



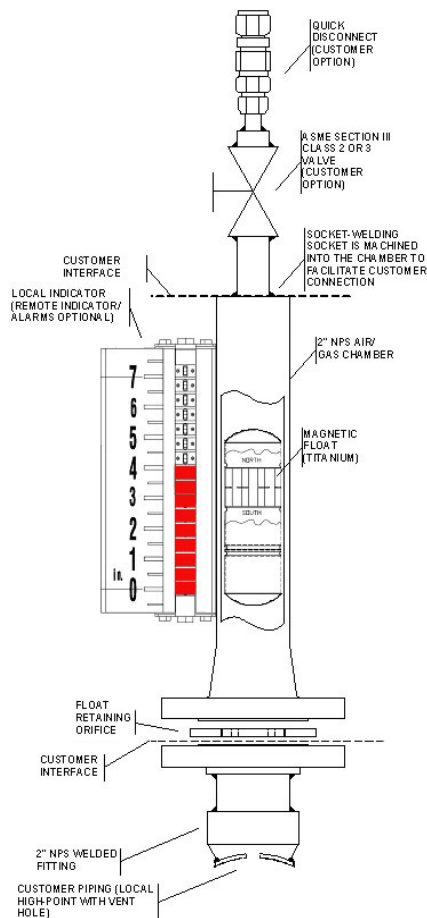
# NGAT-150

## Nuclear Grade Air Trap™

(Patents Pending)

### Technical Data Sheet

Nuccorp's **NGAT™-150** allows for constant and literal compliance with Tech Specs and NRC GL08-01 requirements. The NGAT™ consists of a vertically mounted stainless steel chamber into which a seismically qualified and specially designed Titanium, magnetic float is inserted. A magnetic indicator, external to the pressure boundary, is attached to the chamber. The indicator follows the magnetic field produced by the float, thereby providing constant indication of the air/water level interface. Also, there are specially designed static components internal to the chamber which properly direct flow inside the chamber and serve as travel stops for the float. These also serve as datum points, which allows for NGAT™ calibration. The minimum required indicated level is determined for each NGAT™ by calculation. The determination of the minimum allowed indicated level sets the initial plant conditions which must be maintained to ensure the air/water level stays above the main piping following postulated plant design events (i.e., LOCA, etc.). During normal plant operations, when the actual level in the chamber is above the minimum allowed, then that portion of the subject system associated with the local high point where the NGAT™ is installed, is "full" by definition.



#### SPECIFICATIONS:

NGAT™ Body Material:	ASME SA-182, F316 SST
Float Ret. Orifice Material:	ASME SA-240, Type 316 SST
Magnetic Float Material:	SB-265, GR 2 Titanium
Level Indicator Material:	Aluminum
Indicator Flag Color:	Florescent Orange (others available)
Chamber Volume:	28 in <sup>3</sup> (with the Float inserted)
Design Code:	ASME III, Class 2
Design Pressure / Temp A:	275 psig @ 100F (low temp)
Design Pressure / Temp B:	195 psig @ 400F (high temp)
Process Connection Type:	150 lb Class B16.5 Raised-Face Flange
Process Connection Size:	2 inch
Vent Connection Type:	B16.11 Socket Weld
Vent Connection Size:	¾ inch B16.11 Socket Weld
Indication:	Local, Remote or Both
Range:	7 inches
Volume Resolution:	1.7 in <sup>3</sup> (+/- 1/2 inch resolution)
Calibration:	Individual per plant operating conditions
Safety Classification:	SR – Safety Related
Seismic Category:	Seismically Qualified
QA Quality:	10CFR50 App B, ASME NQA-1
Assembled Weight: (empty)	12 lbs.
Assembled Weight: (full)	14 lbs.
Assembled Height:	15 inches
Mounting Options:	Direct to customer's piping system or Wall
Engineering Support:	As required by customer

Nuccorp reserves the right, without formal notification, to implement changes to the standard design and dimensions prior to an RFQ.

