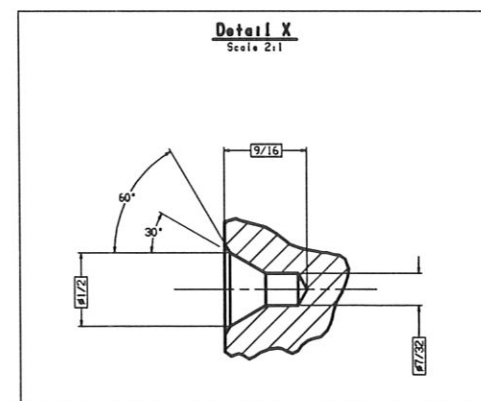
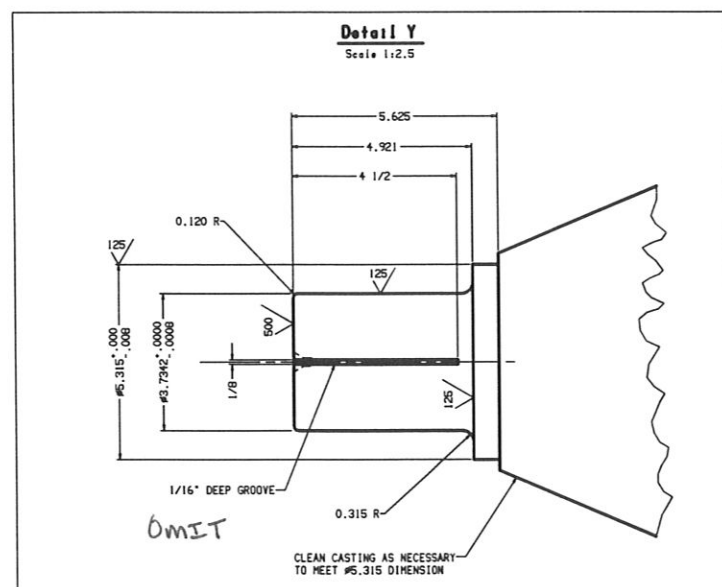
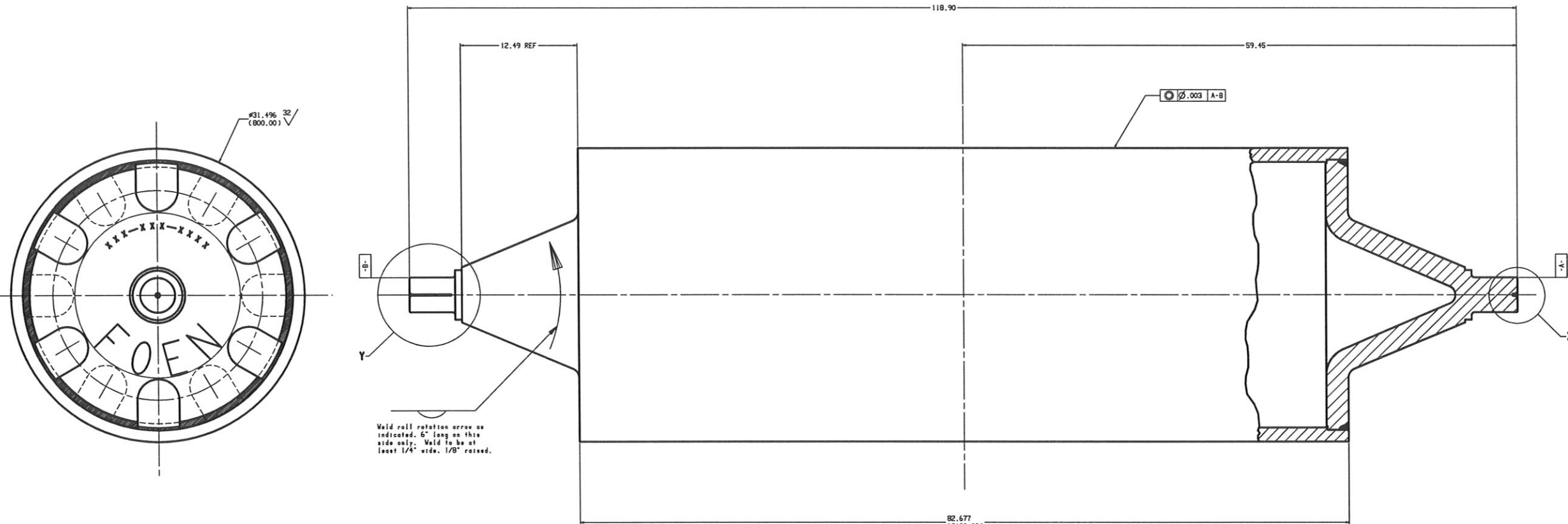


Sink Roll Groove Patterns	
Type 1	Dwg. 006-035-0036
Type 2	Dwg. 006-035-0022

- Notes (Unless otherwise specified):
1. Drill With Standard ANSI Ball Type Combined Drill & Countersink - #17 (View X).
 2. Machine Ends (View Y) & Barrel As Indicated.
 3. Grind Roll Face & Groove As Indicated On Sink Roll Groove Pattern Drawing.
 4. Remove All Burrs And Sharp Edges.
 5. Dynamic Balance Tolerance 100g-200g (0.22lb-0.44lb).
 6. Machine Sink Roll Groove According To Chart Above And Roll Finish Specified On This Drawing.

REVISION LEVEL					BILL of MATERIAL			Part No.
Rev	Date	By	App	Description	Item	Qty	Description	Approximate Weight
A	05/05/08	MM	ALL	Revised groove from front view of roll.	1	006-035-0007	Weldment - Barrel/Hub	5475 Lbs
					2	Per Chart Below	Detail - Sink Roll Groove Pattern	Lbs
							Approximate Total Weight (After Machining)	4873 Lbs

