Metalex
Manufacturing
Inc.

Metalex
Certified ISO 9001 Quality Management
Veteran Owned Business 30 Plus Years

#1-- INSIDE Pkg - Cust Copy

Packing List# 40858 **Rel#** 1 **PAGE** 1
Metalex Job# 2007-7558

Ship To: HI-TECH MANUFACTURING, INC
4637 N. 25TH AVE
SCHILLER PARK IL 60176

Date: 7/26/07
Ship Via: CCX
PTA# _____
(prepaid shipments only)
BOL/Air Bill# 745587430
Prepaid: **Collect:** XXXXXXX
Weight: 9100 **Ctns:** 5 **Zone:**
Dimensions: 34 x 157 x 26

Attn:
Customer PO: 16185

P.O. Item No.	Qty Ordered	Qty Shipped	Qty Back Ordered	Description
001	38	4	34	ANL PART L1430401-100400 REV. 6 SLAC PART#: PF-381-002-80 S/N(S): 7A-08198-01 THRU 7A-08198-04 -CERTIFICATE OF CONFORMANCE, INSPECTION DATA, AND CERTIFICATIONS ENCLOSED. S/N: 7A-08198-01 REPRESENTS THE FIRST ARTICLE OF THIS PART.

Received By:

Printed Name _____ Signature _____ Date _____

MX3006 (10/02)

www.metalexmfg.com
sales@metalexmfg.com

5750 Cornell Road Cincinnati, Oh 45242-2083
Phone (513) 489-0507 Fax (513) 489-1020

Metalex Manufacturing Inc.
5750 Cornell Road · Cincinnati, OH 45242
Phone (513) 489-0507 · Fax (513) 489-1020
EMAIL: metalex@metalexmfg.com

Metalex
Customized Machinery and Parts
ISO 9001:2000 and AS9100 CERTIFIED
Veteran Owned Business 30 Plus Years

CERTIFICATE OF CONFORMANCE

Date: 08/13/2007
Customer: Hi-Tech Manufacturing, Inc.
4637 N. 25th Ave.
Schiller Park, IL 60176

Attention: Simon Sorsher

Metalex Job# 2007-7558
Purchase Order # 16185
MX Packing List # 40858

Metalex certifies that all material, processes, procedures, and dimensions are as called for on the purchase order, drawings, and/or amendments supplied by you.
All information concerning this part or parts, units and/or assemblies are on file at Metalex Manufacturing, Inc.

ITEM	QTY	PART NUMBER	REV	PART NAME	ID # *
001	4	L1430401-100400	6	Support Girder	See Below

*IDENTIFICATION NUMBER INCLUDES SERIAL #, HEAT #, AND/OR LOT #.

COMMENTS: Serial number 7A-08198-01 represents our "First Article" part of this part number.

Applicable serial numbers of this shipment are 7A-08198-01 thru 7A-08198-04.

Some internal documents in this quality package may contain documents certfiying to revision level "5" or "5V". Metalex certifies these documents and processes conform to the rev 6 revision level and the parts conform to revision level "6".

Metalex is in compliance with Statement of Workscope Document No. L143-00093, Revision New, dated 12/12/06.

Manufactured from Metalex purchased material. Reference heat numbers: T7257, T7232, T7130, T7141, U9728, 0129862, X25899, J62810, JF6843, J70358, and 478765.

Metalex Representative Signature	Thomas Clark Print Name	8/13/07 Date

MX1011 (05/05)

Precision Steel Services, Inc.

CERTIFICATE OF CONFORMANCE

TO: METALEX MANUFACTURING INC.

FROM: PRECISION STEEL SERVICES, INC.
31 E. SYLVANIA AVE.
TOLEDO, OH 43612

DATE OF SHIPMENT: 5/24/07

QUANTITY SHIPPED: 4 PCS

PURCHASE ORDER NUMBER: 71069-BL

DESCRIPTION: ASTM A-36 REV. 05 3/4" BURN 22.3" x 151.20"
- ITEM# 1
- JOB# 7558
- HT# T7257

THIS MATERIAL HAS BEEN PRODUCED IN ACCORDANCE WITH APPLICABLE COMMERCIAL STANDARDS AND/OR SPECIFICATIONS THAT MAY BE DESIGNATED ON PURCHASE ORDERS AND/OR BY DRAWING SUPPLIED ON THE DATE ON WHICH THE INQUIRY AND/OR ORDER WAS PLACED. WE HAVE DOCUMENTATION ON FILE AND IS AVAILABLE FOR REVIEW.

AUTHORIZED SIGNATURE:

Laura Epps

Laura Epps
INSIDE SALES

Hi-tech
Job# 7558
Part# L1430401-100400
PO# 71069-BL

METALEX
Q.A. DEPT
ACCEPTED
DATE 6/6/07
BY KKB
IN 19

31 E. Sylvania Ave.
Toledo, Ohio
43612
(419) 476-5702
(419) 476-5512 Fax

Precision Steel Services, Inc.

CERTIFICATE OF CONFORMANCE

TO: METALEX MANUFACTURING INC.

FROM: PRECISION STEEL SERVICES, INC.
31 E. SYLVANIA AVE.
TOLEDO, OH 43612

DATE OF SHIPMENT: 5/24/07

QUANTITY SHIPPED: 2 PCS

PURCHASE ORDER NUMBER: 71069-BL

DESCRIPTION: ASTM A-36 REV. 05 3/4" BURN 22.3" x 151.20"
- ITEM# 1
- JOB# 7558
- HT# T7257

THIS MATERIAL HAS BEEN PRODUCED IN ACCORDANCE WITH APPLICABLE COMMERCIAL STANDARDS AND/OR SPECIFICATIONS THAT MAY BE DESIGNATED ON PURCHASE ORDERS AND/OR BY DRAWING SUPPLIED ON THE DATE ON WHICH THE INQUIRY AND/OR ORDER WAS PLACED. WE HAVE DOCUMENTATION ON FILE AND IS AVAILABLE FOR REVIEW.

AUTHORIZED SIGNATURE:

Laura Epps

Laura Epps
INSIDE SALES

Job# 7558
Part# L1430401-100400
P.O# 71069-BL

METALEX
Q.A. DEPT
ACCEPTED
DATE 06/07
BY KRB
MTX 06 29

31 E. Sylvania Ave.
Toledo, Ohio
43612
(419) 476-5702
(419) 476-5512 Fax

SHIP TO: ISG PLATE INC.

TEST CERTIFICATE

PAGE NO: 01 OF 01
FILE NO: 8462-01-01
MILL ORDER NO: 54690-001
MELT NO: T7257
DATE: 05/02/06

SOLD TO:

SEND TO:

01-C

PLATE DIMENSIONS / DESCRIPTION

TOTAL QTY	GAUGE	WIDTH	LENGTH	DESCRIPTION	PIECE WEIGHT
13	.75"	96"	480"	RECTANGLE	9801#

CUSTOMER INFORMATION

CUSTOMER PO: J.C.R. 4696

SPECIFICATION(S)

THIS MATERIAL HAS BEEN MANUFACTURED AND TESTED IN ACCORDANCE WITH PURCHASE ORDER REQUIREMENTS AND SPECIFICATION(S).

ASME SA36 REV ED YR 04
ASTM A36 05 & ASME SA36 05A
MATERIAL PRODUCED UNDER A CERTIFIED QUALITY MGMT SYSTEM COMPLYING WITH ISO 9001 ABS-QE CERT. NO. 30130

CHEMICAL COMPOSITION

	C	MN	P	S	CU	SI	NI	CR	MO
MELT:T7257	.13	.77	.018	.011	.12	.20	.05	.06	.02

	V	AL	CB
MELT:T7257	.001	.054	.001

TENSILE PROPERTIES

LOC	DIR	YIELD STRENGTH PSI X 100	TENSILE STRENGTH PSI X 100	ELONGATION GAGE LGTH	%
BOT.	TRANS.	406	626	8.00"	30.0
BOT.	TRANS.	435	650	8.00"	27.0

GENERAL INFORMATION

ALL STEEL HAS BEEN MELTED AND MANUFACTURED IN THE U.S.A.

B/L #31420 CR 580676, #31492 BVRY 5741

Hi-Tech
Job # 07-7558
P/N L1430401-100400
MY P.O.# 71069 Item #1

METALEX
Q.A. DEPT
ACCEPTED
DATE 9/10/07
BY KKB

MTX QC 19

WE HEREBY CERTIFY THE ABOVE INFORMATION IS CORRECT:

QUALITY ASSURANCE LABORATORY
COATESVILLE, PA 19320

Elinore Zaplitny
SUPERVISOR - TEST REPORTING
ELINORE ZAPLITNY

Precision Steel Services, Inc.

CERTIFICATE OF CONFORMANCE

TO: METALEX MANUFACTURING INC.

FROM: PRECISION STEEL SERVICES, INC.
31 E. SYLVANIA AVE.
TOLEDO, OH 43612

DATE OF SHIPMENT: 5/24/07

QUANTITY SHIPPED: 4 PCS

PURCHASE ORDER NUMBER: 71069-BL

DESCRIPTION: ASTM A-36 REV. 05 3/4" BURN 22.3" x 151.20"
- ITEM# 1
- JOB# 7558
- HT# T7232

THIS MATERIAL HAS BEEN PRODUCED IN ACCORDANCE WITH APPLICABLE COMMERCIAL STANDARDS AND/OR SPECIFICATIONS THAT MAY BE DESIGNATED ON PURCHASE ORDERS AND/OR BY DRAWING SUPPLIED ON THE DATE ON WHICH THE INQUIRY AND/OR ORDER WAS PLACED. WE HAVE DOCUMENTATION ON FILE AND IS AVAILABLE FOR REVIEW.

AUTHORIZED SIGNATURE:

Laura Epps

Laura Epps
INSIDE SALES

Hi-Tech
Job# 7558
PART# L1430401-100400
P.O# 71069-BL

METALEX MTX QC 19
Q. A. DEPT
ACCEPTED
DATE 6/6/07
BY KRB

31 E. Sylvania Ave.
Toledo, Ohio
43612
(419) 476-5702
(419) 476-5512 Fax

Precision Steel Services, Inc.

CERTIFICATE OF CONFORMANCE

TO: METALEX MANUFACTURING INC.

FROM: PRECISION STEEL SERVICES, INC.
31 E. SYLVANIA AVE.
TOLEDO, OH 43612

DATE OF SHIPMENT: 5/24/07

QUANTITY SHIPPED: 4 PCS

PURCHASE ORDER NUMBER: 71069-BL

DESCRIPTION: ASTM A-36 REV. 05 3/4" BURN 22.3" x 151.20"
- ITEM# 1
- JOB# 7558
- HT# T7232

THIS MATERIAL HAS BEEN PRODUCED IN ACCORDANCE WITH APPLICABLE COMMERCIAL STANDARDS AND/OR SPECIFICATIONS THAT MAY BE DESIGNATED ON PURCHASE ORDERS AND/OR BY DRAWING SUPPLIED ON THE DATE ON WHICH THE INQUIRY AND/OR ORDER WAS PLACED. WE HAVE DOCUMENTATION ON FILE AND IS AVAILABLE FOR REVIEW.

AUTHORIZED SIGNATURE:

Laura Epps

Laura Epps
INSIDE SALES

Job# 7558
Part# L14304501-100400
P.O# 71069-BL

METALEX
Q. A. DEPT
ACCEPTED
DATE 6/6/07
BY KKB
MTX 06 19

31 E. Sylvania Ave.
Toledo, Ohio
43612
(419) 476-5702
(419) 476-5512 Fax

ISG PLATE INC.

SHIP TO:

TEST CERTIFICATE

PAGE NO: 01 OF 01
FILE NO: 8462-01-01
MILL ORDER NO: 53779-002
MELT NO: T7232
DATE: 04/20/06

SOLD TO:

SEND TO:

01-C

PLATE DIMENSIONS / DESCRIPTION

TOTAL QTY	GAUGE	WIDTH	LENGTH	DESCRIPTION	PIECE WEIGHT
4	.75"	96"	480"	RECTANGLE	9801#

CUSTOMER INFORMATION

CUSTOMER PO: J.C.R. 4677

SPECIFICATION(S)

THIS MATERIAL HAS BEEN MANUFACTURED AND TESTED IN ACCORDANCE WITH PURCHASE ORDER REQUIREMENTS AND SPECIFICATION(S).

ASME SA36 REV ED YR 04
ASTM A36 05 & ASME SA36 05A
MATERIAL PRODUCED UNDER A CERTIFIED QUALITY MGMT SYSTEM COMPLYING WITH ISO 9001 ABS-QE CERT. NO. 30130

CHEMICAL COMPOSITION

	C	MN	P	S	CU	SI	NI	CR	MO
MELT:T7232	.17	.85	.025	.016	.14	.18	.07	.05	.01

	V	AL	CB
MELT:T7232	.001	.027	.001

TENSILE PROPERTIES

LOC	DIR	YIELD STRENGTH PSI X 100	TENSILE STRENGTH PSI X 100	ELONGATION GAGE LGTH	%
BOT.	TRANS.	436	683	8.00"	27.0
BOT.	TRANS.	453	673	8.00"	27.0

GENERAL INFORMATION

ALL STEEL HAS BEEN MELTED AND MANUFACTURED IN THE U.S.A.

B/L #29155 CR 578630

MTX QC 19

Hi-Tech
Job# 07-7558
P/N L1430401-100400
MX P.O.# 71069 Item #1

METALEX
Q. A. DEPT
ACCEPTED
DATE 06/07
BY KKB

WE HEREBY CERTIFY THE ABOVE INFORMATION IS CORRECT:

QUALITY ASSURANCE LABORATORY
COATESVILLE, PA 19320

Elinore Zaplitny
SUPERVISOR - TEST REPORTING
ELINORE ZAPLITNY

Precision Steel Services, Inc.

CERTIFICATE OF CONFORMANCE

TO: METALEX MANUFACTURING INC.

FROM: PRECISION STEEL SERVICES, INC.
31 E. SYLVANIA AVE.
TOLEDO, OH 43612

DATE OF SHIPMENT: 5/24/07

QUANTITY SHIPPED: 4 PCS

PURCHASE ORDER NUMBER: 71069-BL

DESCRIPTION: ASTM A-36 REV. 05 3/4" BURN 22.3" x 151.20"
- ITEM# 1
- JOB# 7558
- HT# T7130

THIS MATERIAL HAS BEEN PRODUCED IN ACCORDANCE WITH APPLICABLE COMMERCIAL STANDARDS AND/OR SPECIFICATIONS THAT MAY BE DESIGNATED ON PURCHASE ORDERS AND/OR BY DRAWING SUPPLIED ON THE DATE ON WHICH THE INQUIRY AND/OR ORDER WAS PLACED. WE HAVE DOCUMENTATION ON FILE AND IS AVAILABLE FOR REVIEW.