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Edition: 2015-06-TDS-150 EPX Rev 0



**Nuclear Grade Air Trap™**  
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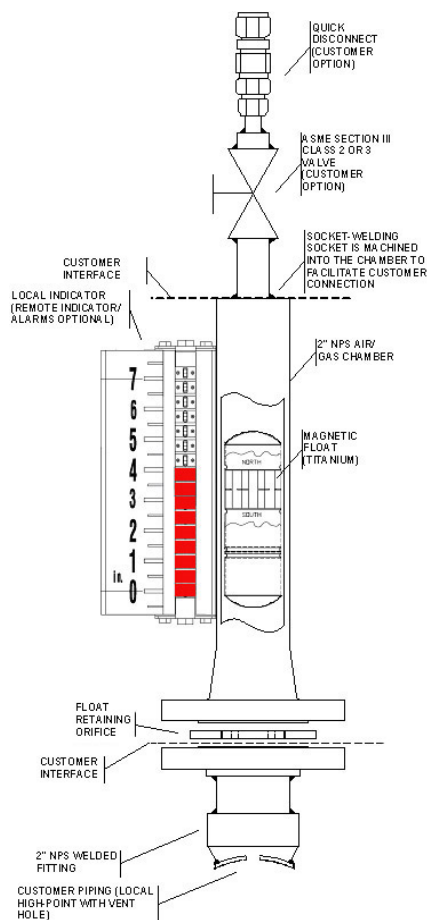
# NGAT-300

## Nuclear Grade Air Trap™

(Patents Pending)

### Technical Data Sheet

Nuccorp's **NGAT™-300** allows for constant and literal compliance with Tech Specs and NRC GL08-01 requirements. The NGAT™ consists of a vertically mounted stainless steel chamber into which a seismically qualified and specially designed Titanium, magnetic float is inserted. A magnetic indicator, external to the pressure boundary, is attached to the chamber. The indicator follows the magnetic field produced by the float, thereby providing constant indication of the air/water level interface. Also, there are specially designed static components internal to the chamber which properly direct flow inside the chamber and serve as travel stops for the float. These also serve as datum points, which allows for NGAT™ calibration. The minimum required indicated level is determined for each NGAT™ by calculation. The determination of the minimum allowed indicated level sets the initial plant conditions which must be maintained to ensure the air/water level stays above the main piping following postulated plant design events (i.e., LOCA, etc.). During normal plant operations, when the actual level in the chamber is above the minimum allowed, then that portion of the subject system associated with the local high point where the NGAT™ is installed, is "full" by definition.



#### SPECIFICATIONS:

NGAT™ Body Material:	ASME SA-182, F316 SST
Float Ret. Orifice Material:	ASME SA-240, Type 316 SST
Magnetic Float Material:	SB-265, GR 2 Titanium
Level Indicator Material:	Aluminum
Indicator Flag Color:	Florescent Orange (others available)
Chamber Volume:	28 in <sup>3</sup> (with the Float inserted)
Design Code:	ASME III, Class 2
Design Pressure / Temp A:	720 psig @ 100F (low temp)
Design Pressure / Temp B:	515 psig @ 400F (high temp)
Process Connection Type:	300 lb Class B16.5 Raised-Face Flange
Process Connection Size:	2 inch
Vent Connection Type:	B16.11 Socket Weld
Vent Connection Size:	¾ inch B16.11 Socket Weld
Indication:	Local, Remote or Both
Range:	7 inches
Volume Resolution:	1.7 in <sup>3</sup> (+/- 1/2 inch resolution)
Calibration:	Individual per plant operating conditions
Safety Classification:	SR – Safety Related
Seismic Category:	Seismically Qualified
QA Quality:	10CFR50 App B, ASME NQA-1
Assembled Weight: (empty)	14 lbs.
Assembled Weight: (full)	16 lbs.
Assembled Height:	15 inches
Mounting Options:	Direct to customer's piping system or Wall
Engineering Support:	As required by customer

Nuccorp reserves the right, without formal notification, to implement changes to the standard design and dimensions prior to an RFQ.