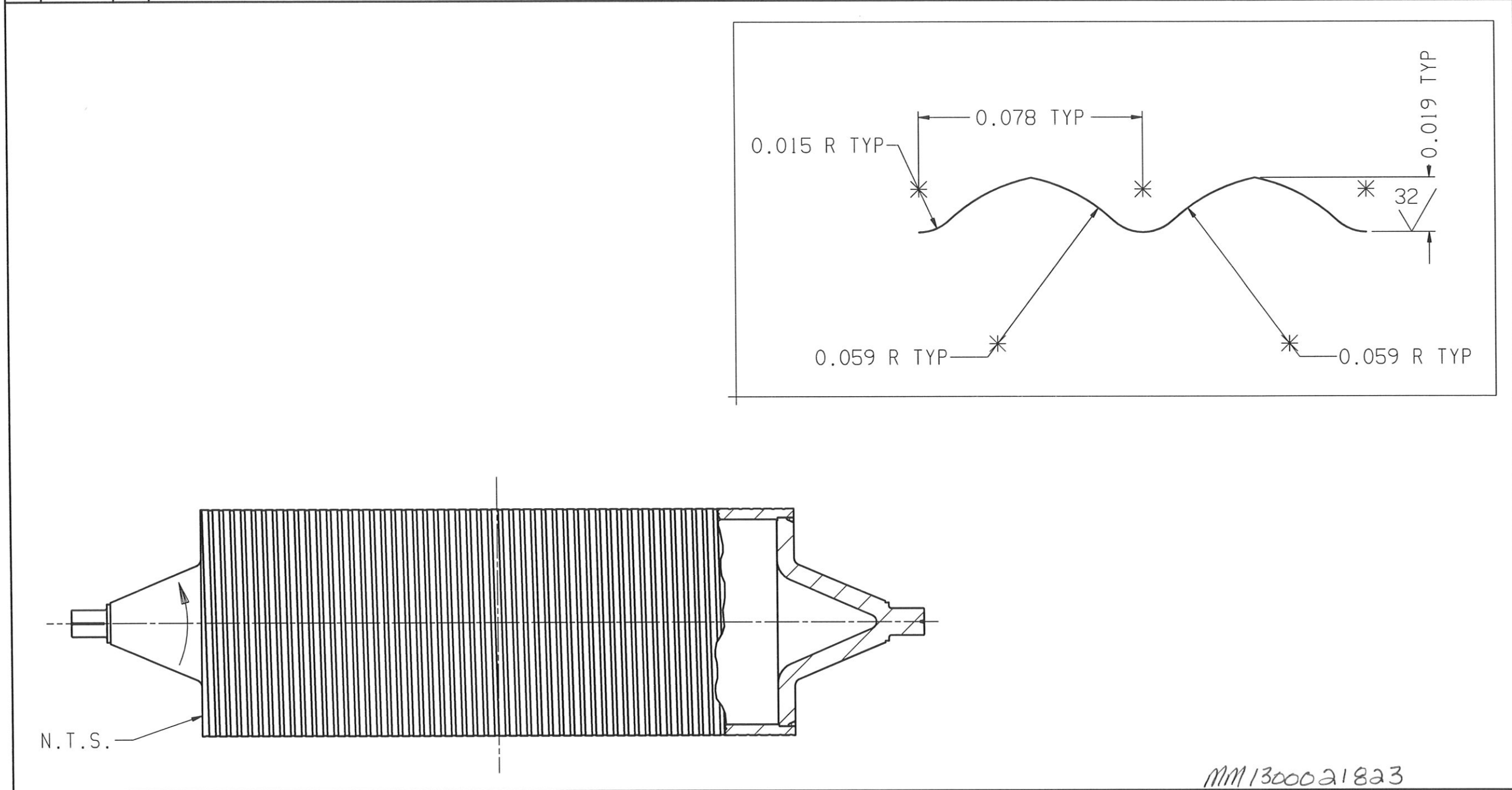


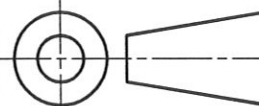
MM1300021823

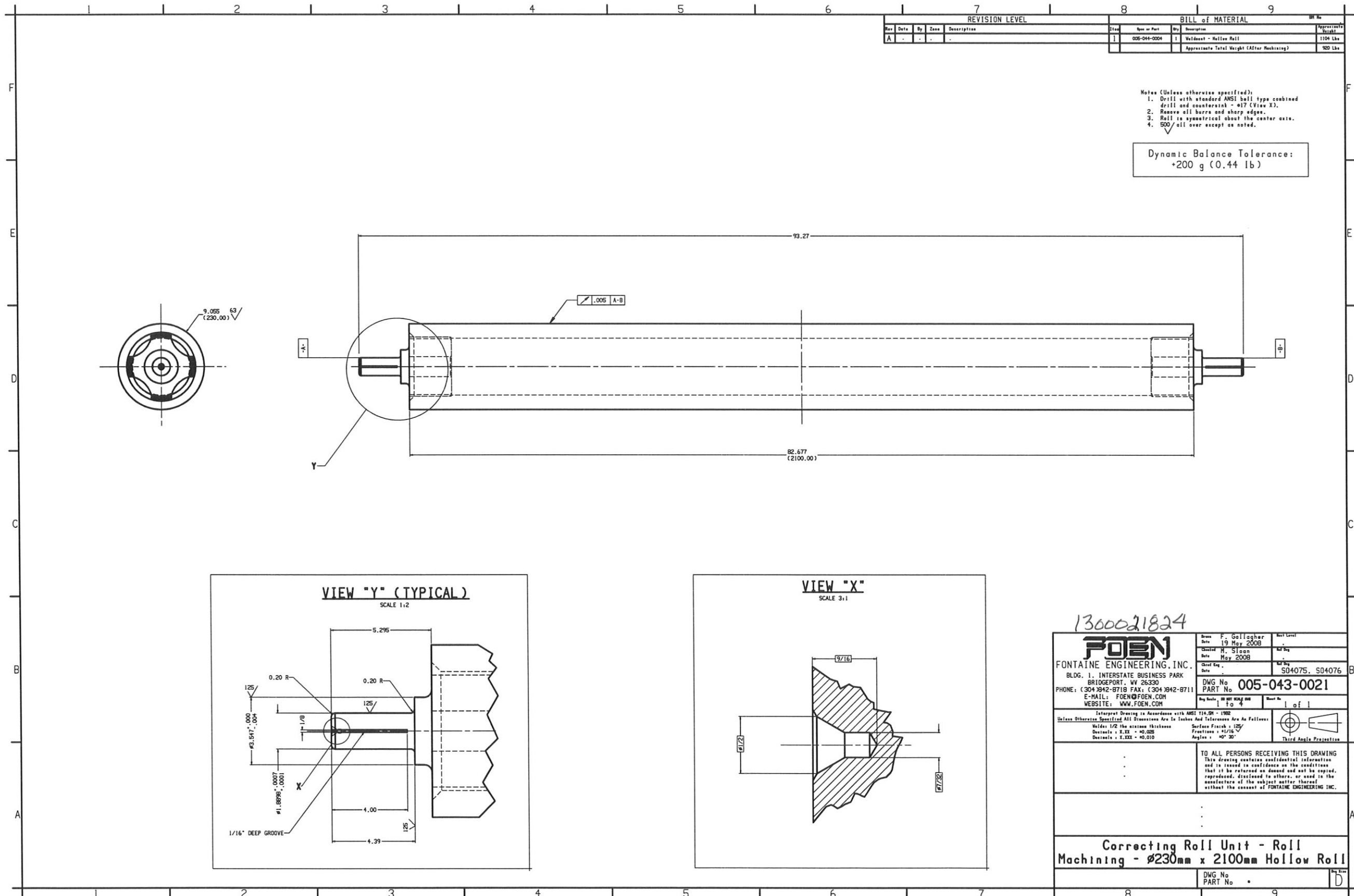
FOEN FONTAINE ENGINEERING, INC. Bldg. 1, Interstate Business Park P.O. Box 1350, Bridgeport, WV 26330 Phone: (304) 842-8718 Fax: (304) 842-8711 E-Mail: FOEN@FOEN.COM Website: WWW.FOEN.COM		Drawn: F. Gallagher Date: 09 May 2008 Checked: M. Sloan Date: May 2008 DWG No: 006-033-0022 A PART No: S04075, S04076 DWG No: 006-033-0022 A PART No: S04075, S04076 DWG No: 006-033-0022 A PART No: S04075, S04076
Interpret Drawing in Accordance with ANSI Y14.1M - 1992 Unless Otherwise Specified All Dimensions Are in Inches and Tolerances Are As Follows: Surfaces 1/2 the minimum thickness Decimals: X.XX ± 0.005 Fractions: 1/16 ± 0.010 Angles: ± 30°		TO ALL PERSONS RECEIVING THIS DRAWING This drawing contains confidential information and is issued in confidence on the condition that it be returned on demand and not be copied, reproduced, disclosed to others, or used in the manufacture of the subject matter thereof without the consent of FONTAINE ENGINEERING, INC.
Sink Roll Unit - Sink Roll Machining - Ø800mm x 2100mm Roll		DWG No: 006-033-0022 A PART No: S04075, S04076

LINE 1 + 2

REVISION LEVELS				BILL of MATERIAL				
Rev	Date	By	Description	Item	Spec or Part	Qty	Description	Approximate Weight
A	3/15/2011	FWG	Modified front view to show spiral groove from end to end.	1	.	.	.	.
							Approximate Total Weight	.



