



Inspection Documents for Type 2.1 Coverage:

Python XL Chemical Injection Pumps

Date: September 8th, 2017

Size: 75 (3/4" Plunger)

Description: PCI-xxx-75x-xx-x

Table of contents: Certificate of Material
Test Certification
Graco XRF Material Verification(s)

Graco Inc. certifies that the above product be manufactured by Graco Inc. and tested to meet all applicable Graco engineering/manufacturing/quality standards and specifications.

Graco manufacturing and product development facilities are certified to ISO 9001:2008.

A handwritten signature in black ink that reads 'Sarah J. Bergstrom'.

Sarah J. Bergstrom
Quality Engineer
Graco Inc.



Test Certificate

Product Family: Python XL Chemical Injection Pumps

Size: 75 (3/4" Plunger)

Description Reference: PCI-xxx-75x-xx-x

Manufacturing Test Frequency: 100%

Test results:

Low pressure startup check: Pass Fail

Stall pressure validation: Pass Fail

Pump operation at maximum pressure: Pass Fail

External fluid leak check: Pass Fail

Graco Inc. certifies that the above product be manufactured by Graco Inc. and tested to meet all applicable Graco engineering/manufacturing/quality standards and specifications. All information provided herein is intended for Graco use and not intended to be duplicated or replicated.

Graco manufacturing and product development facilities are certified to ISO 9001:2008.

A handwritten signature in black ink that reads 'Sarah Bergstrom'.

Sarah J. Bergstrom

Quality Engineer

Graco Inc.



Certificate of Material

Date: September 8, 2017

Product Family: Python XL Chemical Injection Pumps

Size: 75 (3/4" Plunger)

Description Reference: PCI-xxx-75x-xx-x

| Part Number | Wetted Part Description | Material Description |
|--------------------|--------------------------------|----------------------------------|
| 17G514 | Cylinder,Fluid,750 | 316 SST |
| 17L138 | Plunger,Fluid,CRN,75,Python XI | 17-4 SST (Chromex Coated) |
| 17L349 | Plunger,Coated,Ceramic,75,PXL | 17-4 SST (Ceramic Coated) Python |
| 17G113 | Bearing,Plunger,CIP 75,Peek | Peek |
| 17L139 | Nut,Packing,Plunger,Large | 316 SST |
| 17F573 | Housing,Needle,Bleed | 316 SST |
| 17F572 | Needle,Bleed | 316 SST |
| 17G005 | Housing,Check,Inlet,CI Pump | 316 SST |
| 17G006 | Housing,Check,Outlet,CI Pump | 316 SST |
| 17G130 | Piston,Check, CIP | 316 SST |
| 17G131 | Retainer,Check | 316 SST |
| 17G132 | Spring,Compression,CIP Outlet | 302 SST |

Graco Inc. certifies the above product was manufactured and tested to meet all applicable Graco Engineering/Manufacturing/Quality Standards and Specifications.

Graco manufacturing and product development facilities are certified to ISO 9001:2008.

A handwritten signature in black ink that reads 'Bradley A. Byron'.

Bradley A. Byron
Quality Manager
Graco Inc.



Graco, Inc.
88 11th Avenue NE
Minneapolis, MN 55413 USA

Certificate of Verification

XL3-89733

Reading No 889
Mode General Metals
Time 2017-09-08 12:00
Duration 25.64
Units %
Sigma Value 2
Sequence Final
Alloy1 SS-316 : 0.00
Alloy2 No Match : *4.84
Flags
SAMPLE 17F572
HEAT
LOT
BATCH
MISC
NOTE



| | % | ± | Error |
|----|--------|---|-------|
| Sb | 0 | : | N/A |
| Sn | 0.017 | ± | 0.003 |
| Cd | 0 | : | N/A |
| Pd | 0 | : | N/A |
| Ag | 0 | : | N/A |
| Ru | 0 | : | N/A |
| Mo | 2.034 | ± | 0.009 |
| Nb | 0.031 | ± | 0.001 |
| Zr | 0 | : | N/A |
| Bi | 0 | : | N/A |
| Pb | 0 | : | N/A |
| Se | 0 | : | N/A |
| Au | 0 | : | N/A |
| W | 0.079 | ± | 0.013 |
| Zn | 0 | : | N/A |
| Cu | 0.331 | ± | 0.020 |
| Ni | 10.646 | ± | 0.069 |
| Co | 0.162 | ± | 0.050 |
| Fe | 68.169 | ± | 0.093 |
| Mn | 1.497 | ± | 0.041 |
| Cr | 16.820 | ± | 0.050 |
| V | 0.149 | ± | 0.015 |
| Ti | 0.050 | ± | 0.017 |
| Al | 0 | : | N/A |