METALEX
Q. A. DEPT
ACCEPTED
DATE 6/6/07
BY KRB
MTX QC 19

AUTHORIZED SIGNATURE:

Laura Epps

Laura Epps
INSIDE SALES

Hi-tech
Job # 7558
PART# L143049-100400
P.O# 71069-BL

31 E. Sylvania Ave.
Toledo, Ohio
43612
(419) 476-5702
(419) 476-5512 Fax

ISG PLATE INC.

SHIP TO:

TEST CERTIFICATE

PAGE NO: 01 OF 01
FILE NO: 8462-01-01
MILL ORDER NO: 53137-001
MELT NO: T7130
DATE: 04/11/06

SOLD TO:

SEND TO:

01-C

PLATE DIMENSIONS / DESCRIPTION

TOTAL QTY	GAUGE	WIDTH	LENGTH	DESCRIPTION	PIECE WEIGHT
4	.75"	96"	480"	RECTANGLE	9801#

CUSTOMER INFORMATION

CUSTOMER PO: J.C.R. 4662

SPECIFICATION(S)

THIS MATERIAL HAS BEEN MANUFACTURED AND TESTED IN ACCORDANCE WITH PURCHASE ORDER REQUIREMENTS AND SPECIFICATION(S).

ASME SA36 REV ED YR 04
ASTM A36 05 & ASME SA36 05A
MATERIAL PRODUCED UNDER A CERTIFIED QUALITY MGMT SYSTEM COMPLYING WITH ISO 9001 ABS-QE CERT. NO. 30130

CHEMICAL COMPOSITION

	C	MN	P	S	CU	SI	NI	CR	MO
MELT:T7130	.14	.78	.014	.013	.13	.24	.08	.03	.01

	V	AL	CB
MELT:T7130	.001	.052	.001

TENSILE PROPERTIES

LOC	DIR	YIELD STRENGTH PSI X 100	TENSILE STRENGTH PSI X 100	ELONGATION GAGE LGTH	%
BOT.	TRANS.	433	656	8.00"	28.0
BOT.	TRANS.	436	653	8.00"	27.0

GENERAL INFORMATION

ALL STEEL HAS BEEN MELTED AND MANUFACTURED IN THE U.S.A.

B/L #28102 UMP 5517

METALEX
Q. A. DEPT
ACCEPTED
DATE 6/6/07
BY KKB

MTX QC 19

Hi-Tech
Job # 07-7558
P/N L1430401-100400
MX P.O.# 71069 Item #1

WE HEREBY CERTIFY THE ABOVE INFORMATION IS CORRECT:

QUALITY ASSURANCE LABORATORY
COATESVILLE, PA 19320

Elinore Zaplitny
SUPERVISOR – TEST REPORTING
ELINORE ZAPLITNY

Precision Steel Services, Inc.

CERTIFICATE OF CONFORMANCE

TO: METALEX MANUFACTURING INC.

FROM: PRECISION STEEL SERVICES, INC.
31 E. SYLVANIA AVE.
TOLEDO, OH 43612

DATE OF SHIPMENT: 5/24/07

QUANTITY SHIPPED: 4 PCS

PURCHASE ORDER NUMBER: 71069-BL

DESCRIPTION: ASTM A-36 REV. 05 3/4" BURN 22.3" x 151.20"
- ITEM# 1
- JOB# 7558
- HT# T7141

THIS MATERIAL HAS BEEN PRODUCED IN ACCORDANCE WITH APPLICABLE COMMERCIAL STANDARDS AND/OR SPECIFICATIONS THAT MAY BE DESIGNATED ON PURCHASE ORDERS AND/OR BY DRAWING SUPPLIED ON THE DATE ON WHICH THE INQUIRY AND/OR ORDER WAS PLACED. WE HAVE DOCUMENTATION ON FILE AND IS AVAILABLE FOR REVIEW.

AUTHORIZED SIGNATURE:

Hi-tech
Job# 7558
Part# L1430401-100400
P.O# 71069-BL

Laura Epps

Laura Epps
INSIDE SALES

METALEX
Q. A. DEPT
ACCEPTED
DATE 6/6/07
BY KRB
MTX 06 19

31 E. Sylvania Ave.
Toledo, Ohio
43612
(419) 476-5702
(419) 476-5512 Fax

Precision Steel Services, Inc.

CERTIFICATE OF CONFORMANCE

TO: METALEX MANUFACTURING INC.

FROM: PRECISION STEEL SERVICES, INC.
31 E. SYLVANIA AVE.
TOLEDO, OH 43612

DATE OF SHIPMENT: 5/24/07

QUANTITY SHIPPED: 4 PCS

PURCHASE ORDER NUMBER: 71069-BL

DESCRIPTION: ASTM A-36 REV. 05 3/4" BURN 22.3" x 151.20"
- ITEM# 1
- JOB# 7558
- HT# T7141

THIS MATERIAL HAS BEEN PRODUCED IN ACCORDANCE WITH APPLICABLE COMMERCIAL STANDARDS AND/OR SPECIFICATIONS THAT MAY BE DESIGNATED ON PURCHASE ORDERS AND/OR BY DRAWING SUPPLIED ON THE DATE ON WHICH THE INQUIRY AND/OR ORDER WAS PLACED. WE HAVE DOCUMENTATION ON FILE AND IS AVAILABLE FOR REVIEW.

AUTHORIZED SIGNATURE:

Laura Epps

Laura Epps
INSIDE SALES

Job# 7558
Part# L1430401-100400
P.O# 71069-BL

METALEX MTX
Q. A. DEPT
ACCEPTED
DATE 6/6/07
BY KKB

31 E. Sylvania Ave.
Toledo, Ohio
43612
(419) 476-5702
(419) 476-5512 Fax

Precision Steel Services, Inc.

CERTIFICATE OF CONFORMANCE

TO: METALEX MANUFACTURING INC.

FROM: PRECISION STEEL SERVICES, INC.
31 E. SYLVANIA AVE.
TOLEDO, OH 43612

DATE OF SHIPMENT: 5/24/07

QUANTITY SHIPPED: 4 PCS

PURCHASE ORDER NUMBER: 71069-BL

DESCRIPTION: ASTM A-36 REV. 05 3/4" BURN 22.3" x 151.20"
- ITEM# 1
- JOB# 7558
- HT# T7141

THIS MATERIAL HAS BEEN PRODUCED IN ACCORDANCE WITH APPLICABLE COMMERCIAL STANDARDS AND/OR SPECIFICATIONS THAT MAY BE DESIGNATED ON PURCHASE ORDERS AND/OR BY DRAWING SUPPLIED ON THE DATE ON WHICH THE INQUIRY AND/OR ORDER WAS PLACED. WE HAVE DOCUMENTATION ON FILE AND IS AVAILABLE FOR REVIEW.

METALEX
Q. A. DEPT
ACCEPTED
DATE 6/6/07
BY KKB
MTX QC 19

AUTHORIZED SIGNATURE:

Laura Epps

Laura Epps
INSIDE SALES

Job # 7558
PART# L1430401-100400
P.O# 71069-BL

31 E. Sylvania Ave.
Toledo, Ohio
43612
(419) 476-5702
(419) 476-5512 Fax

SHIP TO: ISG PLATE INC.

TEST CERTIFICATE

PAGE NO: 01 OF 01
FILE NO: 8462-01-01
MILL ORDER NO: 53137-001
MELT NO: T7141
DATE: 04/11/06

SOLD TO:

SEND TO:

01-C

PLATE DIMENSIONS / DESCRIPTION

TOTAL QTY	GAUGE	WIDTH	LENGTH	DESCRIPTION	PIECE WEIGHT
4	.75"	96"	480"	RECTANGLE	9801#

CUSTOMER INFORMATION

CUSTOMER PO: J.C.R. 4662

SPECIFICATION(S)

THIS MATERIAL HAS BEEN MANUFACTURED AND TESTED IN ACCORDANCE WITH PURCHASE ORDER REQUIREMENTS AND SPECIFICATION(S).

ASME SA36 REV ED YR 04
ASTM A36 05 & ASME SA36 05A
MATERIAL PRODUCED UNDER A CERTIFIED QUALITY MGMT SYSTEM COMPLYING WITH ISO 9001 ABS-QE CERT. NO. 30130

CHEMICAL COMPOSITION

	C	MN	P	S	CU	SI	NI	CR	MO
MELT:T7141	.13	.81	.016	.013	.11	.18	.06	.04	.01

	V	AL	CB
MELT:T7141	.001	.040	.001

TENSILE PROPERTIES

LOC	DIR	YIELD STRENGTH PSI X 100	TENSILE STRENGTH PSI X 100	ELONGATION GAGE LGTH	%
BOT.	TRANS.	419	646	8.00"	28.0
BOT.	TRANS.	421	646	8.00"	26.0

GENERAL INFORMATION

ALL STEEL HAS BEEN MELTED AND MANUFACTURED IN THE U.S.A.

B/L #28102 UMP 5517

METALEX
Q. A. DEPT
ACCEPTED
DATE 6/6/07
BY KKB

MTX
DEC 19

Hi-Tech
Job # 07-7558
P/N L1430401-100400
MX P.O.# 71069 Item #1

WE HEREBY CERTIFY THE ABOVE INFORMATION IS CORRECT:

QUALITY ASSURANCE LABORATORY
COATESVILLE, PA 19320

Elinore Zaplitny
SUPERVISOR – TEST REPORTING
ELINORE ZAPLITNY

Precision Steel Services, Inc.

CERTIFICATE OF CONFORMANCE

TO: METALEX MANUFACTURING INC.

FROM: PRECISION STEEL SERVICES, INC.
31 E. SYLVANIA AVE.
TOLEDO, OH 43612

DATE OF SHIPMENT: 5/24/07

QUANTITY SHIPPED: 4 PCS

PURCHASE ORDER NUMBER: 71069-BL

DESCRIPTION: ASTM A-36 REV. 05 3/4" BURN 22.3" x 151.20"
- ITEM# 1
- JOB# 7558
- HT# U9728

THIS MATERIAL HAS BEEN PRODUCED IN ACCORDANCE WITH APPLICABLE COMMERCIAL STANDARDS AND/OR SPECIFICATIONS THAT MAY BE DESIGNATED ON PURCHASE ORDERS AND/OR BY DRAWING SUPPLIED ON THE DATE ON WHICH THE INQUIRY AND/OR ORDER WAS PLACED. WE HAVE DOCUMENTATION ON FILE AND IS AVAILABLE FOR REVIEW.

AUTHORIZED SIGNATURE:

Hi-Tech
Job# 7558
Part# L1430401-100400
P.O# 71069-BL

METALEX
Q. A. DEPT
ACCEPTED
DATE 6/6/07
BY KKB

Laura Epps

Laura Epps
INSIDE SALES

31 E. Sylvania Ave.
Toledo, Ohio
43612
(419) 476-5702
(419) 476-5512 Fax

Precision Steel Services, Inc.

CERTIFICATE OF CONFORMANCE

TO: METALEX MANUFACTURING INC.

FROM: PRECISION STEEL SERVICES, INC.
31 E. SYLVANIA AVE.
TOLEDO, OH 43612

DATE OF SHIPMENT: 5/24/07

QUANTITY SHIPPED: 4 PCS

PURCHASE ORDER NUMBER: 71069-BL

DESCRIPTION: ASTM A-36 REV. 05 3/4" BURN 22.3" x 151.20"
- ITEM# 1
- JOB# 7558
- HT# U9728

THIS MATERIAL HAS BEEN PRODUCED IN ACCORDANCE WITH APPLICABLE COMMERCIAL STANDARDS AND/OR SPECIFICATIONS THAT MAY BE DESIGNATED ON PURCHASE ORDERS AND/OR BY DRAWING SUPPLIED ON THE DATE ON WHICH THE INQUIRY AND/OR ORDER WAS PLACED. WE HAVE DOCUMENTATION ON FILE AND IS AVAILABLE FOR REVIEW.

AUTHORIZED SIGNATURE:

Laura Epps

Laura Epps
INSIDE SALES

Job # 7558
Part # L1430401-100400
P.O # 71069-BL

METALEX MTX QC 19
Q. A. DEPT
ACCEPTED
DATE 6/6/07
BY KKB

31 E. Sylvania Ave.
Toledo, Ohio
43612
(419) 476-5702
(419) 476-5512 Fax

ISG PLATE INC.

TEST CERTIFICATE

SHIP TO:

PAGE NO: 01 OF 01
FILE NO: 8462-01-01
MILL ORDER NO: 53137-001
MELT NO: U9728
DATE: 04/13/06

SOLD TO:

SEND TO:

01-C

PLATE DIMENSIONS / DESCRIPTION

TOTAL QTY	GAUGE	WIDTH	LENGTH	DESCRIPTION	PIECE WEIGHT
1	.75"	96"	480"	RECTANGLE	9801#

CUSTOMER INFORMATION

CUSTOMER PO: J.C.R. 4662

SPECIFICATION(S)

THIS MATERIAL HAS BEEN MANUFACTURED AND TESTED IN ACCORDANCE WITH PURCHASE ORDER REQUIREMENTS AND SPECIFICATION(S).

ASME SA36 REV ED YR 04
ASTM A36 05 & ASME SA36 05A
MATERIAL PRODUCED UNDER A CERTIFIED QUALITY MGMT SYSTEM COMPLYING WITH ISO 9001 ABS-QE CERT. NO. 30130

CHEMICAL COMPOSITION

	C	MN	P	S	CU	SI	NI	CR	MO
MELT:U9728	.09	.80	.012	.004	.23	.20	.12	.10	.03

	V	AL	CB
MELT:U9728	.002	.024	.001

TENSILE PROPERTIES

LOC	DIR	YIELD STRENGTH PSI X 100	TENSILE STRENGTH PSI X 100	ELONGATION GAGE LGTH	%
BOT.	TRANS.	427	582	8.00"	28.0
BOT.	TRANS.	455	643	8.00"	28.0

GENERAL INFORMATION

ALL STEEL HAS BEEN MELTED AND MANUFACTURED IN THE U.S.A.

B/L #29142 NW 190356

Hi-Tech
Job# 07-7558
P/N L1430401-100400
MX P.O.# 71069 Item #1

METALEX MTX OC 19
Q.A. DEPT
ACCEPTED
DATE 6/6/07
BY KRB

WE HEREBY CERTIFY THE ABOVE INFORMATION IS CORRECT:

QUALITY ASSURANCE LABORATORY
COATESVILLE, PA 19320

Elinore Zaplitny
SUPERVISOR – TEST REPORTING
ELINORE ZAPLITNY

FREDERICK STEEL CO.