<p>Interpret Drawing in Accordance with ANSI Y14.5M - 1982 Unless Otherwise Specified All Dimensions Are in Inches And Tolerances Are As Follows Decimals X.XX ±.025 Fractions 1/16 Decimals X.XXX ±.010 Angles ±0° 30' Welds: 1/2 The Min. Thickness 125✓</p>			<p>Third Angle Projection</p>		<p>FONTAINE ENGINEERING, INC.</p>	<p>INTERSTATE BUSINESS PARK, BLDG. 1 BRIDGEPORT, WV 26330 PHONE: (304)842-8718 FAX: (304)842-8711 E-MAIL: FOEN@FOEN.COM WEBSITE: WWW.FOEN.COM</p>	<p>PROJECT / REVISION / TYPE</p>	<p>REPLACES THESE PROJECTS</p>	<table><tr><td>Next Level</td><td>Drawn F. Gallagher</td></tr><tr><td>.</td><td>Date 30 Jan 2008</td></tr><tr><td>Ref Dwg</td><td>Checked M. Sloan</td></tr><tr><td>.</td><td>Date Feb 2008</td></tr><tr><td>Ref No.</td><td>Chief .</td></tr><tr><td>.</td><td>Date .</td></tr></table>	Next Level	Drawn F. Gallagher	.	Date 30 Jan 2008	Ref Dwg	Checked M. Sloan	.	Date Feb 2008	Ref No.	Chief .	.	Date .
Next Level	Drawn F. Gallagher																				
.	Date 30 Jan 2008																				
Ref Dwg	Checked M. Sloan																				
.	Date Feb 2008																				
Ref No.	Chief .																				
.	Date .																				
<p>TO ALL PERSONS RECEIVING THIS DRAWING</p> <p>This drawing contains confidential information and is issued in confidence on the conditions that it be returned on demand and not be copied, reproduced, disclosed to others, or used in the manufacture of the subject matter thereof without the consent of FONTAINE ENGINEERING INC.</p>				<p>Sink Roll Unit - Rolls Detail - Micro Groove</p>				<table><tr><td>DWG No</td><td>006-035-0036 A</td></tr><tr><td>PART No</td><td></td></tr><tr><td>Dwg Scale DO NOT SCALE DWG</td><td>Sheet No</td><td>Dwg Size</td></tr><tr><td>NTS</td><td>1 of 1</td><td>A</td></tr></table>		DWG No	006-035-0036 A	PART No		Dwg Scale DO NOT SCALE DWG	Sheet No	Dwg Size	NTS	1 of 1	A		
DWG No	006-035-0036 A																				
PART No																					
Dwg Scale DO NOT SCALE DWG	Sheet No	Dwg Size																			
NTS	1 of 1	A																			



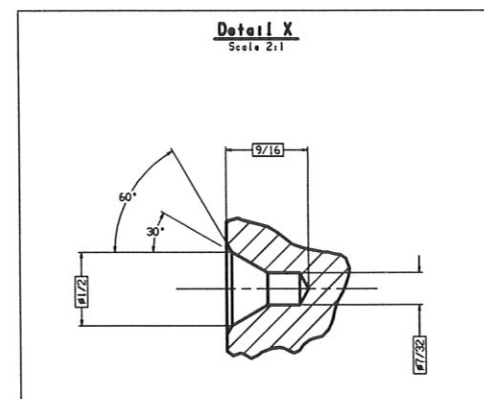
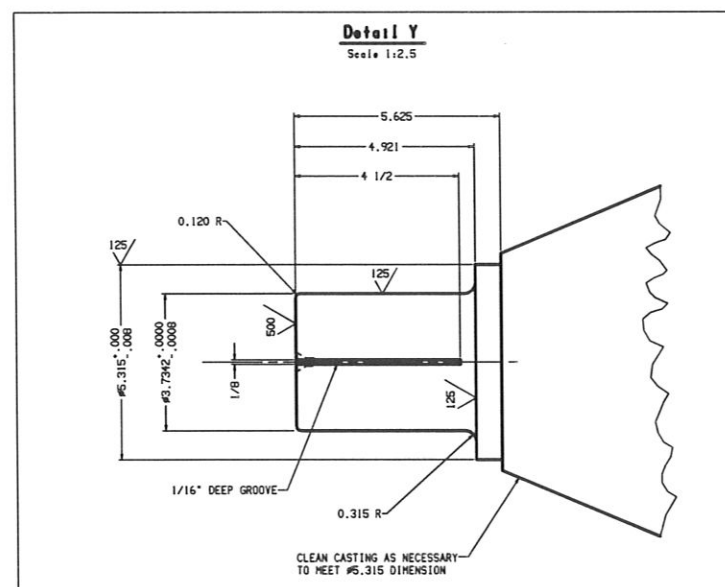
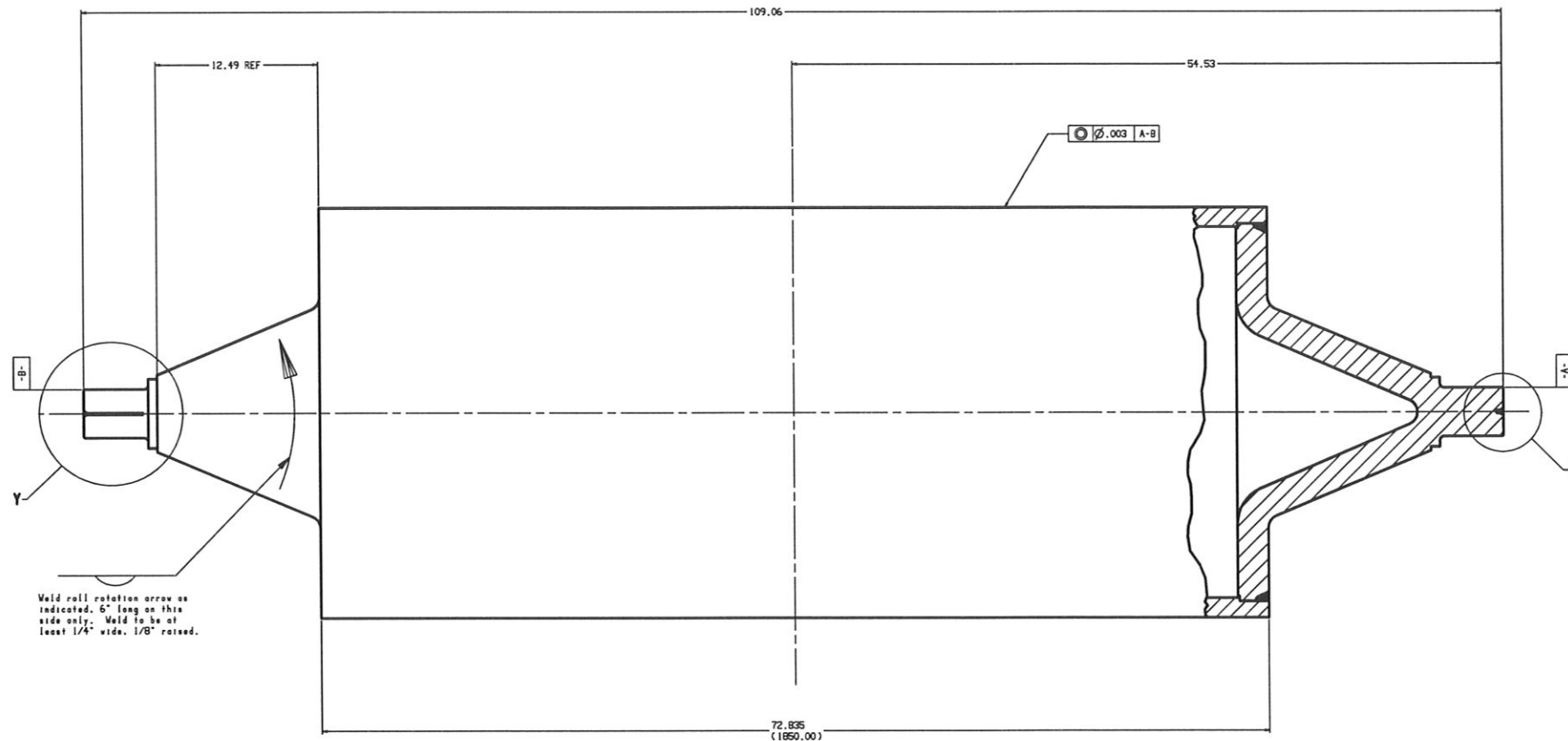
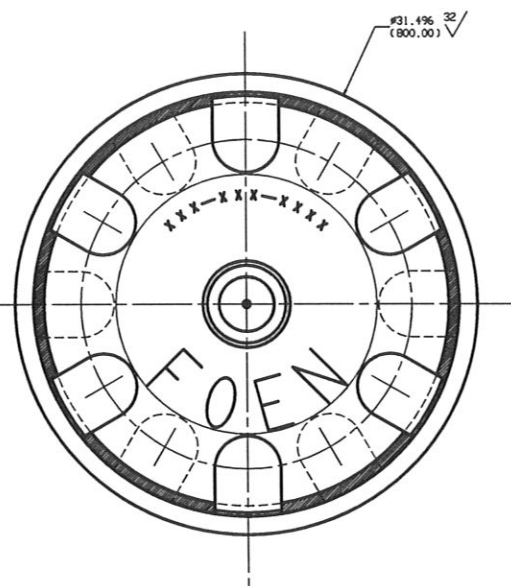
1300021824

