stabilizes Discharge Pressure

WITHOUT Back Pressure CV

Dynamic Load Conditions
Poor Compressor Performance
Numerous Shutdowns

WITH Back Pressure CV

Steady Load Conditions
Good Compressor Performance
Minimal Shutdowns

COMPRESSOR STATION USE CASE

Design Limitations of Conventional Globe Valves

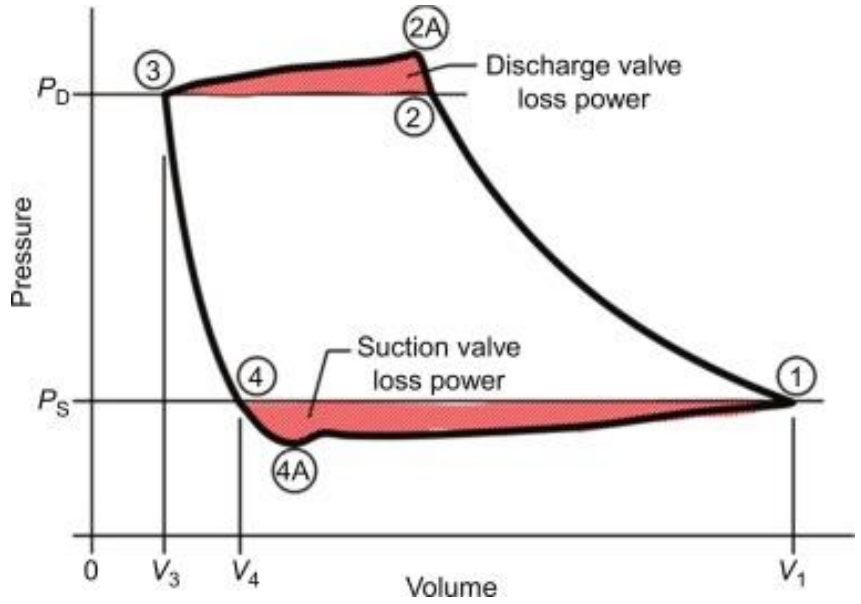
Restricted Flow
Limits the maximum gas that can flow thru the valve

High Pressure Drop
High DP thru the valve
More power is used to draw the gas
Reduces Compressor efficiency

Lower Rangeability
Cannot adapt to fluctuating flows from well easily
20-80% Open Recommended

Larger Actuators Needed
Requires more Compressed Air
Higher O&M costs

Higher Stem Emissions
Continuous Stem leakage
500 PPM or more
Product Loss + GHG Emissions



COMPRESSOR STATION USE CASE

Significant Fugitive Emissions Via Sliding Stem

Valves Continuously Leak
Field Gas to Atmosphere
Environmental Risk
Operational Risk

Zero Emissions in the Field
OXY installed base off 350+ valves
After 5+ years installed

14.6k PPM!!
Segmented Ball Valve
Highly flammable!!

COMPRESSOR STATION USE CASE

Advantages of Dilating Disk™ Valve [DDV]

Straight Thru Flow
Maximizes the Flow Rate
Increases Throughput

Higher Compressor Efficiency
Lower Pressure Drop across a DDV
Less Work for Compressor

Higher Rangeability
Easily adapts to fluctuating flows from well
10-100% Open Range!!

Low Torque Actuation
Requires Less Compressed Air
Lower O&M costs

Zero Stem Emissions
Zero Stem leakage
2 PPM or less, out of the box
Environmentally Friendly

COMPRESSOR STATION USE CASE

Advantages of Dilating Disk™ Valve [DDV]