Supervised By: _____

Sarah Bugstrom



Graco, Inc.
88 11th Avenue NE
Minneapolis, MN 55413 USA

Certificate of Verification

XL3-89733

Reading No 888
Mode General Metals
Time 2017-09-08 11:58
Duration 24.04
Units %
Sigma Value 2
Sequence Final
Alloy1 SS-316 : 0.00
Alloy2 No Match : *3.18
Flags
SAMPLE 17F573
HEAT
LOT
BATCH
MISC
NOTE



| | % | ± | Error |
|----|--------|---|-------|
| Sb | 0 | : | N/A |
| Sn | 0.019 | ± | 0.004 |
| Cd | 0 | : | N/A |
| Pd | 0 | : | N/A |
| Ag | 0 | : | N/A |
| Ru | 0 | : | N/A |
| Mo | 2.080 | ± | 0.010 |
| Nb | 0.005 | ± | 0.001 |
| Zr | 0 | : | N/A |
| Bi | 0 | : | N/A |
| Pb | 0 | : | N/A |
| Se | 0 | : | N/A |
| Au | 0 | : | N/A |
| W | 0.027 | ± | 0.012 |
| Zn | 0 | : | N/A |
| Cu | 0.384 | ± | 0.021 |
| Ni | 10.235 | ± | 0.070 |
| Co | 0.200 | ± | 0.052 |
| Fe | 68.040 | ± | 0.095 |
| Mn | 1.788 | ± | 0.044 |
| Cr | 17.117 | ± | 0.052 |
| V | 0.069 | ± | 0.014 |
| Ti | 0 | : | N/A |
| Al | 0 | : | N/A |

Supervised By: _____

Sarah Bugstrom



Graco, Inc.
88 11th Avenue NE
Minneapolis, MN 55413 USA

Certificate of Verification

XL3-89733

Reading No 891
Mode General Metals
Time 2017-09-08 12:03
Duration 24.26
Units %
Sigma Value 2
Sequence Final
Alloy1 SS-316 : 0.00
Alloy2 No Match : *5.27
Flags
SAMPLE 17G005
HEAT
LOT
BATCH
MISC
NOTE



| | % | ± | Error |
|----|--------|---|-------|
| Sb | 0 | : | N/A |
| Sn | 0 | : | N/A |
| Cd | 0 | : | N/A |
| Pd | 0 | : | N/A |
| Ag | 0 | : | N/A |
| Ru | 0 | : | N/A |
| Mo | 2.091 | ± | 0.010 |
| Nb | 0.025 | ± | 0.001 |
| Zr | 0 | : | N/A |
| Bi | 0 | : | N/A |
| Pb | 0 | : | N/A |
| Se | 0 | : | N/A |
| Au | 0 | : | N/A |
| W | 0 | : | N/A |
| Zn | 0 | : | N/A |
| Cu | 0.857 | ± | 0.027 |
| Ni | 11.192 | ± | 0.076 |
| Co | 0.291 | ± | 0.054 |
| Fe | 66.584 | ± | 0.100 |
| Mn | 1.760 | ± | 0.046 |
| Cr | 16.961 | ± | 0.055 |
| V | 0.151 | ± | 0.017 |
| Ti | 0.043 | ± | 0.019 |
| Al | 0 | : | N/A |