FOEN FONTAINE ENGINEERING, INC. BLDG. 1, INTERSTATE BUSINESS PARK BRIDGEPORT, WV 26330 PHONE: (304) 842-8718 FAX: (304) 842-8711 E-MAIL: FOEN@FOEN.COM WEBSITE: WWW.FOEN.COM		Drawn: F. Gallagher Date: 19 May 2008 Checked: M. Sloan Date: May 2008 Desig. Eng.: Date:	Rev Level: Rev 1 S04075, S04076 DWG No. 005-043-0021 PART No.
Interpret Drawing in Accordance with ANSI Y14.5M - 1992 Unless Otherwise Specified All Dimensions Are in Inches And Tolerances Are As Follows: Holes: 1/2 The minimum thickness Decimals: X.XX = ± 0.005 Decimals: X.XXX = ± 0.010		Surface Finish: 125 Front View: 125/16 Angles: 40° 30'	Third Angle Projection
TO ALL PERSONS RECEIVING THIS DRAWING This drawing contains confidential information and is issued in confidence on the condition that it be returned as directed and not be copied, reproduced, disclosed to others, or used in the manufacture of the subject matter thereof without the consent of FONTAINE ENGINEERING, INC.			
Correcting Roll Unit - Roll Machining - $\phi 230$mm x 2100mm Hollow Roll			
DWG No. PART No.		Rev. No.	

LINE 1+2 160 mm#

Sink Roll Groove Patterns	
Type 1	Dwg. 006-035-0036
Type 2	Dwg. 006-035-0022

- Notes (Unless otherwise specified):
1. Drill With Standard ANSI Ball Type Combined Drill & Counterbore - #17 (View X).
 2. Machine Ends (View Y) & Barrel As Indicated.
 3. Grooved Roll Face & Groove As Indicated On Sink Roll Groove Pattern Drawing.
 4. Remove All Burrs And Sharp Edges.
 5. Dynamic Balance Tolerance (00g-200g (0.22lb-0.44lb)).
 6. Machine Sink Roll Groove According To Chart Above And Roll Finish Specified On This Drawing.