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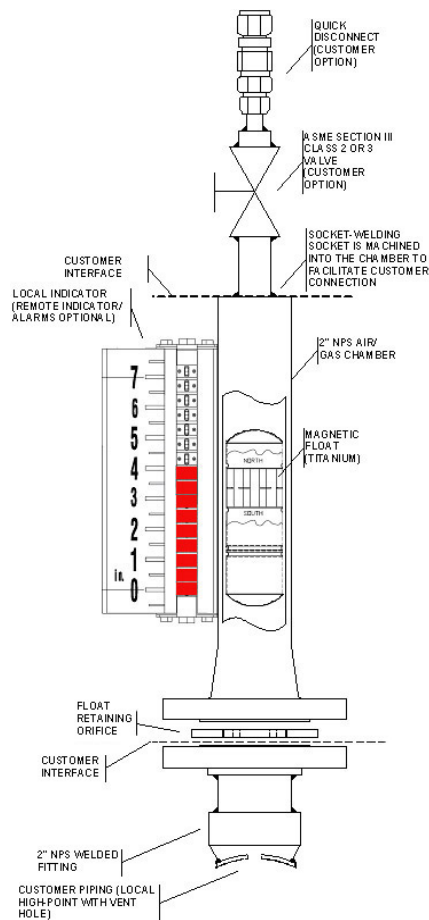
# NGAT-600

## Nuclear Grade Air Trap™

(Patents Pending)

### Technical Data Sheet

Nuccorp's **NGAT™-600** allows for constant and literal compliance with Tech Specs and NRC GL08-01 requirements. The NGAT™ consists of a vertically mounted stainless steel chamber into which a seismically qualified and specially designed Titanium, magnetic float is inserted. A magnetic indicator, external to the pressure boundary, is attached to the chamber. The indicator follows the magnetic field produced by the float, thereby providing constant indication of the air/water level interface. Also, there are specially designed static components internal to the chamber which properly direct flow inside the chamber and serve as travel stops for the float. These also serve as datum points, which allows for NGAT™ calibration. The minimum required indicated level is determined for each NGAT™ by calculation. The determination of the minimum allowed indicated level sets the initial plant conditions which must be maintained to ensure the air/water level stays above the main piping following postulated plant design events (i.e., LOCA, etc.). During normal plant operations, when the actual level in the chamber is above the minimum allowed, then that portion of the subject system associated with the local high point where the NGAT™ is installed, is "full" by definition.



#### SPECIFICATIONS:

NGAT™ Body Material:	ASME SA-182, F316 SST
Float Ret. Orifice Material:	ASME SA-240, Type 316 SST
Magnetic Float Material:	Titanium
Level Indicator Material:	Aluminum
Indicator Flag Color:	Florescent Orange (others available)
Chamber Volume:	28 in <sup>3</sup> (with the Float inserted)
Design Code:	ASME III, Class 2, 2007-08a
Design Pressure / Temp:	1375 psig @ 460F
Process Connection Type:	600 lb Class B16.5 Raised-Face Flange
Process Connection Size:	2 inch
Vent Connection Type:	B16.11 Socket Weld
Vent Connection Size:	¾ inch B16.11 Socket Weld
Indication:	Local, Remote or Both
Range:	7 inches
Volume Resolution:	1.7 in <sup>3</sup> (+/- 1/2 inch resolution)
Calibration:	Individual per plant operating conditions
Safety Classification:	SR – Safety Related
Seismic Category:	Seismically Qualified
QA Quality:	10CFR50 App B, ASME NQA-1
Assembled Weight: (empty)	16 lbs.
Assembled Weight: (full)	18 lbs.
Assembled Height:	15 inches
Mounting Options:	Direct to customer's piping system or Wall
Engineering Support:	As required by customer