Supervised By: _____

Sarah Bugstrom



Graco, Inc.
88 11th Avenue NE
Minneapolis, MN 55413 USA

Certificate of Verification

XL3-89733

Reading No 893
Mode General Metals
Time 2017-09-08 12:05
Duration 24.24
Units %
Sigma Value 2
Sequence Final
Alloy1 SS-316 : 0.00
Alloy2 No Match : *5.29
Flags
SAMPLE 17G006
HEAT
LOT
BATCH
MISC
NOTE



| | % | ± | Error |
|----|--------|---|-------|
| Sb | 0 | : | N/A |
| Sn | 0.011 | ± | 0.004 |
| Cd | 0 | : | N/A |
| Pd | 0 | : | N/A |
| Ag | 0 | : | N/A |
| Ru | 0 | : | N/A |
| Mo | 2.085 | ± | 0.010 |
| Nb | 0.026 | ± | 0.001 |
| Zr | 0 | : | N/A |
| Bi | 0 | : | N/A |
| Pb | 0 | : | N/A |
| Se | 0 | : | N/A |
| Au | 0 | : | N/A |
| W | 0.033 | ± | 0.013 |
| Zn | 0 | : | N/A |
| Cu | 0.856 | ± | 0.026 |
| Ni | 11.199 | ± | 0.074 |
| Co | 0.267 | ± | 0.053 |
| Fe | 66.607 | ± | 0.097 |
| Mn | 1.751 | ± | 0.044 |
| Cr | 16.956 | ± | 0.053 |
| V | 0.175 | ± | 0.017 |
| Ti | 0 | : | N/A |
| Al | 0 | : | N/A |

Supervised By: _____

Sarah Bugstrom



Graco, Inc.
 88 11th Avenue NE
 Minneapolis, MN 55413 USA

Certificate of Verification

XL3-89733

Reading No 896
 Mode General Metals
 Time 2017-09-08 12:09
 Duration 30.71
 Units %
 Sigma Value 2
 Sequence Final
 Alloy1 SS-316 : 0.00
 Alloy2 No Match : *5.18
 Flags
 SAMPLE 17G130
 HEAT
 LOT
 BATCH
 MISC
 NOTE



| | % | ± | Error |
|----|--------|---|-------|
| Sb | 0 | : | N/A |
| Sn | 0.010 | ± | 0.003 |
| Cd | 0 | : | N/A |
| Pd | 0 | : | N/A |
| Ag | 0 | : | N/A |
| Ru | 0 | : | N/A |
| Mo | 2.024 | ± | 0.009 |
| Nb | 0.058 | ± | 0.002 |
| Zr | 0 | : | N/A |
| Bi | 0 | : | N/A |
| Pb | 0 | : | N/A |
| Se | 0 | : | N/A |
| Au | 0 | : | N/A |
| W | 0.065 | ± | 0.012 |
| Zn | 0 | : | N/A |
| Cu | 0.288 | ± | 0.019 |
| Ni | 10.746 | ± | 0.066 |
| Co | 0.262 | ± | 0.048 |
| Fe | 68.490 | ± | 0.088 |
| Mn | 1.333 | ± | 0.039 |
| Cr | 16.556 | ± | 0.048 |
| V | 0.119 | ± | 0.014 |
| Ti | 0.033 | ± | 0.016 |
| Al | 0 | : | N/A |

Supervised By: Sarah Bugstam



Graco, Inc.
88 11th Avenue NE
Minneapolis, MN 55413 USA

Certificate of Verification

XL3-89733

Reading No 900
Mode General Metals
Time 2017-09-08 12:13
Duration 25.84
Units %
Sigma Value 2
Sequence Final
Alloy1 SS-316 : 0.00
Alloy2 No Match : *4.96
Flags
SAMPLE 17G131
HEAT
LOT
BATCH
MISC
NOTE



| | % | ± | Error |
|----|--------|---|-------|
| Sb | 0 | : | N/A |
| Sn | 0.014 | ± | 0.004 |
| Cd | 0 | : | N/A |
| Pd | 0 | : | N/A |
| Ag | 0 | : | N/A |
| Ru | 0 | : | N/A |
| Mo | 1.983 | ± | 0.010 |
| Nb | 0.058 | ± | 0.002 |
| Zr | 0 | : | N/A |
| Bi | 0 | : | N/A |
| Pb | 0 | : | N/A |
| Se | 0 | : | N/A |
| Au | 0 | : | N/A |
| W | 0.065 | ± | 0.014 |
| Zn | 0.011 | ± | 0.005 |
| Cu | 0.295 | ± | 0.021 |
| Ni | 10.788 | ± | 0.074 |
| Co | 0.305 | ± | 0.054 |
| Fe | 68.454 | ± | 0.098 |
| Mn | 1.302 | ± | 0.043 |
| Cr | 16.546 | ± | 0.053 |
| V | 0.132 | ± | 0.016 |
| Ti | 0 | : | N/A |
| Al | 0 | : | N/A |