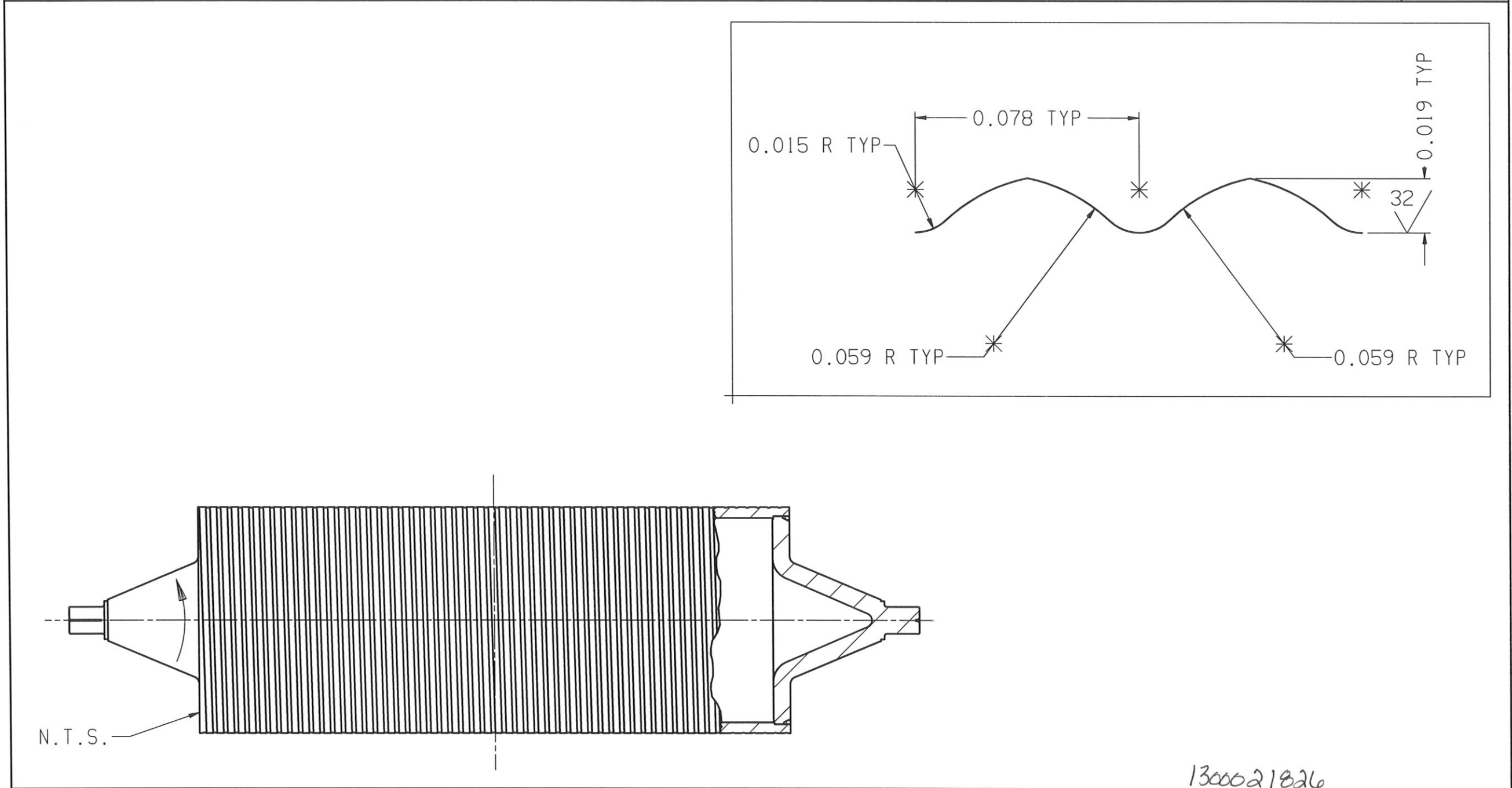


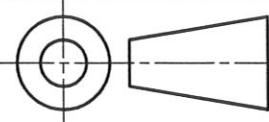

REVISION LEVEL					BILL of MATERIAL			DR No.
Rev	Date	By	Zone	Description	Item	Qty or Part	Description	Approximate Weight
A	14 May 2008	MS	ALL	Revised groove from front view of roll.	1	006-034-0008	Weldment - Barrel/Flange	4671 Lbs
					2	Per Chart Below	Detail - Sink Roll Groove Pattern	Lbs
					Approximate Total Weight (After Machining)			4172 Lbs

MM 1300021826 (FFDEL)

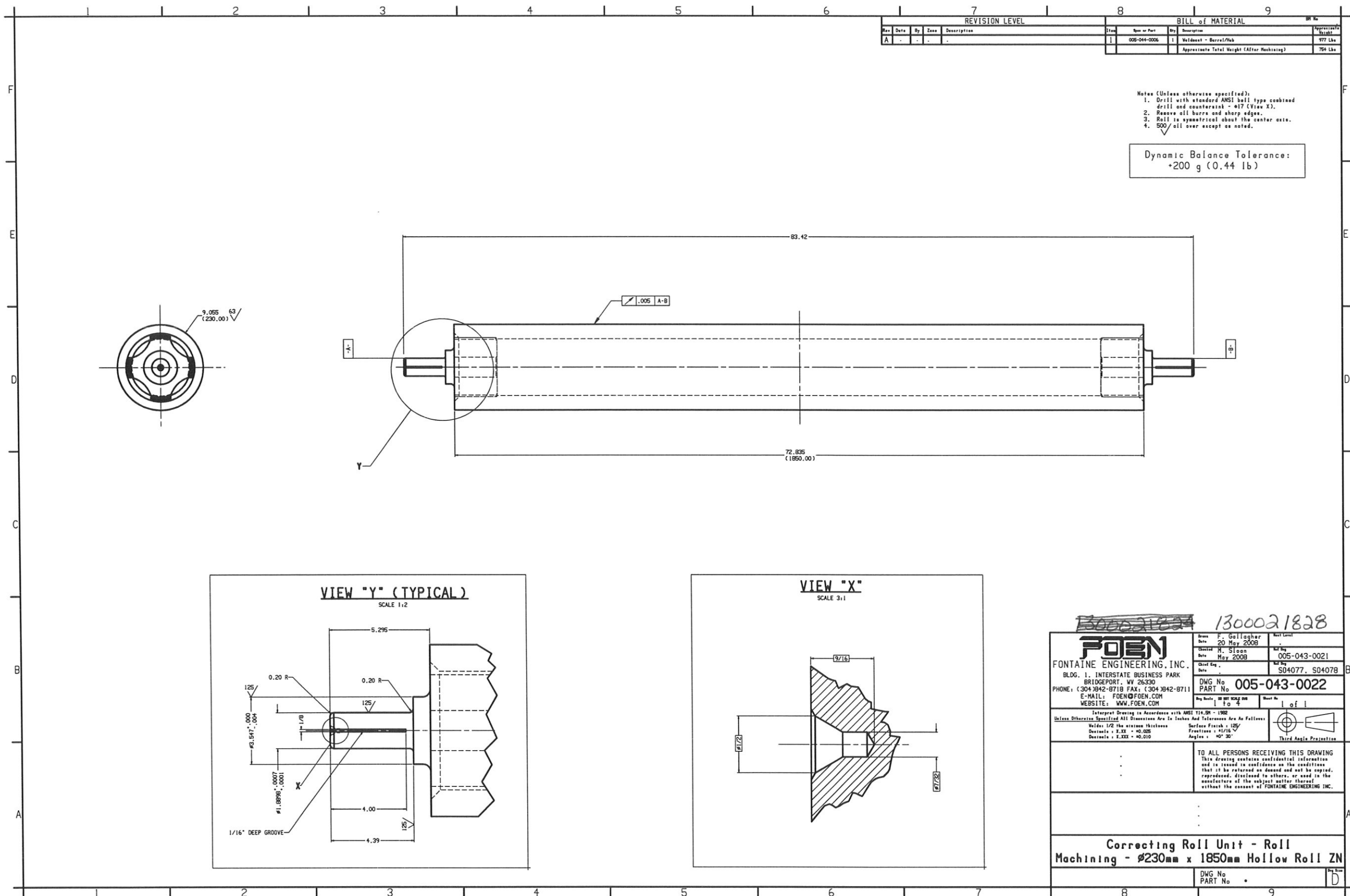
FOEN		Drawn Date	F. Gallagher 14 May 2008	Rev Level	
FONTAINE ENGINEERING, INC.		Checked Date	H. Sloan May 2008	Rev Level	006-033-0022
BLDG. 1, INTERSTATE BUSINESS PARK P.O. BOX 1350, BRIDGEPORT, WV 26330 PHONE: (304) 842-8718 FAX: (304) 842-8711 E-MAIL: FOEN@FOEN.COM WEBSITE: WWW.FOEN.COM		Chief Eng Date		Rev Level	S04077, S0407
		DWG No PART No	006-033-0023	A	
		Rev Desc	REV 002 003	Sheet No	1 of 1

REVISION LEVELS				BILL of MATERIAL				
Rev	Date	By	Description	Item	Spec or Part	Qty	Description	Approximate Weight
A	3/15/2011	FWG	Modified front view to show spiral groove from end to end.	1	.	.	.	.
							Approximate Total Weight	.