VANZANDT CONTROLS, LLC
Eagle AUTOMATION

Repsol

Application:
Compressor Suction Control

Year:
2021

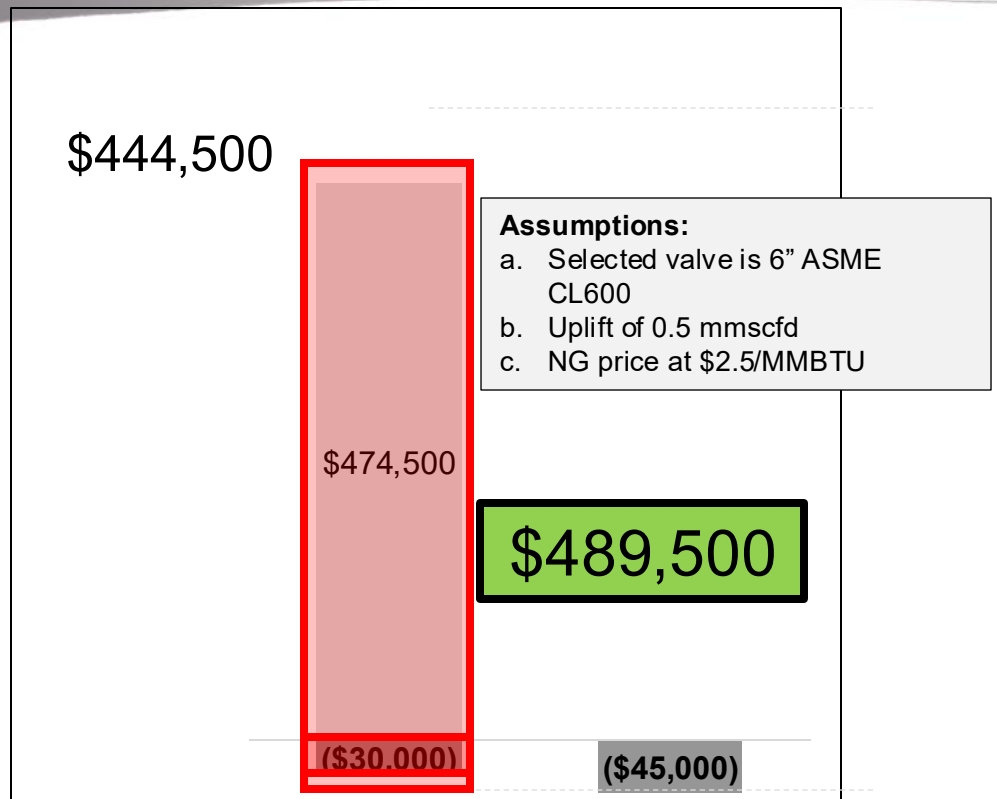
Process Conditions:
Flow Rate: 29 MMSCFD
Temperature: 50 F
P (in): 115 psig
P (out): 112 psig

CVS Globe
(Before)

Dilating Disk Valve CV308
(After)

COMPRESSOR STATION USE CASE

Higher Throughput = Higher Sales



	DDV	Conventional Globe
First Costs	($30,000)	($45,000)
Sales Gas	$474,500	$0

Incremental Revenue/vr

$/MMBTU

Uplift (mmscfd)	$2.00	$2.50	$3.00	$3.50	$4.00
0.4	$303,680	$379,600	$455,520	$531,440	$607,360
0.45	$341,640	$427,050	$512,460	$597,870	$683,280
0.5	$379,600	$474,500	$569,400	$664,300	$759,200
0.6	$455,520	$569,400	$683,280	$797,160	$911,040
0.7	$531,440	$664,300	$797,160	$930,020	$1,062,880

Incremental revenue/yr
+ reduced planned maintenance
+ higher compressor efficiency
+ Zero emissions

What's the Source of the Issue?

Original Design
- Save Money, Smaller Valve

Should Have Put Bigger Valve
- But Would have been more Expensive Valve
- Heavier Piping Too!!

Why Higher Throughput?