Supervised By: _____

Sarah Bugstrom



Graco, Inc.
88 11th Avenue NE
Minneapolis, MN 55413 USA

Certificate of Verification

XL3-89733

Reading No 903
Mode General Metals
Time 2017-09-08 12:17
Duration 28.45
Units %
Sigma Value 2
Sequence Final
Alloy1 SS-302 : 0.08 No
Alloy2 Match : *1.84
Flags
SAMPLE 17G132
HEAT
LOT
BATCH
MISC
NOTE



| | % | ± | Error |
|----|--------|---|-------|
| Sb | 0 | : | N/A |
| Sn | 0 | : | N/A |
| Cd | 0 | : | N/A |
| Pd | 0 | : | N/A |
| Ag | 0 | : | N/A |
| Ru | 0 | : | N/A |
| Mo | 0.128 | ± | 0.013 |
| Nb | 0 | : | N/A |
| Zr | 0 | : | N/A |
| Bi | 0 | : | N/A |
| Pb | 0 | : | N/A |
| Se | 0 | : | N/A |
| Au | 0 | : | N/A |
| W | 0 | : | N/A |
| Zn | 0 | : | N/A |
| Cu | 0.221 | ± | 0.108 |
| Ni | 8.377 | ± | 0.384 |
| Co | 0 | : | N/A |
| Fe | 71.622 | ± | 0.907 |
| Mn | 1.235 | ± | 0.219 |
| Cr | 18.102 | ± | 0.286 |
| V | 0 | : | N/A |
| Ti | 0 | : | N/A |
| Al | 0 | : | N/A |
| S | 0 | : | N/A |
| P | 0 | : | N/A |
| Si | 0 | : | N/A |
| Mg | 0 | : | N/A |

Supervised By: Sarah Bugstrom



Graco, Inc.
88 11th Avenue NE
Minneapolis, MN 55413 USA

Certificate of Verification

XL3-89733

Reading No 910
Mode General Metals
Time 2017-09-08 12:31
Duration 22.05
Units %
Sigma Value 2
Sequence Final
Alloy1 SS-316 : 0.00
Alloy2 No Match : *3.25
Flags
SAMPLE 17G514
HEAT
LOT
BATCH
MISC
NOTE



| | % | ± | Error |
|----|--------|---|-------|
| Sb | 0 | : | N/A |
| Sn | 0.015 | ± | 0.004 |
| Cd | 0 | : | N/A |
| Pd | 0 | : | N/A |
| Ag | 0 | : | N/A |
| Ru | 0 | : | N/A |
| Mo | 2.022 | ± | 0.010 |
| Nb | 0.010 | ± | 0.001 |
| Zr | 0 | : | N/A |
| Bi | 0 | : | N/A |
| Pb | 0 | : | N/A |
| Se | 0 | : | N/A |
| Au | 0 | : | N/A |
| W | 0.064 | ± | 0.014 |
| Zn | 0 | : | N/A |
| Cu | 0.446 | ± | 0.024 |
| Ni | 10.540 | ± | 0.077 |
| Co | 0.210 | ± | 0.056 |
| Fe | 68.139 | ± | 0.104 |
| Mn | 1.285 | ± | 0.045 |
| Cr | 17.128 | ± | 0.057 |
| V | 0.097 | ± | 0.016 |
| Ti | 0.041 | ± | 0.019 |
| Al | 0 | : | N/A |

Supervised By: _____

Sarah Bugstrom



Graco, Inc.
88 11th Avenue NE
Minneapolis, MN 55413 USA

Certificate of Verification

XL3-89733

Reading No 798
Mode General Metals
Time 2017-09-08 09:19
Duration 24.63
Units %
Sigma Value 2
Sequence Final
Alloy1 17-4 PH : *3.87
Alloy2 15-5 PH : *3.89
Flags
SAMPLE 17L138
HEAT
LOT
BATCH
MISC
NOTE