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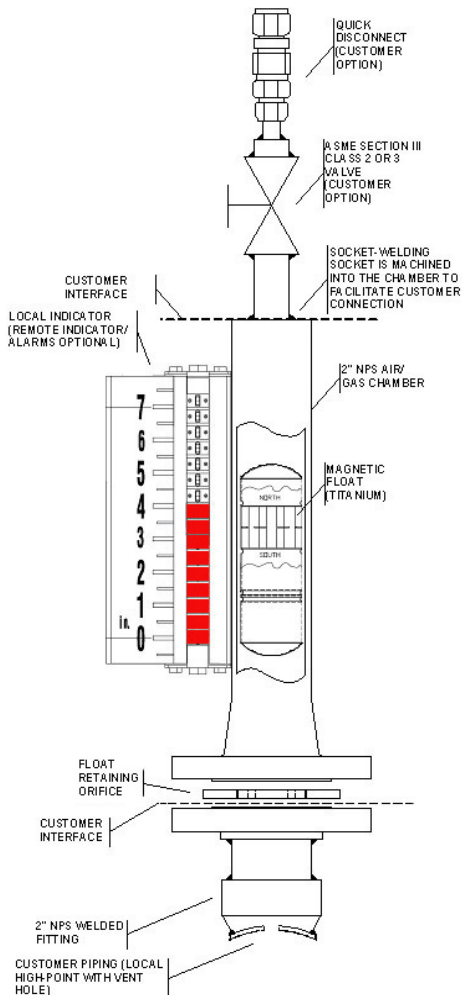
# NGAT-1500

## Nuclear Grade Air Trap™

(Patents Pending)

### Technical Data Sheet

Nuccorp's **NGAT™-1500** allows for constant and literal compliance with Tech Specs and NRC GL08-01 requirements. The NGAT™ consists of a vertically mounted stainless steel chamber into which a seismically qualified and specially designed Titanium, magnetic float is inserted. A magnetic indicator, external to the pressure boundary, is attached to the chamber. The indicator follows the magnetic field produced by the float, thereby providing constant indication of the air/water level interface. Also, there are specially designed static components internal to the chamber which properly direct flow inside the chamber and serve as travel stops for the float. These also serve as datum points, which allows for NGAT™ calibration. The minimum required indicated level is determined for each NGAT™ by calculation. The determination of the minimum allowed indicated level sets the initial plant conditions which must be maintained to ensure the air/water level stays above the main piping following postulated plant design events (i.e., LOCA, etc.). During normal plant operations, when the actual level in the chamber is above the minimum allowed, then that portion of the subject system associated with the local high point where the NGAT™ is installed is "full" by definition.



#### SPECIFICATIONS:

NGAT™ Body Material:	ASME SA-182, F316 SST
Float Ret. Orifice Material:	ASME SA-240, Type 316 SST
Magnetic Float Material:	SB-265, GR 2 Titanium
Level Indicator Material:	Aluminum
Indicator Flag Color:	Florescent Orange (others available)
Chamber Volume:	52 in <sup>3</sup> (with the Float inserted)
Design Code:	ASME III, Class 2
Design Pressure / Temp A:	3600 psig @ 100F (low temp)
Design Pressure / Temp B:	2530 psig @ 650F (high temp)
Process Connection Type:	1500 lb Class B16.5 Raised-Face Flange
Process Connection Size:	3 inch (or smaller, if blind flange with half-coupling is used)
Vent Connection Type:	B16.11 Socket Weld
Vent Connection Size:	¾ inch B16.11 Socket Weld
Indication:	Local, Remote or Both
Range:	7 inches
Volume Resolution:	2.7 in <sup>3</sup> (+/- 1/2 inch resolution)
Calibration:	Individual per plant operating conditions
Safety Classification:	SR – Safety Related
Seismic Category:	Seismically Qualified
QA Quality:	10CFR50 App B, ASME NQA-1
Assembled Weight: (empty)	75 lbs.
Assembled Weight: (full)	78 lbs.
Assembled Height:	18.5 inches (including float retaining orifice and gaskets) above customer's connection
Mounting Options:	Direct to customer's piping system or Wall
Engineering Support:	As required by customer