Higher Cv
- Due to Non-tortious Path

Venturi Section of Valve
- Accelerates the Fluid

SLURRY DUMP / PRODUCED WATER USE CASE

Advantages of Dilating Disk™ Valve [DDV]

Before

Kimray Globe

After

DDV CV308

Customers:
Oxy, Chevron, Exxon

Industry:
Oil & Gas Onshore

Application:
Slurry Dump/Produced Water

Start Year:
2019

Fluid:
Oil, Water, Sand

Process Conditions:
Temperature: 100 F (38 C)
P (in): 175 psig (12.1 barg)
P (out): 60 psig (4.1 barg)

VZLifter™
Rotary-to-Linear Motion Conversion

Large array of valves require multiturn or linear motion which is accomplished historically with **large pneumatic or extremely expensive electric multiturn actuators**

VZLifter™
PATENTED product
Designed fully in-house
By VanZandt Controls

VZLifter™ Key Features
Converts Rotary Motion into Linear Motion
"Industry first" **three-inch lift capability**

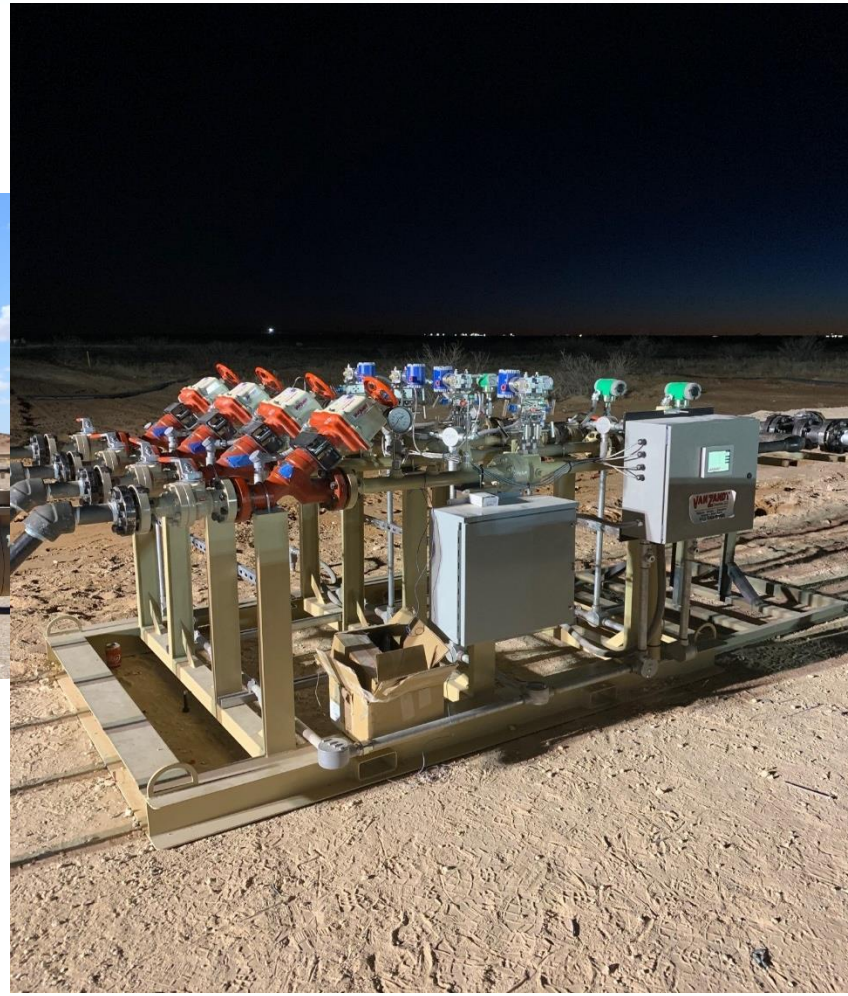
Patented Design To Convert Quarter Turn Actuation into Vertical

CHOKE VALVES & SKIDS
Automated Gas Lift Packages

Five Years Ago
Fisher D4
Cyclonic/NOV valves

Today
Automated Two Stage Taylor Choke valves
Automated Clarke valves
Zero Emissions

Our Gas Lift Skids
Lowest Installed Cost
Minimize Field Construction Costs
Replace the Meter Run
Reduces Time in the Field



Skid mounted for easy deployment!