| | % | ± | Error |
|----|--------|---|-------|
| Sb | 0.015 | ± | 0.006 |
| Sn | 0.013 | ± | 0.006 |
| Cd | 0 | : | N/A |
| Pd | 0 | : | N/A |
| Ag | 0 | : | N/A |
| Ru | 0 | : | N/A |
| Mo | 0.138 | ± | 0.005 |
| Nb | 0.242 | ± | 0.007 |
| Zr | 0 | : | N/A |
| Bi | 0 | : | N/A |
| Pb | 0 | : | N/A |
| Se | 0 | : | N/A |
| Au | 0 | : | N/A |
| W | 0 | : | N/A |
| Zn | 0 | : | N/A |
| Cu | *1.978 | ± | 0.063 |
| Ni | *4.195 | ± | 0.113 |
| Co | 0.289 | ± | 0.088 |
| Fe | 76.539 | ± | 0.737 |
| Mn | 0.599 | ± | 0.064 |
| Cr | 15.086 | ± | 0.083 |
| V | 0.106 | ± | 0.014 |
| Ti | 0 | : | N/A |
| Al | 0 | : | N/A |
| S | 0 | : | N/A |
| P | 0 | : | N/A |
| Si | 0.718 | ± | 0.115 |
| Mg | 0 | : | N/A |

Supervised By: _____

Sarah Bugstrom



Graco, Inc.
88 11th Avenue NE
Minneapolis, MN 55413 USA

Certificate of Verification

XL3-89733

Reading No 919
Mode General Metals
Time 2017-09-08 12:43
Duration 28.74
Units %
Sigma Value 2
Sequence Final
Alloy1 SS-316 : 0.00
Alloy2 No Match : *3.88
Flags
SAMPLE 17L139
HEAT
LOT
BATCH
MISC
NOTE



| | % | ± | Error |
|----|--------|---|-------|
| Sb | 0 | : | N/A |
| Sn | 0 | : | N/A |
| Cd | 0 | : | N/A |
| Pd | 0 | : | N/A |
| Ag | 0 | : | N/A |
| Ru | 0 | : | N/A |
| Mo | 2.047 | ± | 0.009 |
| Nb | 0 | : | N/A |
| Zr | 0 | : | N/A |
| Bi | 0 | : | N/A |
| Pb | 0 | : | N/A |
| Se | 0 | : | N/A |
| Au | 0 | : | N/A |
| W | 0.022 | ± | 0.011 |
| Zn | 0 | : | N/A |
| Cu | 0.218 | ± | 0.018 |
| Ni | 10.640 | ± | 0.067 |
| Co | 0 | : | N/A |
| Fe | 67.951 | ± | 0.090 |
| Mn | 1.659 | ± | 0.041 |
| Cr | 17.269 | ± | 0.049 |
| V | 0.086 | ± | 0.014 |
| Ti | 0.038 | ± | 0.016 |
| Al | 0 | : | N/A |

Supervised By: _____

Sarah Bugstrom



Graco, Inc.
 88 11th Avenue NE
 Minneapolis, MN 55413 USA

Certificate of Verification

XL3-89733

Reading No 861
 Mode General Metals
 Time 2017-09-08 11:08
 Duration 13.30
 Units %
 Sigma Value 2
 Sequence Final
 Alloy1 17-4 PH : *3.89
 Alloy2 No Match : *4.17
 Flags
 SAMPLE 17L349
 HEAT
 LOT
 BATCH
 MISC
 NOTE



| | % | ± | Error |
|----|---------|---|-------|
| Sb | 0 | : | N/A |
| Sn | 0 | : | N/A |
| Cd | 0 | : | N/A |
| Pd | 0 | : | N/A |
| Ag | 0 | : | N/A |
| Ru | 0 | : | N/A |
| Mo | 0.154 | ± | 0.005 |
| Nb | 0.259 | ± | 0.007 |
| Zr | 0 | : | N/A |
| Bi | 0 | : | N/A |
| Pb | 0 | : | N/A |
| Se | 0 | : | N/A |
| Au | 0 | : | N/A |
| W | 0 | : | N/A |
| Zn | 0 | : | N/A |
| Cu | *2.430 | ± | 0.070 |
| Ni | 3.952 | ± | 0.105 |
| Co | 0.458 | ± | 0.094 |
| Fe | 73.844 | ± | 0.351 |
| Mn | 0.653 | ± | 0.071 |
| Cr | *18.203 | ± | 0.164 |
| V | 0 | : | N/A |
| Ti | 0 | : | N/A |
| Al | 0 | : | N/A |

Supervised By: Sarah Bugstrom