"The Complete Steel Service Center"
Since 1933

200 W. North Bend Rd.
Cincinnati, Ohio 45216-1725

(513) 821-6400
FAX (513) 821-6915
U.S.A. 1-800-543-4922

CERTIFICATE OF CONFORMANCE

METALEX Q. A. DEPT ACCEPTED DATE 7/16/07 BY TC MTX DC 20

CUSTOMER METALEX MFG INC

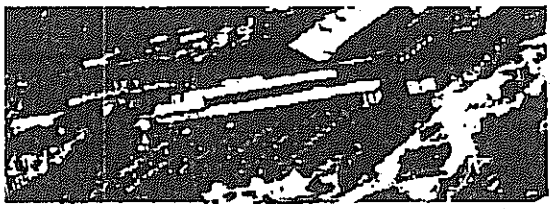
PO# 71070BL7558

DATE: 5/22/07

QUANTITY	DESCRIPTION	SPECIFICATION	HEAT #
13 PCS	STRUCTURAL TUBING 10 X 6 X 3/8 X 40'	A500-03A GrCB	0129862
3 PCS	1-1/4 ID SCH 40 X 21'	A-500-03	X25899
7 PC	HOT ROLL FLATS 3/4 X 8 X 20'	A-529-50	J62810
3 PCS	1/4 X 5 X 20'	A-36 rev5	JF6843
26 PCS	3/8 X 7 X 20'	A-36 rev5	J70358
26 PCS	8x3x3/8x 40'	A500B rev03a GrCB	478765

THIS MATERIAL TO THE BEST OF OUR KNOWLEDGE WAS PRODUCED IN ACCORDANCE WITH APPLICABLE ASTM STANDARDS.

Dee Stone



Mill and Warehouse located on 75 acres and served by B & O siding

HOT & COLD ROLLED BARS • STRUCTURALS • MESH • PLATE • SHEETS
REINFORCING BARS ROLLED IN OUR OWN MILL

Atlas Tube Canada ULC
200 Clark St.
Harrow, Ontario, Canada
N0R 1G0
Tel: 519-738-3541
Fax: 519-738-3537

Ref.B/L: 80190559
Date: 07.11.2007
Customer: 63

Atlas TUBE

MATERIAL TEST REPORT

Sold to

Frederick Steel
200 W. North Bend Road
CINCINNATI OH 45216
USA

Shipped to

Frederick Steel
200 W. North Bend Road
CINCINNATI OH 45216
USA

Material: 8.0x3.0x375x24'0"0(2x6). Material No: 80030375 Made in: Canada
Sales order: 224717 Purchase Order: 105913

Heat No	Pcs	C	Mn	P	S	Si	Al	Cu	Cb	Mo	Ni	Cr	V
0129683		0.200	1.070	0.015	0.004	0.160	0.050	0.030	0.000	0.000	0.000	0.000	0.000

Bundle No	Yield	Tensile	Eln.2in	Certification
M100507323	065130 Psi	075610 Psi	29.9 %	ASTM A500-03A GRADE B&C

Material Note:
Sales Or.Note:

Material: 8.0x3.0x125x48'0"0(2x5). Material No: 800301254800 Made in: Canada
Sales order: 224717 Purchase Order: 105913

Heat No	Pcs	C	Mn	P	S	Si	Al	Cu	Cb	Mo	Ni	Cr	V
3269D		0.180	0.790	0.014	0.008	0.030	0.028	0.030	0.000	0.010	0.020	0.020	0.002

Bundle No	Yield	Tensile	Eln.2in	Certification
M100507346	059280 Psi	072670 Psi	24.0 %	ASTM A500-03A GRADE B&C

Material Note:
Sales Or.Note:

Material: 12.0x12.0x250x48'0"0(2x2). Material No: 1201202504800 Made in: Canada
Sales order: 221075 Purchase Order: 105844

Heat No	Pcs	C	Mn	P	S	Si	Al	Cu	Cb	Mo	Ni	Cr	V
225417		0.140	0.810	0.015	0.021	0.080	0.047	0.050	0.000	0.004	0.030	0.020	0.005

Bundle No	Yield	Tensile	Eln.2in	Certification
M200334612	065720 Psi	077590 Psi	29.4 %	ASTM A500-03A GRADE B&C

Material Note:
Sales Or.Note:

Material: 10.0x6.0x375x40'0"0(2x2).-CSA Material No: 1000603754000-CSA Made in: Canada
Sales order: 225427 Purchase Order: 105913

Heat No	Pcs	C	Mn	P	S	Si	Al	Cu	Cb	Mo	Ni	Cr	V
0129862		0.220	1.020	0.011	0.008	0.160	0.080	0.000	0.000	0.000	0.000	0.000	0.000

Bundle No	Yield	Tensile	Eln.2in	Certification
M200339261	060720 Psi	073990 Psi	30.3 %	CSA G40.21-04 50W CLASS C MEETS ASTM A500-03A GR C&B

Material Note:
Sales Or.Note:

METALEX
Q. A. DEPT
ACCEPTED
DATE 7/16/07
BY TC
MTX QC 20

Authorized by Quality Assurance:

Job # 7558
PN: L1430401-100400
PO# 71070

Steel Tube Institute OF NORTH AMERICA

Metals Service Center Institute

This fax was received by GFI FAXmaker fax server. For more information, visit: http://www.gfi.com

Southland Tube, Inc.
3525 Richard Arrington Jr. Blvd. N.
Birmingham, AL. 35234
Phone (205) 251-1884 Fax (205)421-4561

07C06018

TEST REPORT ASTM-E8

Customer: FREDERICK STEEL

Print Date: 3/1/2007

Heat No.: X25899

Description: CARBON STEEL TUBE

Size: 1-1/4 X SCH 40

Spec/Grade: A500-03/B/C

Carbon:	.150
Manganese:	.430
Sulphur:	.012
Phosphorus:	.007
Silicon:	.009

Sample number	Date	Tensile	Yield	Elongation
SL9242	2/23/2007	70,000	59,900	25.50

We hereby certify that the above figures are correct as contained in the records of this company and that the tubing was manufactured, tested and inspected in compliance with applicable specifications.

Melted & Manufactured in the U.S.A.

Computer Generated Document
Quality Assurance

Melted & Manufactured in the U.S.A.

Job# 7558
P/N: L1430401-100400
PO# 71070

METALEX
Q. A. DEPT
ACCEPTED
DATE 7/16/07
BY TC

MTX QC 20

Pickup # 03L004
STI Ord# 124649

Heat # X25899

Cust PO# 106530

CERTIFIED MILL TEST REPORT

For additional copies call (800) 637-3227

CMC Steel - Alabama
P.O. Box 321188
Birmingham, AL 35232-1188
www.sml-al.com

CMC Steel - South Carolina
Box 2005
Cayce, SC 29171-2005
www.sml-sc.com

We hereby certify that the test results presented here are accurate and conform to the reported grade specification.

John F. Powell - CMC Steel AL
Quality Assurance Manager

HEAT NO.: J62810
SECTION: F 8X3/4
GRADE: ASTM A529-05-50/A529-05-55
ASTM A529M-05-345/A529M-05-380

SOLD TO

SHIP TO

SHIP#:
BOL #:
INV #:
CUST PO#:
CUST P/N:

CHEMICAL ANALYSIS	%
C	0.25
Mn	0.96
P	0.012
S	0.035
Si	0.22
Cu	0.39
Cr	0.13
Ni	0.09
Mo	0.031
Cb	0.014
V	0.002
Sn	0.011
B	0.0003
Ti	0.001
C.Eq.	0.47
AL	0.001
N	0.006

PROPERTIES

MECHANICAL	TEST 1 IMPERIAL	TEST 1 METRIC	TEST 2 IMPERIAL	TEST 2 METRIC	TEST 3 IMPERIAL	TEST 3 METRIC
Yield Strength	60.1 KSI	414.3 MPA	60.0 KSI	413.5 MPA		
Tensile Strength	86.2 KSI	594.7 MPA	88.4 KSI	609.5 MPA		
Elongation	19 %	19 %	20 %	20 %		
Gauge Length	8 INS	203 MM	8 INS	203 MM		
Reduction of Area						
Bend Test						
Diameter						
Charpy Impact						
Test Temp						
Sample Size						
Orientation						
Hardness						

Job # 7558
P/N: L1430401-180400
PO# 71070-BL

METALEX
Q. A. DEPT
ACCEPTED
DATE 7/16/07
BY TC
MTX
DC 20

JOMINY RESULTS - Rockwell C hardness at 1/16th Inch Increments

1	2	3	4	5	6	7	8	9	10	11	12
13	14	15	16	18	20	22	24	26	28	30	32

GRAIN SIZE
METHOD
RESULT

INCLUSION RATING

METHOD				
TYPE				
SIZE	T H	T H	T H	T H

100% MELTED AND MANUFACTURED IN THE USA AND FREE OF MERCURY CONTAMINATION IN THE PROCESS

REMARKS:

EXCEEDS THE PHYSICAL REQUIREMENTS OF ASTM A36.

Steel Dynamics®
Roanoke Bar Division

Steel Dynamics - Roanoke Bar Division
P.O. Box 13948 Roanoke, VA 24038
Office: 540-342-1831 Fax: 540-342-9437

Test and Inspection Report

NO. 39696-4
ROANOKE

07E03024

FREDERICK STEEL CO.
200 W NORTH BEND RD
CINCINNATI OH 45216-0000

Date 5/01/0

HEAT NUMBER	SIZE	1-YIELD Pt. KSI	ULTIMATE KSI	ELONG 8 IN.	BEND TEST	GRADE
JF6843	FLATS 1/4 X 5	43.9	64.4	32.5		A36

PURCHASE ORDER NUMBER	NUMBER PIECES	2-YIELD PT. KSI	ULTIMATE KSI	ELONG 8 IN.	BEND TEST	GRADE
106663	60 PIECES 20'	45.7	67.9	31.9		A36

HEAT NUMBER	SIZE	1-YIELD Pt. MPA	ULTIMATE MPA	ELONG 203mm	BEND TEST	GRADE
JF6843	FLATS 6.4 X 127.0	302.7	444.0	32.5		A36

PURCHASE ORDER NUMBER	NUMBER PIECES	2-YIELD PT. MPA	ULTIMATE MPA	ELONG 203mm	BEND TEST	GRADE
106663	60 PIECES 20'	315.1	468.2	31.9		A36

C	MN	S	P	SI	CR	NI	MO	CU	V	NB
.13	.66	.030	.007	.21	.08	.08	.02	.28	.001	.002

METALEX Q. A. DEPT ACCEPTED DATE 7/16/07 BY TC
MTX QC 20

Job# 7558
P/N: L1430401-100400
Po# 71070-BL

MERCURY, RADIUM OR OTHER ALPHA SOURCE MATERIALS IN ANY FORM HAVE NOT BEEN USED IN THE PRODUCTION OF THIS MATERIAL. NO WELD REPAIR HAS BEEN PERFORMED.

Approved ABS QA Mill. Certificate No. 00NN10108-X.

This material was melted and manufactured in the USA by basic Electric Furnace processes to meet specification: ASTM A36-05 ASME SA36 QQS741D A709-06A GR36 AASHTO M270 GR 36 IMPACTS WAIVED

The tensile values stated in either inch-pound units or SI units are to be regarded as separate as defined in the ASTM scope for this material. Unless a metric specification is ordered, this material has been tested and meets the requirements of the inch-pound ranges.

This is to certify the above to be a true and accurate report as contained in the records of this company.

Engineer of Tests: Charles R. Charlton

Attn Brian Lawson

CERTIFIED MILL TEST REPORT

For additional copies call (800) 637-3227

We hereby certify that the test results presented here are accurate and conform to the reported grade specification.

John F. Powell - CMC Steel AL
Quality Assurance Manager

CMC Steel - Alabama
P.O. Box 321188
Birmingham, AL 35232-1188
www.sml-al.com

CMC Steel - South Carolina
Box 2005
Cayce, SC 29171-2005
www.sml-sc.com

07B26025

HEAT NO.: J70358 SECTION: F 7x3/8 x20'0" F 178.9.5x6.096 GRADE: ASTM A36-05 ASTM A36M-05	SOLD TO FREDERICK STEEL CO 200 WEST NORTH BEND RD CINCINNATI, OH 45216-	SHIP TO FREDERICK STEEL 200 WEST NORTH BEND RD CINCINNATI, OH 45216-	SHIP#: 101941/177 BOL #: 266176 INV #: CUST PO#: 106527 CUST P/N:

CHEMICAL ANALYSIS	%
C	0.16
Mn	0.61
P	0.013
S	0.028
Si	0.20
Cu	0.33
Cr	0.11
Ni	0.09
Mo	0.019
Cb	0.000
V	0.003
Sn	0.011
B	0.0002
Ti	0.001
C.Eq.	0.32
AL	0.001
N	0.008

PROPERTIES

MECHANICAL	TEST 1 IMPERIAL	TEST 1 METRIC	TEST 2 IMPERIAL	TEST 2 METRIC	TEST 3 IMPERIAL	TEST 3 METRIC
Yield Strength	43.6 KSI	301.0 MPA	42.7 KSI	294.7 MPA		
Tensile Strength	69.0 KSI	475.8 MPA	67.9 KSI	468.3 MPA		
Elongation	28 %	28 %	27 %	27 %		
Gauge Length	8 INS	203 MM	8 INS	203 MM		
Reduction of Area						
Bend Test						
Diameter						
Charpy Impact						
Test Temp						
Sample Size						
Orientation						
Hardness						

Job# 7558
P/N: L1430401-100400
PO#: 71070-BL

METALEX Q.A. DEPT ACCEPTED DATE 7/16/07 BY TC
MTX 06 28

JOMINY RESULTS - Rockwell C hardness at 1/16th inch increments												GRAIN SIZE
1	2	3	4	5	6	7	8	9	10	11	12	METHOD
13	14	15	16	18	20	22	24	26	28	30	32	RESULT

INCLUSION RATING				
METHOD				
TYPE				
SIZE	T H	T H	T H	T H

100% MELTED AND MANUFACTURED IN THE USA AND FREE OF MERCURY CONTAMINATION IN THE PROCESS

REMARKS:

FEB-22-2007 13:23

Atlas Tube Canada ULC
200 Clark St.
Harrow, Ontario, Canada
NOR 1G0
Tel: 519-738-3541
Fax: 519-738-3537

Ref.B/L: 80242832
Date: 06.12.2007
Customer: 63

MATERIAL TEST REPORT

Sold to

Frederick Steel
200 W. North Bend Road
CINCINNATI OH 45216
USA

Shipped to

Frederick Steel
200 W. North Bend Road
CINCINNATI OH 45216
USA

07F13006

Material: 10.0x10.0x375x45'0"0(2x2). Material No: 100100375 Made in: Canada
Sales order: 306203 Purchase Order: 106753

Heat No	C	Mn	P	S	Si	Al	Cu	Cb	Mo	Ni	Cr	V
479379	0.200	0.800	0.013	0.003	0.160	0.052	0.026	0.005	0.002	0.008	0.036	0.000

Bundle No	Yield	Tensile	Eln.2in	Certification
M200448518	062620 Psi	075680 Psi	34.4 %	ASTM A500-03A GRADE C & B

Material Note:
Sales Or.Note:

Material: 10.0x10.0x375x45'0"0(1x1). Material No: 100100375 Made in: Canada
Sales order: 306203 Purchase Order: 106753