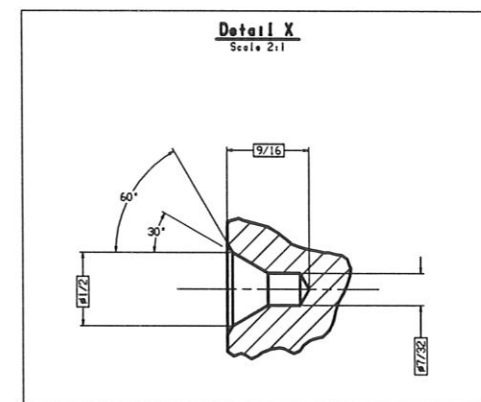
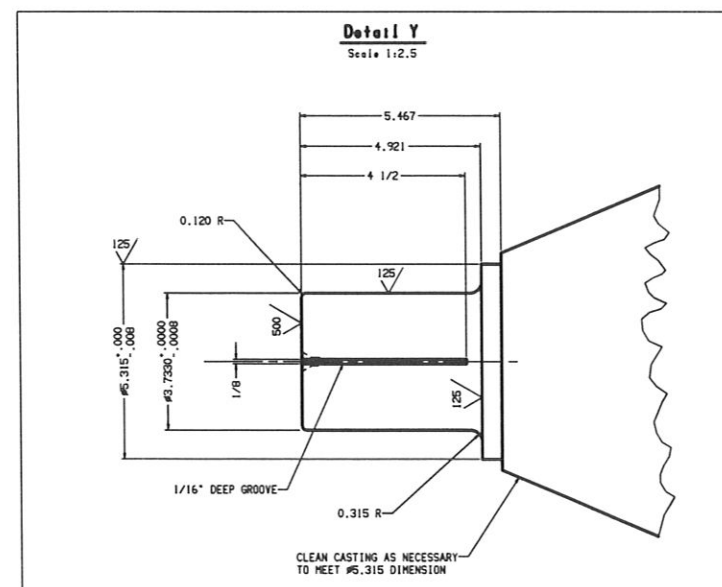
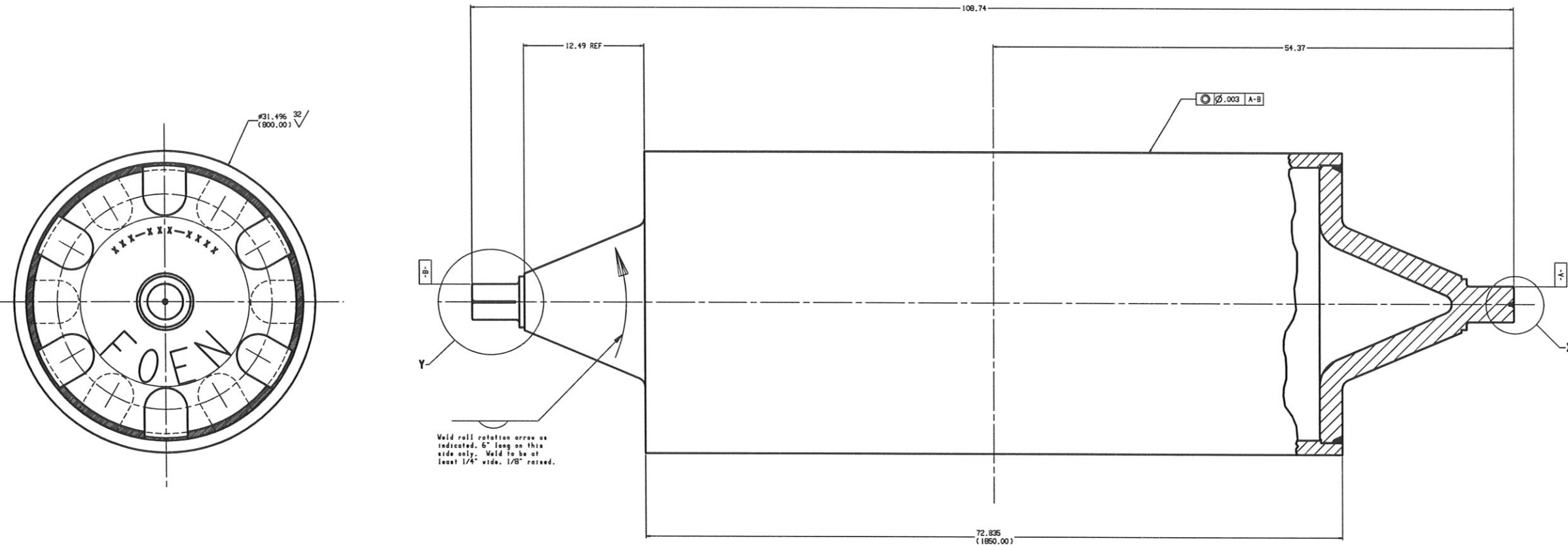
<p>Interpret Drawing in Accordance with ANSI Y14.5M - 1982 Unless Otherwise Specified All Dimensions Are In Inches And Tolerances Are As Follows Decimals X.XX ±.025 Fractions ±1/16 Decimals X.XXX ±.010 Angles ±0° 30' Welds: 1/2 The Min. Thickness 125</p>		 <p>Third Angle Projection</p>	 <p>FONTAINE ENGINEERING, INC.</p>		<p>PROJECT / REVISION / TYPE</p>		<p>REPLACES THESE PROJECTS</p>	<p>Next Level</p> <p>.</p>	<p>Drawn F. Gallagher</p> <p>Date 30 Jan 2008</p>	
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					<p>Ref No.</p> <p>.</p>	<p>Chief</p> <p>Date</p>				
								<p>DWG No 006-035-0036 A</p> <p>PART No</p>		
								<p>Dwg Scale DO NOT SCALE DWG</p> <p>NTS</p>	<p>Sheet No</p> <p>1 of 1</p>	<p>Dwg Size</p> <p>A</p>

Sink Roll Unit - Rolls
Detail - Micro Groove



- Notes (Unless otherwise specified):
1. Drill With Standard ANSI Drill Type Combined Drill & Counterbore - #17 (View X).
 2. Machine Ends (View Y) & Barrel As Indicated.
 3. Grind Roll Face Flat. No Grooves.
 4. Remove All Burrs And Sharp Edges.
 5. Dynamic Balance Tolerance 100g-200g (0.22lb-0.44lb).