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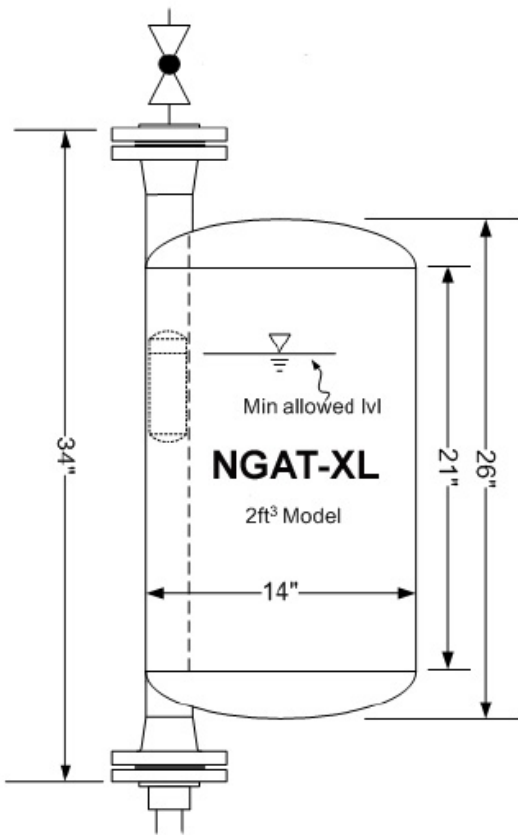
# NGAT-XL

## Nuclear Grade Air Trap™

(Patents Pending)

### Technical Data Sheet

Nuccorp's **NGAT™-XL** allows for constant and literal compliance with Tech Specs and NRC GL08-01 requirements. The NGAT™ consists of a vertically mounted stainless steel chamber into which a seismically qualified and specially designed Titanium, magnetic float is inserted. A magnetic indicator, external to the pressure boundary, is attached to the chamber. The indicator follows the magnetic field produced by the float, thereby providing constant indication of the air/water level interface. Also, there are specially designed static components internal to the chamber which properly direct flow inside the chamber and serve as travel stops for the float. These also serve as datum points, which allows for NGAT™ calibration. The minimum required indicated level is determined for each NGAT™ by calculation. The determination of the minimum allowed indicated level sets the initial plant conditions which must be maintained to ensure the air/water level stays above the main piping following postulated plant design events (i.e., LOCA, etc.). During normal plant operations, when the actual level in the chamber is above the minimum allowed, then that portion of the subject system associated with the local high point where the NGAT™ is installed, is "full" by definition.



#### SPECIFICATIONS:

NGAT™ Body Material:	ASME SA-182, F316 SST
Float Ret. Orifice Material:	ASME SA-240, Type 316 SST
Magnetic Float Material:	SB-265, GR 2 Titanium
Level Indicator Material:	Aluminum
Indicator Flag Color:	Florescent Orange (others available)
Chamber Volume:	2 ft <sup>3</sup> (with the Float inserted)
Design Code:	ASME III, Class 2 ASME "N" Stamp
Design Pressure / Temp A:	275 psig @ 100F (low temp) – or custom
Design Pressure / Temp B:	195 psig @ 400F (high temp) – or custom
Process Connection Type:	150 lb Class B16.5 Raised-Face Flange
Process Connection Size:	2 inch
Vent Connection Type:	B16.11 Socket Weld
Vent Connection Size:	¾ inch B16.11 Socket Weld
Indication:	Local, Remote or Both
Range:	26 inches
Volume Resolution:	77 in <sup>3</sup> (+/- 1/2 inch resolution) in range
Calibration:	Individual per plant operating conditions
Safety Classification:	SR – Safety Related
Seismic Category:	Seismically Qualified
QA Quality:	10CFR50 App B, ASME, NQA-1
Assembled Weight: (empty)	90 lbs.
Assembled Weight: (full)	215 lbs.
Assembled Height:	30 inches
Mounting Options:	Wall brackets on vessel.
Engineering Support:	As required by customer

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