Heat No	C	Mn	P	S	Si	Al	Cu	Cb	Mo	Ni	Cr	V
679856	0.200	0.810	0.016	0.003	0.160	0.041	0.032	0.004	0.002	0.011	0.042	0.000

Bundle No	Yield	Tensile	Eln.2in	Certification
M200448513	057920 Psi	071280 Psi	35.8 %	ASTM A500-03A GRADE C & B

Material Note:
Sales Or.Note:

Material: 6.0x3.0x313x40'0"0(3x3). Material No: 600303134000 Made in: Canada
Sales order: 307413 Purchase Order: 106771

Heat No	C	Mn	P	S	Si	Al	Cu	Cb	Mo	Ni	Cr	V
120827	0.160	0.770	0.016	0.020	0.030	0.038	0.040	0.000	0.006	0.005	0.030	0.003

Bundle No	Yield	Tensile	Eln.2in	Certification
M100619084	063320 Psi	070490 Psi	34.3 %	ASTM A500-03A GRADE C & B

Material Note:
Sales Or.Note:

Material: 8.0x3.0x375x40'0"0(2x3). Material No: 800303754000 Made in: Canada
Sales order: 304925 Purchase Order: 106737

Heat No	C	Mn	P	S	Si	Al	Cu	Cb	Mo	Ni	Cr	V
478765	0.200	0.800	0.019	0.002	0.160	0.034	0.017	0.006	0.002	0.007	0.039	0.000

Bundle No	Yield	Tensile	Eln.2in	Certification
M100635600	068200 Psi	080330 Psi	30.5 %	ASTM A500-03A GRADE C & B

Material Note:
Sales Or.Note:

Authorized by Quality Assurance:

Job# 7558
P/N: 1430401-100400
PO# 71070-BL

METALEX MTX QC 20
Q. A. DEPT
ACCEPTED
DATE 7/16/07
BY TC

Steel Tube Institute OF NORTH AMERICA

Metals Service Center Institute

Reid Supply Company®
A Division of Reid Entities
Phone: 800-253-0421
231-777-3951
Fax: 800-438-1145
231-773-4485
2265 Black Creek Road • Muskegon, MI 49444-2684
www.reidsupply.com mail@reidsupply.com

METALEX
Q. A. DEPT
ACCEPTED
DATE 6/29/07
BY TC
MTX QC 20

H1-Tech 755B

* 3 7 5 4 4 5 7 *

P.O. #: 70778-JG-7558

Shipper No 03754457-0

Bill To: METALEX MFG INC
5750 CORNELL RD
CINCINNATI, OH 45242-2083

Ship To: METALEX MFG INC
5750 CORNELL RD
CINCINNATI, OH 45242-2083

Attn:

Phone

Customer No	Your P.O. No	Sched Date	Ship Via	Ship Date	Shipper No
29204	70778-JG-7558	05/23/07	U.P.S.	06/26/07	03754457-0

Line	Order Qty	Item	Description	Qty Shipped	Back Order
1	380	PF-22	PRESS FIT JIG FEET 6MM X 16MM	380	0

HS Tariff Code: 846620
Country of Origin: United States

1 WEEK LEAD TIME.
THANK YOU FOR YOUR ORDER.

Total Number of items: 1
Opr: KMF Branch: 11 SLSM: REID
Picker: JBH

Estimated Weight 14 lb 4.00 oz 6.470 kg

UPS GND PPD

RECEIVED
JUN 28 2007
METALEX MFG.
BY

All sales of products by Reid Supply Company are made on the terms contained in Reid Supply Company's standard Terms of Sale, which are incorporated by reference. If buyer has not otherwise agreed to those terms, then buyer's Acceptance of Delivery of, or Payment For, the goods will constitute buyer's agreement to the standard Terms of Sale. Reid Supply Company's standard Terms of Sale are available at www.reidsupply.com or by calling 800-253-0421 and requesting a copy.

CERTIFICATION OF COMPLIANCE
Reid Supply Company and it's divisions being ISO-9002 compliant does certify that according to our records the above material purchased was supplied in accordance with the description as illustrated in our catalog.

ALL ITEMS MANUFACTURED IN THE U.S.A UNLESS OTHERWISE NOTED.
THANK YOU VERY MUCH FOR YOUR ORDER

Cathy Reid, Document Control Supervisor

Packing List

Packing List

JUL-18-2007 12:48 FROM: TO:915134890827 P:1/1

METALEX MANUFACTURING INC
5750 CORNELL RD
CINCINNATI OH 45242

CALLER) JAMES GIFFIN

YOUR PURCHASE ORDER NUMBER
70779-JT
Today's Date:

MCMASTER-CARR
200 AURORA INDUSTRIAL PKWY
AURORA OH 44202
IF THERE ARE ANY QUESTIONS ABOUT THIS SHIPMENT CONTACT OUR SALES DEPARTMENT
(330)995-5500

PAGE 1
MCM NUMBER 4789768-01

EXTRA PACKING LIST

Warehouse Location	McMaster Carr Part Number	Full Quantity	Item Description	Your Line	Your Order	This Shipment
	90145 A537	18 PK	18-8 STAINLESS STEEL DOWEL PIN 1/4" DIAMETER,1/2" LENGTH PKG = 20 EA/PK 3 CERTIFICATE OF COMPLIANCE -This is to certify the above item(s) on your purchase order was supplied in accordance with the description and as illustrated in the catalog. Compliance Manager- Alberto Valadon	1	18 PK	18

Certificate of Compliance
This document certifies that according to our records, the material furnished on your purchase order was supplied in accordance with the description and illustration provided in our catalog.
Steve Tuttle
Steve Tuttle, Quality Assurance Manager

Post-it® Fax Note 7671	Date 7/18	# of pages ▶ 1
To JAMES GIFFIN	From	
Co./Dept. METALEX MFG	Co. MCMASTER-CARR	
Phone #	Phone #	
Fax # 513-489-0827	Fax #	

4789768-01

TALEX MANUFACTURING INC

FER TO:
UR
CP

LNS: 1 EST # PKG 1 WEIGHT 3

PACKER	Number of CARTONS	FILLER

CLE

MCM NO. 4789768-01 04

PURCHASE ORDER
70779-JT

FROM:
MCMASTER-CARR
200 AURORA INDUSTRIAL PKWY
AURORA OH 44202 USA

SHIP TO:

METALEX MANUFACTURING INC
BLUE ASH INDUSTRIAL PARK
5750 CORNELL RD
CINCINNATI OH
45242-2010

CCP

LB

METALEX
Q. A. DEPT
ACCEPTED
DATE 7/18/07
BY TC
MTX QC 20

SHERWIN-WILLIAMS.

SHERWIN-WILLIAMS
3143 E KEMPER RD
SHARONVILLE OH 45241

Visit www.sherwin-williams.com
Store 1246 ANDREW
(513)771-8572
Fax - (513)771-8590

PACKING SLIP
No. 5888-8

ACCOUNT: 6538-0111-8 JOB 01 METALEX MFG

PO:7126 JG

METALEX MFG
5750 CORNELL RD
CINCINNATI OH 45242 2010

DATE: 06/20/07
TIME: 8:30 AM

E23/13651 11

(513)489-0507

SALES NUMBER	SIZE	PRODUCT	DESCRIPTION		QUANTITY
630-4240	GALLON	B67H5	RCT EPX PR BUFF A		5
630-4265	GALLON	B67V5	RCT EPX PR HARD B		5
			TOTAL LINES	2	10

METALEX
Q. A. DEPT
ACCEPTED
DATE 6/29/07
BY TC
MTX QC 28

Job 7558

MXT
RECEIVED
JUN 20 2007
METALEX MFG.
BY CD

MERCHANDISE RECEIVED IN GOOD ORDER BY:

BILLY DATE (CENTRALIZED INVOICE)

The Sherwin–Williams Co.
3143 EAST KEMPER RD
CINCINNATI,OHIO 45241

METALEX
Q. A. DEPT
ACCEPTED
DATE 6/29/07
BY TC
MTX QC 20

Job 7558

CERTIFICATE OF COMPLIANCE
STATEMENT OF QUALITY

METALEX

PURCHASE ORDER 71261-JG
DATE OF MFG
SHELF LIFE
PART

QUANTITY
BATCH

IT IS HEREBY CERTIFIED THAT ALL MATERIAL USED IN THE MANUFACTURE OF PARTS IN THE QUALITY CALLED FOR ON THE SUBJECT PURCHASE ORDER, CONFORM TO THE MATERIALS AND/OR MANUFACTURING SPECIFICATIONS INDICATED IN DRAWINGS OF SPECIFICATIONS AS CALLED FOR ON SAID PURCHASE ORDER.

THE SHERWIN–WILLIAMS CO
3143 EAST KEMPER RD
CINCINNATI OHIO 45241

AUTHORIZED SIGNATURE
CUSTOMER SERVICE ADM

Shelf life 36 months
0X2696S
0X2716S
batch date 0X2785S B67VS
0X0275C B67HS
0X2005Z

SHERWIN-WILLIAMS.

SHERWIN-WILLIAMS
3143 E KEMPER RD
SHARONVILLE OH 45241

Visit www.sherwin-williams.com
Store 1246 KEVIN
(513)771-8572
Fax - (513)771-8590

PACKING SLIP
No. 7233-5

ACCOUNT: 6538-0111-8 JOB 01 METALEX MFG

PO:71829-BL-7558
ORDER:CE0025007Q1246
DATE: 07/16/07
TIME: 8:08 AM

METALEX MFG
5750 CORNELL RD
CINCINNATI OH 45242 2010

METALEX
Q. A. DEPT
ACCEPTED
DATE 7/16/07
BY TC

E16/13651 11

SALES NUMBER	SIZE	PRODUCT	DESCRIPTION	QUANTITY
6405-18999	GALLON	B62WZ111	TC HS EX WHT A	5

Color: SW4026 SLATE GRAY

BAC	Blend-a-Color	OZ	32	64	128
B1	Black	2	16	1	1
G2	New Green	-	3	-	-
Y3	Deep Gold	-	2	-	-

Sher-Color Formula

TOTAL LINES 1 5

RECEIVED
JUL 16 2007
METALEX MFG.
BY CD

OE16376

MERCHANDISE RECEIVED IN GOOD ORDER BY:

BILLY BLANTON DATE (CENTRALIZED INVOICE)

Metalex PO# 71829-BL-7558

Certificate of Conformance

Customer: Metalex Mfg. Inc.
Address: 5750 Cornell Rd.
Cincinnati, Oh. 45242
Attention: Quality Engineering Dept.

METALEX Q. A. DEPT ACCEPTED DATE 7/16/07 BY TC MTX QC 20

Item	Qty.	Part Number	Rev.	Part Name	Job #
1	5	B62WZ111		BATCH# OE 16372 TILECIAD H.S. SW4026 Shelf life 36 months	7558

SHERWIN WILLIAMS certifies that all materials, processes, etc. furnished to
Supplier Name

Metalex, for the purchase order number stated above, comply with all conditions stated in the P.O. for the items shown.

Signed/Dated: 7-16-07
Supplier Quality Rep.

cc: Hardcopy P.O. Books
MX4012 (5/95)

ATTN.: JAMES GRIFFIN

Metalex PO# 70772-JG-7558

Certificate of Conformance

Hi-Tech Job# 7558

METALEX Q. A. DEPT ACCEPTED DATE 6/5/07 BY KKB MTX QC 19

Customer: Metalex Mfg. Inc.
Address: 5730 Cornell Rd. Cincinnati, Oh. 45242
Attention: Quality Engineering Dept.

KKB 6/5/07 MTX QC 19

Shelf Life ID# 2835 thru 2839

Item	Qty.	Part Number	Rev.	Part Name	Job #
1.	5	B62W2111		TILECLAD H.S. EW. MC-56	SHELF LIFE 36 MONTH UN OPENE
2.	5	B60V2470		TILECLAD H.S. HARDNER	36 MONTH UN OPE
3.	1	R7K54		SI REDUCER	2 YEARS

Shelf Life ID# 2834
KKB 6/5/07 MTX QC 19

mx Shelf Life ID# 2841 thru 2844 KKB 6/5/07 MTX QC 19

SHERWIN WILLIAMS (Supplier Name) certifies that all materials, processes, etc. furnished to Metalex, for the purchase order number stated above, comply with all conditions stated in the P.O. for the items shown.

Signed/Dated: _____
Vendor Quality Rep.

cc: Handcopy P.O. Books

MX4012 (3/95)

Metalex Manufacturing Inc.
5750 Cornell Road · Cincinnati, OH 45242
Phone (513) 489-0507 · Fax (513) 489-1020
EMAIL: metalex@metalexmfg.com

Metalex
Customized Machinery and Parts
ISO 9001:2000 and AS9100 CERTIFIED
Veteran Owned Business 30 Plus Years

METALEX WELD CERTIFICATION

MX JOB #: 07-7558 QTY 4 CUSTOMER: Hi-Tech Manufacturing, Inc.

PART NAME: Support Girder

PART NUMBER: L1430401-100400 REVISION: 5V

S/N: (if applicable) 7A-08198-01 thru -04

METALEX PROCEDURE # WPS 146 (K. Ballard), WPS 194-1 (G. Black)

CUST. SPECIFICATION # AWS D1.1

WELD WIRE SPEC AWS A5.20

TYPE E71T-1

HEAT 79526, 81192, 80622

DIAMETER .062

SERIAL NUMBER	WELDER
7A-08198-01	Ken Ballard
7A-08198-02	Greg Black
7A-08198-03	Ken Ballard
7A-08198-04	Greg Black

THE ABOVE PARTS LISTED WERE WELDED IN ACCORDANCE WITH THE REFERENCED WELDING SPECIFICATION.

Metalex Quality Control

7/30/07
Date

MX1025 (9/98)

WELDING OPERATOR QUALIFICATION (WPQ)

Welding Specification: ASME IX & AWS D1.1

Welder's Name: Ken Ballard | Employee No.: 334 | WPQ No.: 146

Welding Process(es) used: FCAW | Type: Semi-Automatic

Identification of WPS followed by welder during welding of test coupon: WPS 146

Base Material(s) welded: ASME IX: P1 to P1 (A36)
AWS D1.1: Group 1 to Group 1 (A36) | Thickness: .375"

Manual or Semi-Automatic Variables for Each Process	Actual Values	Range Qualified
Penetration – Complete or Partial	Complete	Complete
Single or Double Weld	Single	Single
Backing (metal, weld metal, welded from both sides, flux, etc)	Yes	Yes
ASME IX P-No. to ASME IX P-No.	1	1
AWS D 17.1. Group No. to Group No.	N/A	N/A
AWS D 1.1. Group-No. to Group-No.	1	1
Plate X Pipe (enter diameter, if pipe)	.375"	ASME IX: .0625" - .75" AWS D1.1: .125" - .75"
Filler Metal Specification (SFA): 5.20 Classification	E71T-1	-
Filler Metal F-No.	6	6
Consumable Insert for GTAW or PAW	N/A	N/A
Weld deposit thickness for each welding process (ASME IX)	.375"	.750" max
Weld deposit thickness for each welding process (AWS D 17.1)	N/A	N/A
Weld deposit thickness for each welding process (AWS D 1.1)	.375"	.750" max
Welding Position (1G, 5G, etc)	1G	1G
Progression (uphill/downhill)	N/A	N/A
Backing Gas	N/A	N/A
GMAW Transfer Mode	N/A	N/A
Welding current type / polarity	DC REverse	DC Reverse

GUIDED BEND TEST RESULTS

Guided Bend Tests Type: (Side) Results ☒ (Trans. R&F) Type ☐ (Long.R&F) Results ☐

1 - Acceptable	4 - Acceptable		
2 - Acceptable			
3 - Acceptable			

Visual test results: Pass | Radiographic test results: N/A

Fillet Weld – Fracture Test: N/A | Length and percent of defects: N/A in.