REVISION LEVEL					BILL of MATERIAL			Part No.
Rev	Date	By	Zone	Description	Item	Qty	Part	Description
A	-	-	-	-	1	006-034-0008	1	Weldment - Barrel/Flank
Approximate Total Weight (After Machining)								4172 Lbs



1300021829

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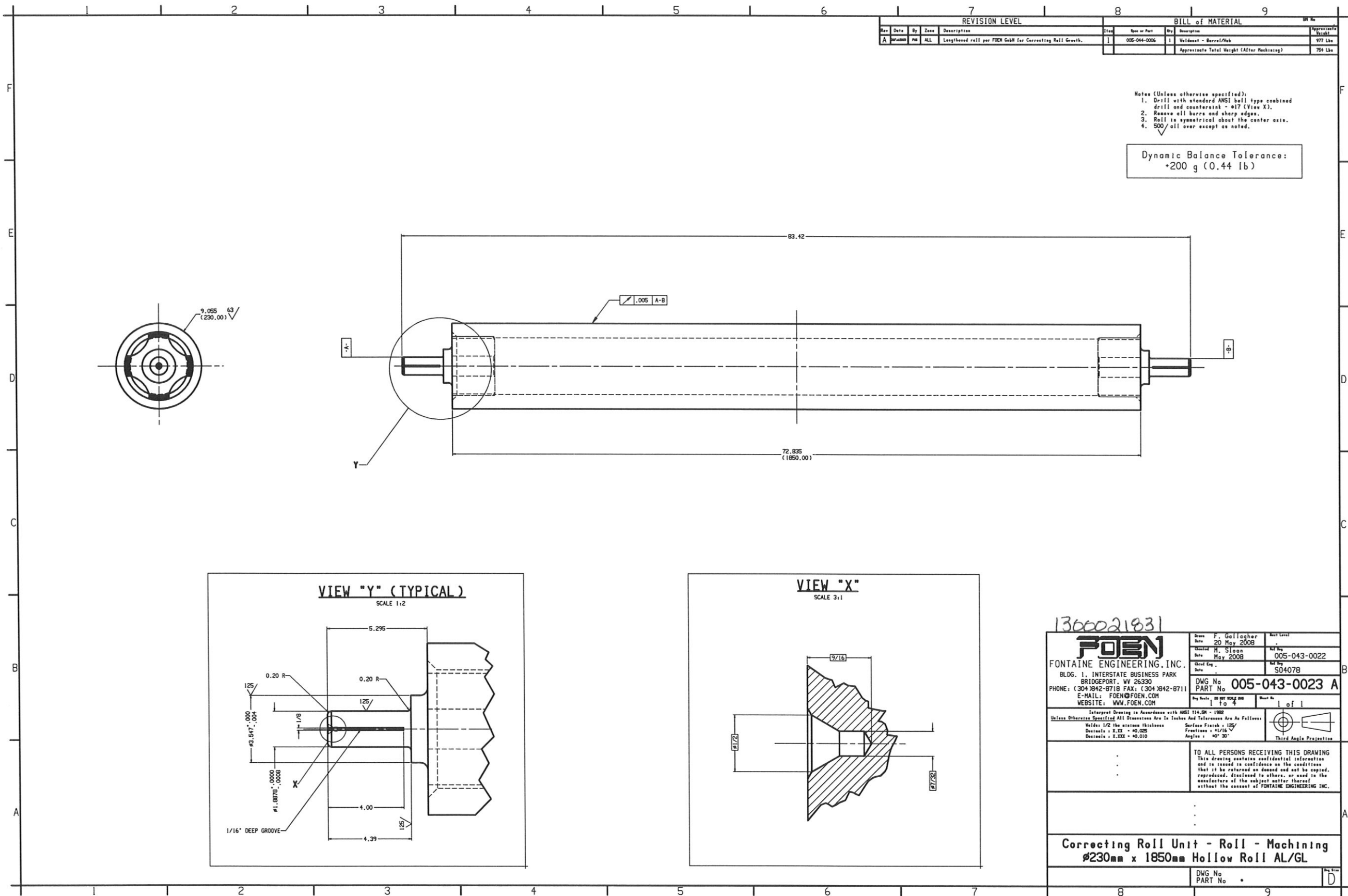
Drawn: F. Gallagher
Date: 14 May 2008
Checked: M. Sloan
Date: May 2008
DWG No: 006-033-0024
PART No: 006-033-0024
Sheet No: 1 of 1

Interpret Drawing in Accordance with ANSI Y14.5M - 1992
Unless Otherwise Specified All Dimensions Are in Inches And Tolerances Are As Follows:
Welds: 1/2 the minimum thickness
Surfaces: Finish: 125
Fractions: 1/16
Decimals: 0.005
Angles: 30°

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Sink Roll Unit - Sink Roll
Machining - #800mm x 1850mm Roll AL/GL

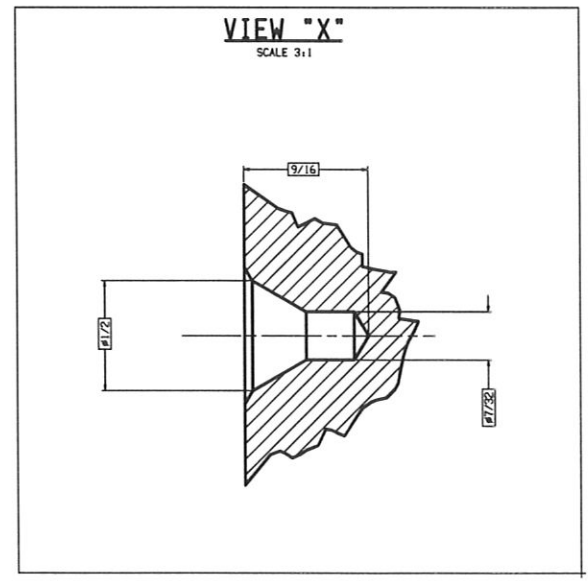
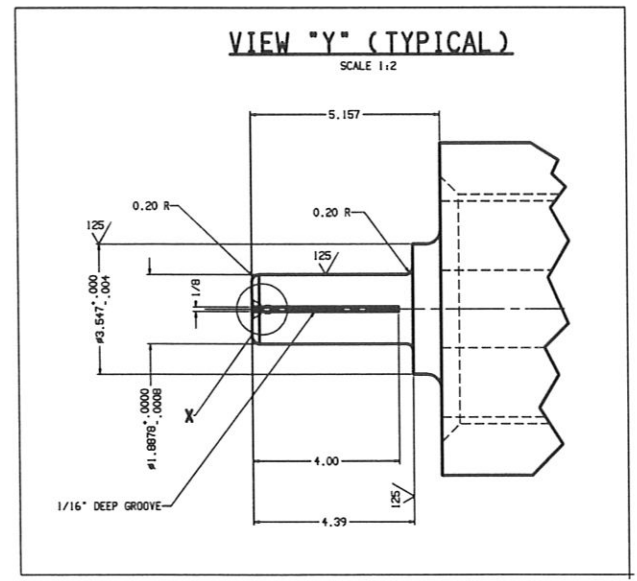
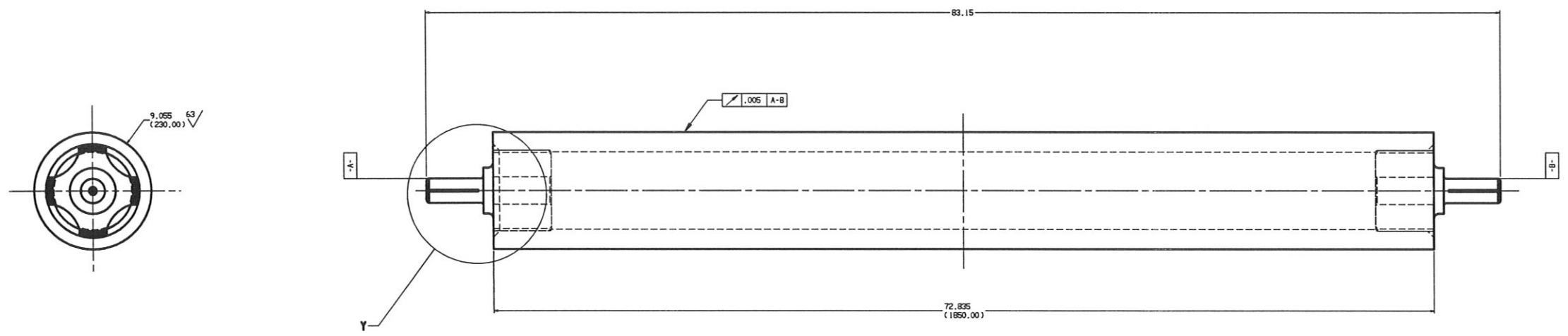
DWG No: 006-033-0024
PART No: 006-033-0024