Macro test fusion: N/A | Fillet leg size: N/A in. X N/A in | Concavity/convexity: N/A in.

Welding test conducted by: Metalex Manufacturing

Mechanical tests conducted by: MQS Inspection | Lab test no.: 0594-5586

We certify that the statements in this record are correct and that the test welds were prepared and tested in accordance with the requirements of the above referenced welding specification. The above named individual is qualified in accordance with the above referenced welding specification within the above limits for the welding process used for this test.

Date: 5/19/94 By: Katrina Black / 7/31/00
Metalex Manufacturing, Inc.

* Revised By/Date: 7/26/07
Revised to transfer info to updated Form to include AWS D1.1 info.

MX7051 (07/07)

WELDING OPERATOR QUALIFICATION (WPQ)

Welding Specification AWS D1.1

Welder's Name Greg Black Employee No. 132 WPQ No. 194-1

Welding Process(es) used FCAW Type Semi-Automatic

Identification of WPS followed by welder during welding of test coupon 194-1

Base Material(s) welded Group II to Group II (A572 to A572) Thickness .500"

Manual or Semi-Automatic Variables for Each Process	Actual Values	Range Qualified
Penetration – Complete or Partial	Complete	Complete
Single or Double Weld	Single	Single
Backing (metal, weld metal, welded from both sides, flux, etc)	N/A	N/A
ASME IX P-No. to ASME IX P-No.	N/A	N/A
AWS D 17.1. Group No. to Group No.	N/A	N/A
AWS D 1.1. Group-No. to Group-No.	.500"	.125" - 1.00"
Plate X Pipe (enter diameter, if pipe)	.500"	.125" - 1.00"
Filler Metal Specification (SFA): 5.20 Classification	E71T-1	E71T-1
Filler Metal F-No.	6	6
Consumable Insert for GTAW or PAW	N/A	N/A
Weld deposit thickness for each welding process (ASME IX)	N/A	N/A
Weld deposit thickness for each welding process (AWS D 17.1)	N/A	N/A
Weld deposit thickness for each welding process (AWS D 1.1)	1.00" max	1.00" max
Welding Position (1G, 5G, etc)	1G	1G
Progression (uphill/downhill)	N/A	N/A
Backing Gas	Argon	Argon
GMAW Transfer Mode	N/A	N/A
Welding current type / polarity	DC Reverse	DC Reverse

GUIDED BEND TEST RESULTS

Guided Bend Tests Type: (Side) Results ☒ (Trans. R&F) Type ☐ (Long.R&F) Results ☐

Side - Acceptable	Side - Acceptable		
Side - Acceptable			
Side - Acceptable			

Visual test results Pass Radiographic test results Pass

Fillet Weld – Fracture Test N/A Length and percent of defects N/A in.

Macro test fusion N/A Fillet leg size N/A in. X ____ in Concavity/convexity ____ in.

Welding test conducted by Metalex Manufacturing

Mechanical tests conducted by Cooperheat MQS Lab test no. 303-04557-1

We certify that the statements in this record are correct and that the test welds were prepared and tested in accordance with the requirements of the above referenced welding specification. The above named individual is qualified in accordance with the above referenced welding specification within the above limits for the welding process used for this test.

Date: 2/26/04 By: Tom Fully / KKB

Metalex Manufacturing, Inc.

* Revised by: [signature] ~~7/27/07~~ 7/26/07 RB

to transfer to revised form to add AWS D1.1. info.

MX7051 (07/07)

CERTIFICATE OF ANALYSIS

ESAB

CERTIFICATE OF TYPICAL ANALYSIS

ORDER # : 0
PART NUMBER: 245015904

CUSTOMER NAME: INDIANA OXYGEN
5704 STATE ROUTE 128
CLEVES

P.O. 67952

METALEX Q.A. DEPT ACCEPTED DATE 1/26/07 BY TC MTX QC 20

DIAMETER & LENGTH: 1/16
TRADE NAME: DUAL SHIELD
TYPE : 70 ULTRA PLUS
HEAT NO: 79526
CLASSIFICATION : E71T-1M/T-9M
This material conforms to :
AWS A5.20-95, ASME SFA 5.20

CHEMICAL ANALYSIS :

	PROPERTIES	SPEC. REQUIREMENTS
Carbon	0.04	0.18 Max
Manganese	1.18	1.75 Max
Silicon	0.64	0.90 Max
Phosphorus	0.018	0.03 Max
Sulphur	0.013	0.03 Max
Chromium	0.04	0.20 Max
Nickel	0.01	0.50 Max
Molybdenum	0.01	0.30 Max
Vanadium	0.02	0.08 Max
Copper	0.04	0.35 Max

RADIOGRAPHY :
XRAY Satisfactory

DIFFUSIBLE HYDROGEN :
AVERAGE : 2.2 (ml/100gr Avg).
GAS USED : 75AR/25CO2

TENSILE REQUIREMENTS:
AS WELDED
MIN YIELD(psi) : 58000
MIN YIELD(MPa) : 400
MIN TENSILE(psi) : 70000
MIN TENSILE(MPa) : 480 MAX TENSILE(MPa) :
MIN ELONG : 22

TENSILE RESULTS :

	AS WELDED
GAS USED :	75AR/25CO2
CALCULATE YIELD(psi) :	76250
CALCULATE YIELD(Mpa) :	526
CALCULATE TENSILE(psi) :	86250
CALCULATE TENSILE(Mpa) :	595
% ELONGATION :	27.0
% REDUCTION OF AREA :	71.8

The ESAB Group, Inc.
1500 Karen Lane
Hanover, PA 17331
www.esab.com
Fax: 1-800-444-8911
Phone: 1-800-123ESAB

By: K. Wildasin
K. Wildasin, Supervisor, Q.A. Services

ISO 9001 REGISTERED QUALITY SYSTEM

CERTIFICATE OF ANALYSIS

ORDER # : 0
PART NUMBER: 245015904

P.O. 67952

METALEX Q. A. DEPT ACCEPTED DATE 1/26/07 BY TC
MTX DOC 28

CHARPY V-NOTCH REQUIREMENTS:
AS-WELDED :

CVN TEMPERATURE (F) :	0
CVN TEMPERATURE (C) :	-18
CVN AW MIN (FT-LBS) :	20
CVN AW MIN (JOULES) :	27

CHARPY V-NOTCH RESULTS:
AS-WELDED :

TEMP(F)	FT-LBS	TEMP(C)	JOULES	GAS
0	106	-18	144	75AR/25CO2
-20	100	-29	136	75AR/25CO2

FILLET : Satisfactory

This material is certified to be free of any mercury.
The undersigned certifies that the product supplied will meet the requirements of the applicable AWS Filler Metal Specification when tested in accordance with that specification, and that no significant change has been made in the elements described in the qualification approval

The ESAB Group, Inc.
1500 Karen Lane
Hanover, PA 17331
www.esab.com
Fax: 1-800-444-8911
Phone: 1-800-123ESAB

By: K. Wildasin
K. Wildasin, Supervisor, Q.A. Services

ESAB

CERTIFICATE OF ANALYSIS

CERTIFICATE OF TYPICAL ANALYSIS

ORDER # : 282637
PART NUMBER: 245015904

USTOMER NAME: Indiana Oxygen Co
5704 STATE RD 128
CLEVES
OH 45002

PO# 71400

METALEX MTX QC 20
Q.A. DEPT
ACCEPTED
DATE 6/26/07
BY TC

USTOMERS ORDER NO:	102836
IAMETER & LENGTH:	1/16
RADE NAME:	DUAL SHIELD
YPE :	70 ULTRA PLUS
EIGHT:	396
OT NO:	81192
LASSIFICATION :	E71T-1M/T-9M

his material conforms to :
WS A5.20-95, ASME SFA 5.20

HEMICAL ANALYSIS :

	PROPERTIES	SPEC. REQUIREMENTS
arbon	0.04	0.18 Max
anganese	1.18	1.75 Max
ilicon	0.64	0.90 Max
hosphorus	0.018	0.03 Max
ulphur	0.013	0.03 Max
hromium	0.04	0.20 Max
ickel	0.01	0.50 Max
olybdenum	0.01	0.30 Max
anadium	0.02	0.08 Max
opper	0.04	0.35 Max

RADIOGRAPHY :

XRAY Satisfactory

DIFFUSIBLE HYDROGEN :

AVERAGE : 2.2 (ml/100gr Avg).
GAS USED : 75AR/25CO2

TENSILE REQUIREMENTS:

AS WELDED

MIN YIELD(psi) :	58000
MIN YIELD(MPa) :	400
MIN TENSILE(psi) :	70000
MIN TENSILE(MPa) :	480
MIN ELONG :	22

MAX TENSILE(MPa) :

TENSILE RESULTS :

	AS WELDED
GAS USED :	75AR/25CO2
CALCULATE YIELD(psi) :	76250
CALCULATE YIELD(Mpa) :	526
CALCULATE TENSILE(psi) :	86250
CALCULATE TENSILE(Mpa) :	595

The ESAB Group, Inc.
1500 Karen Lane
Hanover, PA 17331
www.esab.com
Fax: 1-800-444-8911
Phone: 1-800-123ESAB

By: K. Wildasin
K. Wildasin, Supervisor, Q.A. Services

ISO 9001 QMI REGISTERED QUALITY SYSTEM

CERTIFICATE OF ANALYSIS

ESAB

ORDER # : 282637
PART NUMBER: 245015904

ELONGATION : 27.0
REDUCTION OF AREA : 71.8

HARPY V-NOTCH REQUIREMENTS:
S-WELDED :
VN TEMPERATURE (F) : 0
VN TEMPERATURE (C) : -18
VN AW MIN (FT-LBS) : 20
VN AW MIN (JOULES) : 27

METAL - MTX
Q.A. DEPT QC 20
ACCEPTED
DATE 6/26/07
BY TC

HARPY V-NOTCH RESULTS:
S-WELDED :

EMP(F)	FT-LBS	TEMP(C)	JOULES	GAS
	106	-18	144	75AR/25CO2
20	100	-29	136	75AR/25CO2

ILLET : Satisfactory

his material is certified to be free of any mercury.
he undersigned certifies that the product supplied will meet the requirements of the applicable AWS
iller Metal Specification when tested in accordance with that specification, and that no
ignificant change has been made in the elements described in the qualification approval

The ESAB Group, Inc.
1500 Karen Lane
Hanover, PA 17331
www.esab.com
Fax: 1-800-444-8911
Phone: 1-800-123ESAB

By: K. Wildasin
K. Wildasin, Supervisor, Q.A. Services

ISO 9001 DMI REGISTERED QUALITY SYSTEM

DATE : 01/10/007
PAGE : 1

CERTIFICATE OF ANALYSIS

ESAB

CERTIFICATE OF TYPICAL ANALYSIS

ORDER # : 0
PART NUMBER: 245015904

CUSTOMER NAME: INDIANA OXYGEN
5704 STATE ROUTE 128

P.O. 67952

METALEX
QA DEPT.
ACCEPTED
DATE 1/12/07
BY TC
MTX QC 20

DIAMETER & LENGTH: 1/16
TRADE NAME: DUAL SHIELD
TYPE : 70 ULTRA PLUS
HEAT NO: 80622
CLASSIFICATION : E71T-1M/T-9M
This material conforms to :
AWS A5.20-95, ASME SFA 5.20

CHEMICAL ANALYSIS :

	PROPERTIES	SPEC. REQUIREMENTS
Carbon	0.04	0.18 Max
Manganese	1.18	1.75 Max
Silicon	0.64	0.90 Max
Phosphorus	0.018	0.03 Max
Sulphur	0.013	0.03 Max
Chromium	0.04	0.20 Max
Nickel	0.01	0.50 Max
Molybdenum	0.01	0.30 Max
Vanadium	0.02	0.08 Max
Copper	0.04	0.35 Max

RADIOGRAPHY :
XRAY Satisfactory

DIFFUSIBLE HYDROGEN :
AVERAGE : 2.2 (ml/100gr Avg).
GAS USED : 75AR/25CO2

TENSILE REQUIREMENTS:
AS WELDED
MIN YIELD(psi) : 58000
MIN YIELD(MPa) : 400
MIN TENSILE(psi) : 70000
MIN TENSILE(MPa) : 480
MAX TENSILE(MPa) :
MIN ELONG : 22

TENSILE RESULTS :

	AS WELDED
GAS USED :	75AR/25CO2
CALCULATE YIELD(psi) :	76250
CALCULATE YIELD(Mpa) :	526
CALCULATE TENSILE(psi) :	86250
CALCULATE TENSILE(Mpa) :	595
% ELONGATION :	27.0
% REDUCTION OF AREA :	71.8

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Phone: 1-800-123ESAB

By: K. Ildasin
K. Wildasin, Supervisor, Q.A. Services

CERTIFICATE OF ANALYSIS

ESAB

ORDER # : 0
PART NUMBER: 245015904

CHARPY V-NOTCH REQUIREMENTS:
AS-WELDED :

CVN TEMPERATURE (F) :	0
CVN TEMPERATURE (C) :	-18
CVN AW MIN (FT-LBS) :	20
CVN AW MIN (JOULES) :	27

CHARPY V-NOTCH RESULTS:
AS-WELDED :

TEMP(F)	FT-LBS	TEMP(C)	JOULES	GAS
0	106	-18	144	75AR/25CO2
-20	100	-29	136	75AR/25CO2

FILLET : Satisfactory

This material is certified to be free of any mercury.
The undersigned certifies that the product supplied will meet the requirements of the applicable AWS Filler Metal Specification when tested in accordance with that specification, and that no significant change has been made in the elements described in the qualification approval

P.O. 67952

METALEX
QA DEPT.
ACCEPTED
DATE 1/12/07
BY TC

MTX QC 20

The ESAB Group, Inc.
1500 Karen Lane
Hanover, PA 17331
www.esab.com
Fax: 1-800-444-8911
Phone: 1-800-123ESAB

By: K. Wildasin
K. Wildasin, Supervisor, Q.A. Services

Metalex Manufacturing
L1430401-100400 Girder Support
Hi-Tech Purchase Order No. 16185

Visual Weld Inspection Report

Metalex Job: 2007-7558 **Serial Number: 7A-08198- (01)**

Welding and Visual Welding Inspection Requirements:

Per SOW L143-00093 Section 4.1.4.2: For all welded parts, the welding practice shall conform to the Structural Welding Code, ANSI/AWS D1.1-D1.1M:2004..

Per SOW L143-00093 Section 4.1.4.2.2: All structural welds shall be visually inspected as defined in section 6.9 of the Structural Welding Code. The contractor shall certify that the welds were inspected and were acceptable.

Part Print L1430401-100400 sheet 1 of 3.

Fabrication Stage#1

Features: W1 and W2

Acceptable (Y/N) YES **Initial:** B.H. MTX QC 16 **Date:** 6/5/07

Fabrication Stage#2

Features: W3, W4 and W5

Acceptable (Y/N) YES **Initial:** B.H. MTX QC 16 **Date:** 6/8/07

Fabrication Stage#3

B.H. 6/18/07

Features: W6, W7, W8, W9, W10, W11 and W12

Acceptable (Y/N) YES **Initial:** B.H. MTX QC 16 **Date:** 6/9/07

Verification of completion of weld visual inspection:

Completed By: MTX QC 16 **Date:** 6/9/07

5750 Cornell Road • Blue Ash Industrial Park • Cincinnati, OH 45242
Phone (513) 489-0507 • Fax (513) 489-1020

Metalex Manufacturing
L1430401-100400 Girder Support
Hi-Tech Purchase Order No. 16185

Visual Weld Inspection Report

Metalex Job: 2007-7558 Serial Number: 7A-08198- (02)

Welding and Visual Welding Inspection Requirements:

Per SOW L143-00093 Section 4.1.4.2: For all welded parts, the welding practice shall conform to the Structural Welding Code, ANSI/AWS D1.1-D1.1M:2004..

Per SOW L143-00093 Section 4.1.4.2.2: All structural welds shall be visually inspected as defined in section 6.9 of the Structural Welding Code. The contractor shall certify that the welds were inspected and were acceptable.

Part Print L1430401-100400 sheet 1 of 3.

Fabrication Stage#1

Features: W1 and W2

Acceptable (Y/N) YES Initial: B.H. MTX QC 16 Date: 6/5/07

Fabrication Stage#2

Features: W3, W4 and W5

Acceptable (Y/N) YES Initial: B.H. MTX QC 16 Date: 6/7/07

Fabrication Stage#3 6/7/07

Features: W6, W7, W8, W9, W10, W11 and W12

Acceptable (Y/N) YES Initial: B.H. MTX QC 16 Date: 6/8/07

Verification of completion of weld visual inspection:

Completed By: [signature] MTX QC 16 Date: 6/8/07

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Phone (513) 489-0507 • Fax (513) 489-1020

Metalex Manufacturing
L1430401-100400 Girder Support
Hi-Tech Purchase Order No. 16185

Visual Weld Inspection Report

Metalex Job: 2007-7558 **Serial Number: 7A-08198- (03)**

Welding and Visual Welding Inspection Requirements:

Per SOW L143-00093 Section 4.1.4.2: For all welded parts, the welding practice shall conform to the Structural Welding Code, ANSI/AWS D1.1-D1.1M:2004..

Per SOW L143-00093 Section 4.1.4.2.2: All structural welds shall be visually inspected as defined in section 6.9 of the Structural Welding Code. The contractor shall certify that the welds were inspected and were acceptable.

Part Print L1430401-100400 sheet 1 of 3.

Fabrication Stage#1

Features: W1 and W2

Acceptable (Y/N) YES **Initial:** B.H. (MTX QC 16) **Date:** 6/20/07 .

Fabrication Stage#2

Features: W3, W4 and W5

Acceptable (Y/N) YES **Initial:** B.H. (MTX QC 16) **Date:** 6/21/07 .

Fabrication Stage#3

Features: W6, W7, W8, W9, W10, W11 and W12

Acceptable (Y/N) YES **Initial:** B.H. (MTX QC 16) **Date:** 6/22/07 .

Verification of completion of weld visual inspection:

Completed By: [signature] (MTX QC 16) **Date:** 6/22/07

5750 Cornell Road • Blue Ash Industrial Park • Cincinnati, OH 45242
Phone (513) 489-0507 • Fax (513) 489-1020

Metalex Manufacturing
L1430401-100400 Girder Support
Hi-Tech Purchase Order No. 16185

Visual Weld Inspection Report

Metalex Job: 2007-7558 Serial Number: 7A-08198- (04)

Welding and Visual Welding Inspection Requirements:

Per SOW L143-00093 Section 4.1.4.2: For all welded parts, the welding practice shall conform to the Structural Welding Code, ANSI/AWS D1.1-D1.1M:2004..

Per SOW L143-00093 Section 4.1.4.2.2: All structural welds shall be visually inspected as defined in section 6.9 of the Structural Welding Code. The contractor shall certify that the welds were inspected and were acceptable.

Part Print L1430401-100400 sheet 1 of 3.

Fabrication Stage#1

Features: W1 and W2

Acceptable (Y/N) YES Initial: B.H. MTX QC 16 Date: 6/22/07

Fabrication Stage#2

Features: W3, W4 and W5

Acceptable (Y/N) YES Initial: B.H. MTX QC 16 Date: 6/23/07

Fabrication Stage#3

Features: W6, W7, W8, W9, W10, W11 and W12

Acceptable (Y/N) YES Initial: B.H. MTX QC 16 Date: 6/25/07

Verification of completion of weld visual inspection:

Completed By: MTX QC 16 Date: 6/25/07

5750 Cornell Road • Blue Ash Industrial Park • Cincinnati, OH 45242
Phone (513) 489-0507 • Fax (513) 489-1020

Metalex Manufacturing
L1430401-100400 Girder Support
Hi-Tech Purchase Order No. 16185

Serialization Sheet

Part Print L1430401-100400 sheet 1 of 3. Qty-38 Units

Metalex Job: 2007-7558

Serial Numbers:

7A-08198-01	7A-08198-14	7A-08198-27
7A-08198-02	7A-08198-15	7A-08198-28
7A-08198-03	7A-08198-16	7A-08198-29
7A-08198-04	7A-08198-17	7A-08198-30
7A-08198-05	7A-08198-18	7A-08198-31
7A-08198-06	7A-08198-19	7A-08198-32
7A-08198-07	7A-08198-20	7A-08198-33
7A-08198-08	7A-08198-21	7A-08198-34
7A-08198-09	7A-08198-22	7A-08198-35
7A-08198-10	7A-08198-23	7A-08198-36
7A-08198-11	7A-08198-24	7A-08198-37
7A-08198-12	7A-08198-25	7A-08198-38
7A-08198-13	7A-08198-26	

5750 Cornell Road • Blue Ash Industrial Park • Cincinnati, OH 45242
Phone (513) 489-0507 • Fax (513) 489-1020

be measured with suitable gages. Visual ins
cracks in welds and base metal and other dis
should be aided by a strong light, magnifie
other devices as may be found helpful.

6.5.6 Inspector Identification of Inspections Performed. Inspectors shall identify with a distinguishing mark or other recording methods all parts or joints that they have inspected and accepted. Any recording method which is mutually agreeable may be used. Die stamping of cyclically loaded members without the approval of the Engineer shall be prohibited.

6.5.7 Maintenance of Records. The Inspector shall keep a record of qualifications of all welders, welding operators, and tack welders; all WPS qualifications or other tests that are made; and such other information as may be required.

Part B
Contractor Responsibilities

6.6 Obligations of the Contractor

6.6.1 Contractor Responsibilities. The Contractor shall be responsible for visual inspection and necessary correction of all deficiencies in materials and workmanship in conformance with the requirements of this code.

6.6.2 Inspector Requests. The Contractor shall comply with all requests of the Inspector(s) to correct deficiencies in materials and workmanship as provided in the contract documents.

6.6.3 Engineering Judgment. In the event that faulty welding, or its removal for rewelding, damages the base metal so that in the judgment of the Engineer its retention is not in conformance with the intent of the contract documents, the Contractor shall remove and replace the damaged base metal or shall compensate for the deficiency in a manner approved by the Engineer.

6.6.4 Specified NDT Other than Visual. When NDT other than visual inspection is specified in the information furnished to bidders, it shall be the Contractor's responsibility to ensure that all specified welds shall meet the quality requirements of Section 6, Part C, whichever is applicable.

6.6.5 Nonspecified NDT Other than Visual. If NDT other than visual inspection is not specified in the original contract agreement but is subsequently requested by the Owner, the Contractor shall perform any requested testing or shall allow any testing to be performed in conformance th 6.14. The Owner shall be responsible for all associ-
ed costs including handling, surface preparation, NDT,
d repair of discontinuities other than those described in
9, whichever is applicable, at rates mutually agreeable between Owner and Contractor. However, if such testing should disclose an attempt to defraud or gross nonconformance to this code, repair work shall be done at the Contractor's expense.

Part C
Acceptance Criteria

6.7 Scope

Acceptance criteria for visual and NDT inspection of tubular connections and statically and cyclically loaded nontubular connections are described in Part C. The extent of examination and the acceptance criteria shall be specified in the contract documents on information furnished to the bidder.

6.8 Engineer's Approval for Alternate Acceptance Criteria

The fundamental premise of the code is to provide general stipulations applicable to most situations. Acceptance criteria for production welds different from those described in the code may be used for a particular application, provided they are suitably documented by the proposer and approved by the Engineer. These alternate acceptance criteria may be based upon evaluation of suitability for service using past experience, experimental evidence or engineering analysis considering material type, service load effects, and environmental factors.

6.9 Visual Inspection

All welds shall be visually inspected and shall be acceptable if the criteria of Table 6.1 are satisfied.

6.10 PT and MT

Welds that are subject to MT and PT, in addition to visual inspection, shall be evaluated on the basis of the applicable requirements for visual inspection. The testing shall be performed in conformance with 6.14.4 or 6.14.5, whichever is applicable.

Table 6.1
Visual Inspection Acceptance Criteria (see 6.9)

Discontinuity Category and Inspection Criteria	Statically Loaded Nontubular Connections	Cyclically Loaded Nontubular Connections	Tubular Connections (All Loads)
(1) Crack Prohibition Any crack shall be unacceptable, regardless of size or location.	X	X	X
(2) Weld/Base-Metal Fusion Thorough fusion shall exist between adjacent layers of weld metal and between weld metal and base metal.	X	X	X
(3) Crater Cross Section All craters shall be filled to provide the specified weld size, except for the ends of intermittent fillet welds outside of their effective length.	X	X	X
(4) Weld Profiles Weld profiles shall be in conformance with 5.24.	X	X	X
(5) Time of Inspection Visual inspection of welds in all steels may begin immediately after the completed welds have cooled to ambient temperature. Acceptance criteria for ASTM A 514, A 517, and A 709 Grade 100 and 100 W steels shall be based on visual inspection performed not less than 48 hours after completion of the weld.	X	X	X
(6) Undersized Welds The size of a fillet weld in any continuous weld may be less than the specified nominal size (L) without correction by the following amounts (U): L, specified nominal weld size, in. [mm] — U, allowable decrease from L, in. [mm] ≤ 3/16 [5] — ≤ 1/16 [2] 1/4 [6] — ≤ 3/32 [2.5] ≥ 5/16 [8] — ≤ 1/8 [3] In all cases, the undersize portion of the weld shall not exceed 10% of the weld length. On web-to-flange welds on girders, underrun shall be prohibited at the ends for a length equal to twice the width of the flange.	X	X	X
(7) Undercut (A) For material less than 1 in. [25 mm] thick, undercut shall not exceed 1/32 in. [1 mm], with the following exception: undercut shall not exceed 1/16 in. [2 mm] for any accumulated length up to 2 in. [50 mm] in any 12 in. [300 mm]. For material equal to or greater than 1 in. thick, undercut shall not exceed 1/16 in. [2 mm] for any length of weld.	X		
(B) In primary members, undercut shall be no more than 0.01 in. [0.25 mm] deep when the weld is transverse to tensile stress under any design loading condition. Undercut shall be no more than 1/32 in. [1 mm] deep for all other cases.		X	X
(8) Porosity (A) CJP groove welds in butt joints transverse to the direction of computed tensile stress shall have no visible piping porosity. For all other groove welds and for fillet welds, the sum of the visible piping porosity 1/32 in. [1 mm] or greater in diameter shall not exceed 3/8 in. [10 mm] in any linear inch of weld and shall not exceed 3/4 in. [20 mm] in any 12 in. [300 mm] length of weld.	X		
(B) The frequency of piping porosity in fillet welds shall not exceed one in each 4 in. [100 mm] of weld length and the maximum diameter shall not exceed 3/32 in. [2.5 mm]. Exception: for fillet welds connecting stiffeners to web, the sum of the diameters of piping porosity shall not exceed 3/8 in. [10 mm] in any linear inch of weld and shall not exceed 3/4 in. [20 mm] in any 12 in. [300 mm] length of weld.		X	X
(C) CJP groove welds in butt joints transverse to the direction of computed tensile stress shall have no piping porosity. For all other groove welds, the frequency of piping porosity shall not exceed one in 4 in. [100 mm] of length and the maximum diameter shall not exceed 3/32 in. [2.5 mm].		X	X

General Note: An "X" indicates applicability for the connection type; a shaded area indicates non-applicability.

and shall have at least 75% of the stiffener bearing cross-sectional area in contact with the inner surface of the flanges. The outer surface of the flanges when bearing against a steel base or seat shall fit within 0.010 in. [0.25 mm] for 75% of the projected area of web and stiffeners and not more than 1/32 in. [1 mm] for the remaining 25% of the projected area. Girders without stiffeners shall bear on the projected area of the web on the outer flange surface within 0.010 in. [0.25 mm] and the included angle between web and flange shall not exceed 90° in the bearing length (see Commentary).

5.23.11 Tolerance on Stiffeners

5.23.11.1 Fit of Intermediate Stiffeners. Where tight fit of intermediate stiffeners is specified, it shall be defined as allowing a gap of up to 1/16 in. [2 mm] between stiffener and flange.

5.23.11.2 Straightness of Intermediate Stiffeners. The out-of-straightness variation of intermediate stiffeners shall not exceed 1/2 in. [12 mm] for girders up to 6 ft [1.8 m] deep, and 3/4 in. [20 mm] for girders over 6 ft [1.8 m] deep, with due regard for members which frame into them.

5.23.11.3 Straightness and Location of Bearing Stiffeners. The out-of-straightness variation of bearing stiffeners shall not exceed 1/4 in. [6 mm] up to 6 ft [1.8 m] deep or 1/2 in. [12 mm] over 6 ft [1.8 m] deep. The actual centerline of the stiffener shall lie within the thickness of the stiffener as measured from the theoretical centerline location.

5.23.11.4 Other Dimensional Tolerances. Twist of box members and other dimensional tolerances of members not covered by 5.23 shall be individually determined and mutually agreed upon by the Contractor and the Owner with proper regard for erection requirements.