REVISION LEVEL					BILL of MATERIAL			DR No
Rev	Date	By	Zone	Description	Item	Qty	Part No	Approximate Weight
A	-	-	-	-	1	1	005-044-0005	977 Lbs
							Approximate Total Weight (After Machining)	754 Lbs

- Notes (Unless otherwise specified):
1. Drill with standard ANSI ball type combined drill and counterbore - $\phi 17$ (View X).
 2. Remove all burrs and sharp edges.
 3. Roll is symmetrical about the center axis.
 4. 500/ all over except as noted.

Dynamic Balance Tolerance:
+200 g (0.44 lb)



1300021830

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E-MAIL: FOEN@FOEN.COM
WEBSITE: WWW.FOEN.COM

Drawn F. Gallagher Date 06 Feb 2009	Rev Level 1
Checked M. Sisson Date Feb 2009	Part No 005-043-0023
Chief Eng. Date	Sheet No S04078
DWG No 004-053-0005	Part No
Eng Scale: 1 to 4	Sheet No: 1 of 1

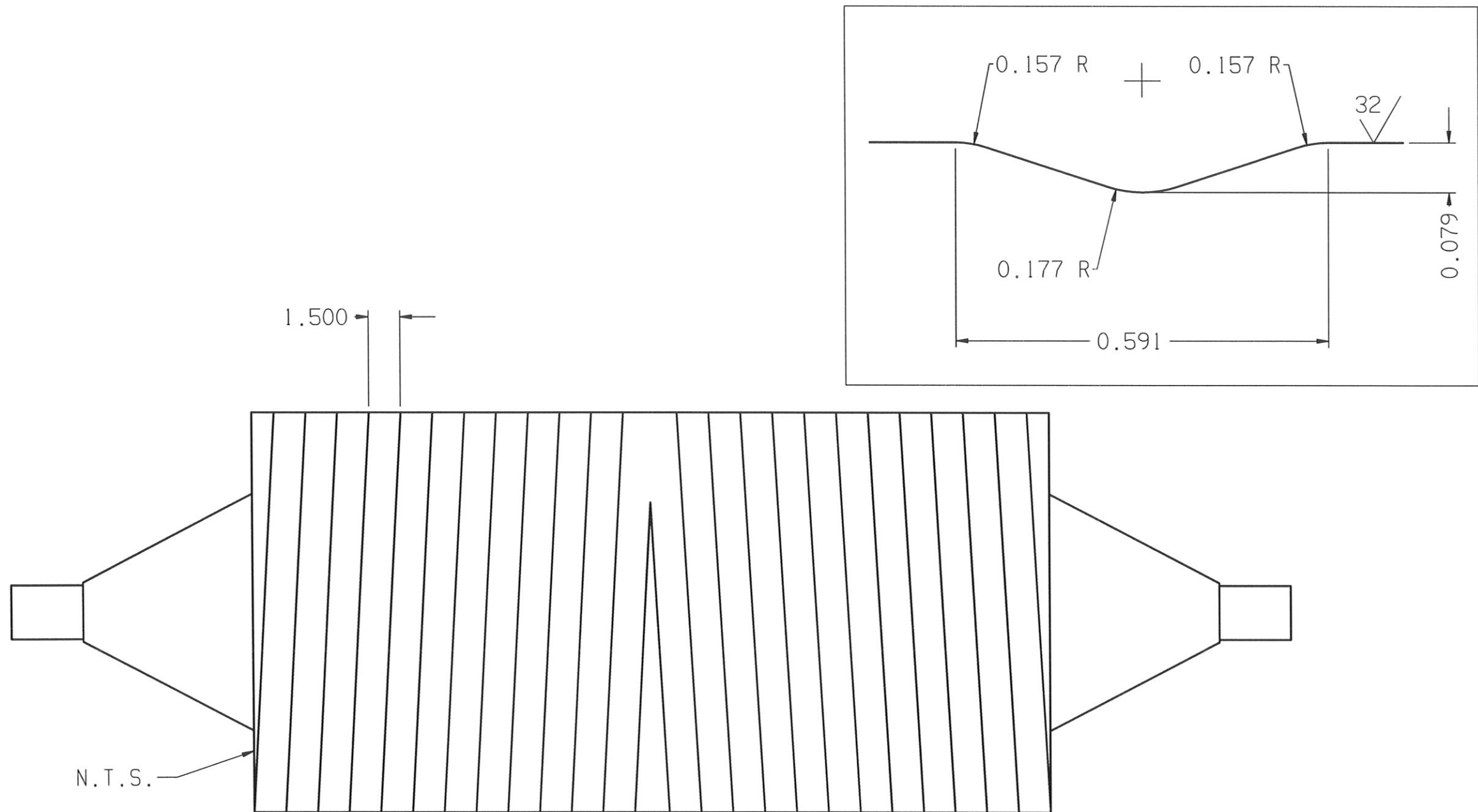
Interpret Drawing in Accordance with ANSI Y14.5M - 1982
Unless Otherwise Specified All Dimensions Are in Inches and Tolerances Are As Follows:
Welds: 1/2 the extreme thickness
Decimals: ± 0.01
Fractions: ± 1/16
Angles: ± 30°
Surface Finish: 125/16
Angles: 40°/30°

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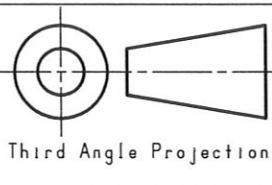
Stab. Roll Unit - Roll - Machining
Ø230mm x 1850mm Hollow Roll (AL & GL)

DWG No
PART No

REVISION LEVELS					BILL of MATERIAL				
Rev	Date	DCA	By	Description	Item	Spec or Part	Qty	Description	Approximate Weight
A	11/97	.	MWR	Changed Tolerance On The 1.5" Dim To 1.500"	1	.	.	.	.
								Approximate Total Weight	.



Interpret Drawing in Accordance
with ANSI Y14.5M - 1982
Unless Otherwise Specified All
Dimensions Are In Inches
And Tolerances Are As Follows
Decimals X.XX ±.025 Fractions ±1/16
Decimals X.XXX ±.010 Angles ±0° 30'
Welds: 1/2 The Min. Thickness 125/



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FONTAINE ENGINEERING, INC.
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Sink Roll Unit - Rolls
Detail - Sink Roll Groove

Next Level	Drawn J. Bell
.	Date 9 May 1997
Ref Dwg	Checked .
.	Date .
Ref Dwg	Chief .
S01381 (LIB)	Date .

DWG No	006-035-0017A		
PART No			
Dwg Scale	DO NOT SCALE DWG	Sheet No	Dwg Size
NTS		1 of 1	A