5.24 Weld Profiles

All welds, except as otherwise allowed below, shall be free from cracks, overlaps, and the unacceptable profile discontinuities exhibited in Figure 5.4.

5.24.1 Fillet Welds. The faces of fillet welds may be slightly convex, flat, or slightly concave as shown in Figure 5.4. Figure 5.4(C) shows typically unacceptable fillet weld profiles.

5.24.2 Intermittent Fillet Welds. Except for undercut, as allowed by the code, the profile requirements of Figure 5.4 shall not apply to the ends of intermittent fillet welds outside their effective length.

5.24.3 Convexity. Except at outside welds in corner joints, the convexity C of a weld or individual surface bead shall not exceed the values given in Figure 5.4.

5.24.4 Groove or Butt Welds. Groove welds shall be made with minimum face reinforcement unless otherwise specified. In the case of butt and corner joints, face reinforcement shall not exceed 1/8 in. [3 mm] in height. All welds shall have a gradual transition to the plane of the base-metal surfaces with transition areas free from undercut except as allowed by this code. Figure 5.4(D) shows typically acceptable groove weld profiles in butt joints. Figure 5.4(E) shows typically unacceptable weld profiles for groove weld butt joints.

5.24.4.1 Flush Surfaces. Butt welds required to be flush shall be finished so as to not reduce the thicknesses of the thinner base metal or weld metal by more than 1/32 in. [1 mm], or 5% of the material thickness, whichever is less. Remaining reinforcement shall not exceed 1/32 in. [1 mm] in height. However, all reinforcement shall be removed where the weld forms part of a faying or contact surface. All reinforcement shall blend smoothly into the plate surfaces with transition areas free from undercut.

5.24.4.2 Finish Methods and Values. Chipping and gouging may be used provided these are followed by grinding. Where surface finishing is required, roughness values (see ASME B46.1) shall not exceed 250 microinches [6.3 micrometers]. Surfaces finished to values of over 125 microinches [3.2 micrometers] through 250 microinches [6.3 micrometers] shall be finished parallel to the direction of primary stress. Surfaces finished to values of 125 microinches [3.2 micrometers] or less may be finished in any direction.

5.25 Technique for Plug and Slot Welds

5.25.1 Plug Welds. The technique used to make plug welds when using SMAW, GMAW, (except GMAW-S), and FCAW processes shall be as follows:

5.25.1.1 Flat Position. For welds to be made in the flat position, each pass shall be deposited around the root of the joint and then deposited along a spiral path to the center of the hole, fusing and depositing a layer of weld metal in the root and bottom of the joint. The arc shall then be moved to the periphery of the hole and the procedure repeated, fusing and depositing successive layers to fill the hole to the required depth. The slag covering the weld metal should be kept molten until the weld is finished. If the arc is broken or the slag is allowed to cool, the slag must be completely removed before restarting the weld.

The Cincinnati Steel Treating Co
5701 Mariemont Ave.
Cincinnati, Ohio 45227 (513) 271-3173

Certification ID
36423

Order ID
95712

CERTIFICATION OF COMPLIANCE

CUSTOMER

Metalex Mfg., Inc.
5750 Cornell Road

Cincinnati OH
Blkt Ord # 45242

METALEX Q. A. DEPT ACCEPTED DATE 7/19/07 BY TC MTX QC 20

Purchase Order 71422-JS **Customer Cust**

Qty	Part No / Description	Material
2	L1430401-100400-05 SUPPORT GIRDER	A36

S/N 7A-08198-01 & 7A-08198-02

STRESS RELIEVE PER AWS D1.1 REV. 2004.
NOTE: SUPPORT TO PREVENT DISTORTION.
HEAT TREAT CHARTS REQUIRED.
CERTIFICATIONS REQUIRED.

RESULTS

THE ABOVE PARTS HAVE BEEN HEAT TREATED TO THE FOLLOWING:

HEAT TREATMENT STRESS RELIEVED PER AWSD1.1 REV 2004

WE HEREBY CERTIFY THAT THE ABOVE PARTS WERE PROCESSED IN ACCORDANCE WITH THE SPECIFICATIONS AND INSTRUCTIONS SPECIFIED ON THE ABOVE PURCHASE ORDER AND THAT THE RESULTS AND REPORT THEREOF ARE AS STATED. ALL TESTING AND INSPECTION PROCEDURES EMPLOYED WERE IN ACCORDANCE WITH THE APPLICABLE SPECIFICATIONS AND THE RESULTS THEREOF ARE ON FILE.

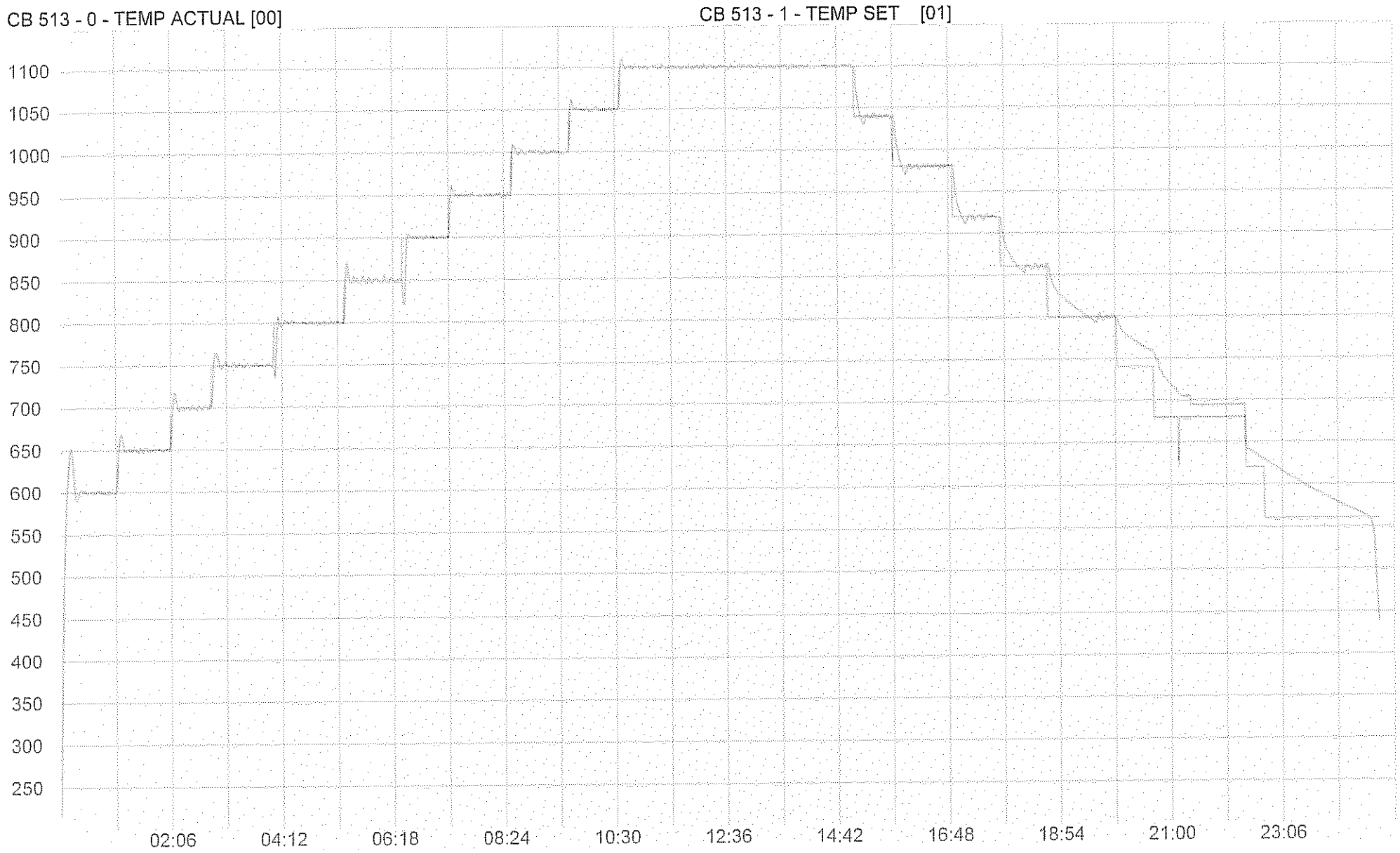
James M. H

NAME JAMES M. HUNT
TITLE QA MANAGER
DATE 7/17/2007

Datalog Report

Start: 6/11/2007
End: 6/12/2007 12:55:00 AM
Sample every 1 minute(s)
Printed 7/17/2007 8:05:13 AM

Customer: METALEX STRESS RELIEVE
Part#: L1430401-100400-05
PO#: 71422-JS
CST Order#: 95712



The Cincinnati Steel Treating Co
5701 Mariemont Ave.
Cincinnati, Ohio 45227 (513) 271-3173

Certification ID
36424

Order ID
96188

CERTIFICATION OF COMPLIANCE

CUSTOMER

Metalex Mfg., Inc.
5750 Cornell Road

Cincinnati OH
Blkt Ord # 45242

METALEX MTX
Q. A. DEPT OC 20
ACCEPTED
DATE 7/19/07
BY TC

Purchase Order 71474-JS **Customer Cust**

Qty	Part No / Description	Material
2	L1430401-100400-05 SUPPORT GIRDER	A36

S/N 7A-08198-03 & 7A-08189-04

STRESS RELIEVE PR AWS D1.1 REV. 2004 SECTION 5.8 AND TABLE 5.2. FURNACE CHARTS & CERTIFY.

RESULTS

THE ABOVE PARTS HAVE BEEN HEAT TREATED TO THE FOLLOWING:

HEAT TREATMENT STRESS RELIEVED PER AWS D1.1 REV 2004
SECTION 5.8 AND TABLE 5.2

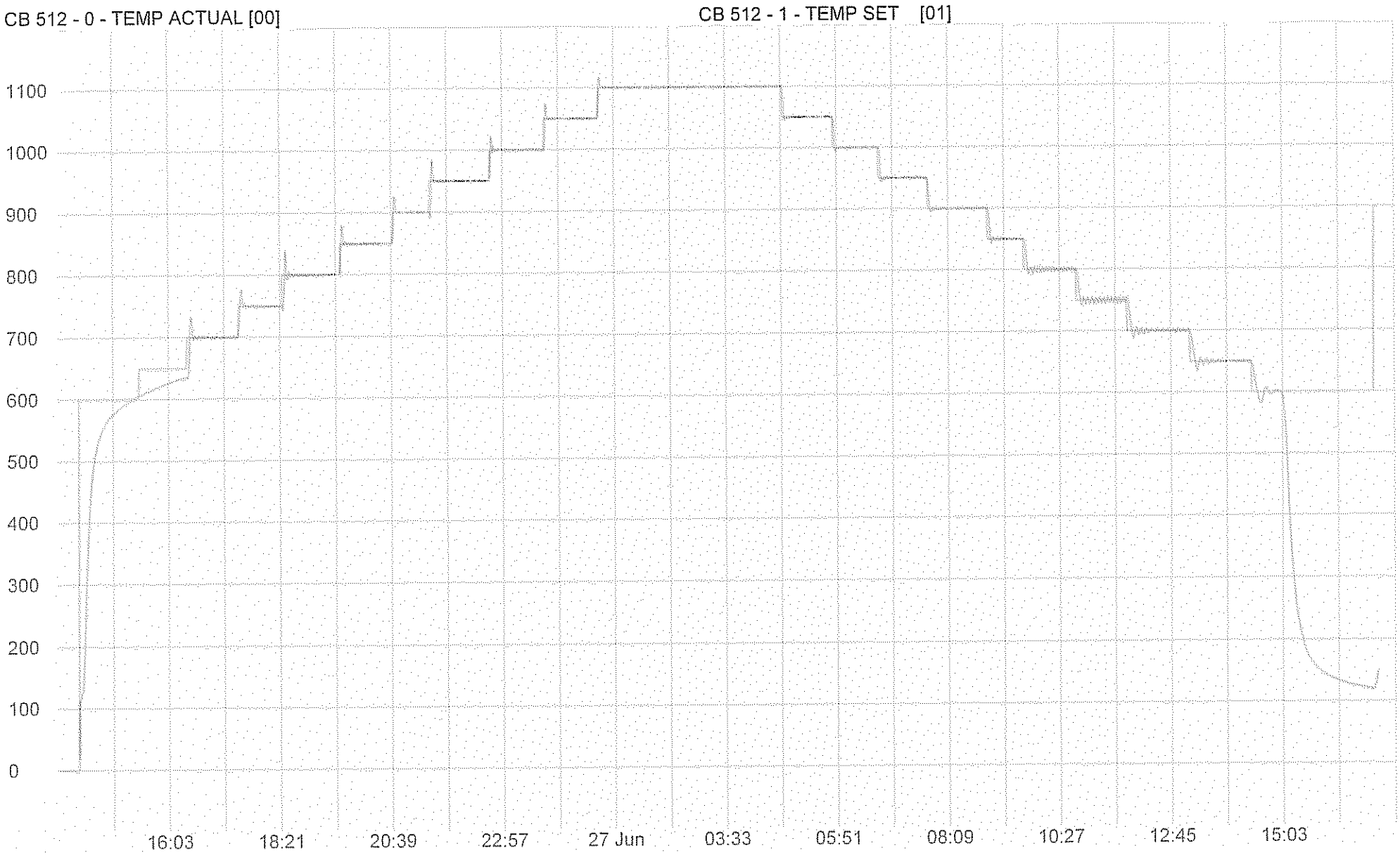
WE HEREBY CERTIFY THAT THE ABOVE PARTS WERE PROCESSED IN ACCORDANCE WITH THE SPECIFICATIONS AND INSTRUCTIONS SPECIFIED ON THE ABOVE PURCHASE ORDER AND THAT THE RESULTS AND REPORT THEREOF ARE AS STATED. ALL TESTING AND INSPECTION PROCEDURES EMPLOYED WERE IN ACCORDANCE WITH THE APPLICABLE SPECIFICATIONS AND THE RESULTS THEREOF ARE ON FILE.

NAME JAMES M. HUNT
TITLE QA MANAGER
DATE 7/17/2007

Datalog Report

Start: 6/26/2007 1:45:00 PM
End: 6/27/2007 5:00:00 PM
Sample every 1 minute(s)
Printed 7/17/2007 8:10:48 AM

Customer: METALEX STRESS RELIEVE
Part#: L1430401+-100400-05
PO#:71474-JS
CST Order #: 96188



Metalex Customized Machinery and Parts CERTIFIED ISO 9001 QUALITY MANAGEMENT	INSPECTION PLANNING & REPORT FORM Metalex Mfg. 5750 Cornell Rd ! Cincinnati, OH 45242 ! (513) 489-0507	Job No. 2007-7558	Qty 1

Inspection Origin	Vendor (Sub-Tier Source) Identification		Customer Identification		
☐ Receiving ☐ In-Process ☐ Final ☐ Rework/Repair X First Article	Vendor Name N/A		Part No. L1430401-100400	REV 5V	P.O. Number 16185
	Date Rec'd N/A	P.O. No. N/A	Part Name Undulator Support Girder		
At Oper. 170	Serial Numbers: 01 (FIRST ARTICLE)		Customer Name Hi-Tech Manufacturing		

SPECIFICATION	B/P ZONE	INSPECTION METHOD / GAGE NO.	ACTUAL DIMENSION / GAGE VERIFICATION (Range of Readings or Accept Status)	QTY ACC	QTY REJ
**** ALL DIMENSIONS TO BE RECORDED IN MILLIMETERS **** **** ALL TEMPERATURES TO BE RECORDED IN CELSIUS ****					
ALL DIMENSIONS APPLY AT A TEMPERATURE OF 20 DEGREES CELSIUS. PART MUST BE IN THERMAL EQUILIBRIUM DURING MEASUREMENTS AND AT THE SAME TEMPERATURE AT THE BEGINNING AND CONCLUSION OF THE MEASUREMENTS WITHIN +/-2 DEG. CELSIUS.					
PART TEMPERATURE ***BEFORE*** INSPECTION (Record in Celsius)	SOW 4.5.4	CONTACT THERMOMETER MX1794	20.51° C	MTX QC 8	
PART TEMPERATURE ***DURING*** INSPECTION (Record in Celsius)	SOW 4.5.4	CONTACT THERMOMETER MX1794	20.51° C	MTX QC 8	
PART TEMPERATURE ***AFTER*** INSPECTION (Record in Celsius)	SOW 4.5.4	CONTACT THERMOMETER MX1794	20.53° C	MTX QC 8	
CRITICAL DIMENSIONS PER SECTION 4.5.2.2 OF DOC. # L143-00093					
SHEET 2 – TOP VIEW					
A) Flatness of Datum B of .030 [.001]	N/A	CMM MX1269	.013 mm	MTX QC 8	
B) *Perpendicularity of Datum B to Datum C* ⊥ .25 [.010]|A|C	E8	CMM MX1269	.013 mm	MTX QC 8	
C) Flatness of datum A of .030 [.001]	N/A	CMM MX1269	.025 mm	MTX QC 8	
D) *Perpendicularity of Datum A to Datum C* ⊥ .25 [.010]|C	D8	CMM MX1269	.023 mm	MTX QC 8	
E) 9X ∅ 6.315 – 6.329 *marked "D1", "D2" & "D3"*	E7 E6 E3	CMM MX1269	6.327 - 6.329	MTX QC 8	
F) *True position of "D3" holes* 2X ⌖ .1 [.004]|A|B|C ⌖ .03 [.0012]B|C	E3	CMM MX1269	.050 .058 .008	MTX QC 8	
F) *True position of "D2" holes* 2X ⌖ .1 [.004]|A|B|C ⌖ .03 [.0012]B|C	E6	CMM MX1269	.017 .030 .010	MTX QC 8	

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MTX QC 8	THOMAS G COOK	7/10/07	PAGE 1 OF 2	1	0

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Inspection Origin	Vendor (Sub-Tier Source) Identification		Customer Identification		
☐ Receiving ☐ In-Process ☐ Final ☐ Rework/Repair X First Article	Vendor Name N/A		Part No. L1430401-100400	REV 5V	P.O. Number 16185
	Date Rec'd N/A	P.O. No. N/A	Part Name Undulator Support Girder		
At Oper. 170	Serial Numbers: 01		Customer Name Hi-Tech Manufacturing		

SPECIFICATION	B/P ZONE	INSPECTION METHOD / GAGE NO.	ACTUAL DIMENSION / GAGE VERIFICATION (Range of Readings or Accept Status)	QTY ACC	QTY REJ
F) *Locations of "D1" holes* 444.50 [17.500]	E7	CMM MX1269	444.521	MTX QC 8	
1968.50 [77.500]	E4	CMM MX1269	1968.505	MTX QC 8	
3492.50 [137.500]	E2	CMM MX1269	3492.487	MTX QC 8	
2X 523.6 [20.61]	E1	CMM MX1269	523.594 523.594 523.615	MTX QC 8	
3185.26 [125.404]	D2	CMM MX1269	3185.242	MTX QC 8	
845.29 [33.179]	D6	CMM MX1269	845.271	MTX QC 8	
2X 95.10 [3.744]	D8	CMM MX1269	95.097 95.111	MTX QC 8	
SHEET 2 – SIDE VIEW					
A) -C- ⏥ .030 [.0012]	C8	CMM MX1269	.030	MTX QC 8	
SHEET 2 – BOTTOM VIEW					
A) 2X 749.78 ± .15	C7	CMM MX1269	749.780 749.759	MTX QC 8	
B) 2X 2340.00 ± .15	C5	CMM MX1269	2340.039 2340.026	MTX QC 8	
C) 4X // .05 [.002] B	B2	CMM MX1269	.001 .017 .000 .003	MTX QC 8	
D) 4X // .030 [.0012] A	B7	CMM MX1269	.006 .002 .002 .003	MTX QC 8	
SHEET 3 – SECTION B-B					
E) // .07 [.003] C	C2	CMM MX1269	.013 .015 .028 .020	MTX QC 8	
F) 4X 109.47 ± .08	C2	CMM MX1269	109.485 109.568	MTX QC 8	
ALL OTHER FEATURES ARE ACCEPTED PER METALEX OPERATOR ACCEPTANCE PROGRAM (OAP) MXWI17001 & OPERATOR SIGNOFF OF ROUTER OPERATIONS FOR COMPLIANCE TO ALL DRAWING FEATURES GENERATED WITHIN THAT DEFINED OPERATION.	ROUTER SIGNOFF MX5009	CONFORMS ↓		MTX QC 8	

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MTX QC 8	THOMAS G COOK	7/10/07		1	0

Metalex Customized Machinery and Parts CERTIFIED ISO 9001 QUALITY MANAGEMENT	INSPECTION PLANNING & REPORT FORM Metalex Mfg. 5750 Cornell Rd ! Cincinnati, OH 45242 ! (513) 489-0507	Job No. 2007-7558	Qty 1

Inspection Origin	Vendor (Sub-Tier Source) Identification		Customer Identification		
☐ Receiving ☐ In-Process x Final ☐ Rework/Repair ☐ First Article	Vendor Name N/A		Part No. L1430401-100400	REV 5V	P.O. Number 16185
	Date Rec'd N/A	P.O. No. N/A	Part Name Undulator Support Girder		
At Oper. 170	Serial Numbers: 02		Customer Name Hi-Tech Manufacturing		

SPECIFICATION	B/P ZONE	INSPECTION METHOD / GAGE NO.	ACTUAL DIMENSION / GAGE VERIFICATION (Range of Readings or Accept Status)	QTY ACC	QTY REJ
**** ALL DIMENSIONS TO BE RECORDED IN MILLIMETERS ** ** ALL TEMPERATURES TO BE RECORDED IN CELSIUS ****					
ALL DIMENSIONS APPLY AT A TEMPERATURE OF 20 DEGREES CELSIUS. PART MUST BE IN THERMAL EQUILIBRIUM DURING MEASUREMENTS AND AT THE SAME TEMPERATURE AT THE BEGINNING AND CONCLUSION OF THE MEASUREMENTS WITHIN +/-2 DEG. CELSIUS.					
PART TEMPERATURE ***BEFORE*** INSPECTION (Record in Celsius)	SOW 4.5.4	CONTACT THERMOMETER MX1794	20.58 °C	MTX QC 8	
PART TEMPERATURE ***DURING*** INSPECTION (Record in Celsius)	SOW 4.5.4	CONTACT THERMOMETER MX1794	20.55 °C	MTX QC 8	
PART TEMPERATURE ***AFTER*** INSPECTION (Record in Celsius)	SOW 4.5.4	CONTACT THERMOMETER MX1794	20.57 °C	MTX QC 8	
CRITICAL DIMENSIONS PER SECTION 4.5.2.2 OF DOC. # L143-00093					
SHEET 2 – TOP VIEW					
A) Flatness of Datum B of .030 [.001]	N/A	CMM MX1269	.011	MTX QC 8	
B) *Perpendicularity of Datum B to Datum C* ⊥ | .25 [.010]|A|C	E8	CMM MX1269	.011	MTX QC 8	
C) Flatness of datum A of .030 [.001]	N/A	CMM MX1269	.022	MTX QC 8	
D) *Perpendicularity of Datum A to Datum C* ⊥ | .25 [.010]|C	D8	CMM MX1269	.024	MTX QC 8	
E) 9X ∅ 6.315 – 6.329 *marked "D1", "D2" & "D3"*	E7 E6 E3	CMM MX1269	6.315 – 6.327	MTX QC 8	
F) *True position of "D3" holes* 2X ⌖ | .1 [.004]|A|B|C ⌖ | .03 [.0012]B|C	E3	CMM MX1269	.063 AND .052 .0006	MTX QC 8	
F) *True position of "D2" holes* 2X ⌖ | .1 [.004]|A|B|C ⌖ | .03 [.0012]B|C	E6	CMM MX1269	.029 AND .055 .018	MTX QC 8	

STAMP	INSPECTED BY	DATE	PAGE 1 OF 2	QTY ACC	QTY REJ
MTX QC 8	THOMAS G COOK	7/7/07		1	0

MX1010 (7/98)

Metalex Customized Machinery and Parts CERTIFIED ISO 9001 QUALITY MANAGEMENT	INSPECTION PLANNING & REPORT FORM Metalex Mfg. 5750 Cornell Rd ! Cincinnati, OH 45242 ! (513) 489-0507	Job No. 2007-7558	Qty 1

Inspection Origin	Vendor (Sub-Tier Source) Identification		Customer Identification		
☐ Receiving ☐ In-Process x Final ☐ Rework/Repair ☐ First Article	Vendor Name N/A		Part No. L1430401-100400	REV 5V	P.O. Number 16185
	Date Rec'd N/A	P.O. No. N/A	Part Name Undulator Support Girder		
At Oper. 170	Serial Numbers: 02		Customer Name Hi-Tech Manufacturing		

SPECIFICATION	B/P ZONE	INSPECTION METHOD / GAGE NO.	ACTUAL DIMENSION / GAGE VERIFICATION (Range of Readings or Accept Status)	QTY ACC	QTY REJ
F) *Locations of "D1" holes* 444.50 [17.500]	E7	CMM MX1269	444.513	MTX QC 8	
1968.50 [77.500]	E4	CMM MX1269	1968.532	MTX QC 8	
3492.50 [137.500]	E2	CMM MX1269	3492.533	MTX QC 8	
2X 523.6 [20.61]	E1	CMM MX1269	523.600 523.599	MTX QC 8	
3185.26 [125.404]	D2	CMM MX1269	3185.293	MTX QC 8	
845.29 [33.179]	D6	CMM MX1269	845.276	MTX QC 8	
2X 95.10 [3.744]	D8	CMM MX1269	95.110 95.105	MTX QC 8	
SHEET 2 – SIDE VIEW					
A) -C- ⏥ .030 [.0012]	C8	CMM MX1269	.028 mm	MTX QC 8	
SHEET 2 – BOTTOM VIEW					
A) 2X 749.78 ± .15	C7	CMM MX1269	749.746 749.752	MTX QC 8	
B) 2X 2340.00 ± .15	C5	CMM MX1269	2340.002 2340.004	MTX QC 8	
C) 4X // .05 [.002] B	B2	CMM MX1269	.004 .003 .003 .006	MTX QC 8	
D) 4X // .030 [.0012] A	B7	CMM MX1269	.002 .008 .003 .006	MTX QC 8	
SHEET 3 – SECTION B-B					
E) // .07 [.003] C	C2	CMM MX1269	.015 .023 .031 .021	MTX QC 8	
F) 4X 109.47 ± .08	C2	CMM MX1269	109.495 - 109.537	MTX QC 8	
ALL OTHER FEATURES ARE ACCEPTED PER METALEX OPERATOR ACCEPTANCE PROGRAM (OAP) MXWI17001 & OPERATOR SIGNOFF OF ROUTER OPERATIONS FOR COMPLIANCE TO ALL DRAWING FEATURES GENERATED WITHIN THAT DEFINED OPERATION.	ROUTER SIGNOFF MX5009	CONFORMS		MTX QC 8	

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MTX QC 8	THOMAS G COOK	7/7/07		1	0

MX1010 (7/98)

Metalex Customized Machinery and Parts CERTIFIED ISO 9001 QUALITY MANAGEMENT	INSPECTION PLANNING & REPORT FORM Metalex Mfg. 5750 Cornell Rd ! Cincinnati, OH 45242 ! (513) 489-0507	Job No. 2007-7558	Qty 1

Inspection Origin	Vendor (Sub-Tier Source) Identification		Customer Identification		
☐ Receiving ☐ In-Process x Final ☐ Rework/Repair ☐ First Article	Vendor Name N/A		Part No. L1430401-100400	REV 5V	P.O. Number 16185
	Date Rec'd N/A	P.O. No. N/A	Part Name Undulator Support Girder		
At Oper. 170	Serial Numbers: 03		Customer Name Hi-Tech Manufacturing		

SPECIFICATION	B/P ZONE	INSPECTION METHOD / GAGE NO.	ACTUAL DIMENSION / GAGE VERIFICATION (Range of Readings or Accept Status)	QTY ACC	QTY REJ
**** ALL DIMENSIONS TO BE RECORDED IN MILLIMETERS ** ** ALL TEMPERATURES TO BE RECORDED IN CELSIUS ****					
ALL DIMENSIONS APPLY AT A TEMPERATURE OF 20 DEGREES CELSIUS. PART MUST BE IN THERMAL EQUILIBRIUM DURING MEASUREMENTS AND AT THE SAME TEMPERATURE AT THE BEGINNING AND CONCLUSION OF THE MEASUREMENTS WITHIN +/-2 DEG. CELSIUS.					
PART TEMPERATURE ***BEFORE*** INSPECTION (Record in Celsius)	SOW 4.5.4	CONTACT THERMOMETER MX1794	20.26° C	MTX QC 8	
PART TEMPERATURE ***DURING*** INSPECTION (Record in Celsius)	SOW 4.5.4	CONTACT THERMOMETER MX1794	20.26° C	MTX QC 8	
PART TEMPERATURE ***AFTER*** INSPECTION (Record in Celsius)	SOW 4.5.4	CONTACT THERMOMETER MX1794	20.23° C	MTX QC 8	
CRITICAL DIMENSIONS PER SECTION 4.5.2.2 OF DOC. # L143-00093					
SHEET 2 – TOP VIEW					
A) Flatness of Datum B of .030 [.001]	N/A	CMM MX1269	.013 mm	MTX QC 8	
B) *Perpendicularity of Datum B to Datum C* ⊥ | .25 [.010]|A|C	E8	CMM MX1269	.016 mm	MTX QC 8	
C) Flatness of datum A of .030 [.001]	N/A	CMM MX1269	.014 mm	MTX QC 8	
D) *Perpendicularity of Datum A to Datum C* ⊥ | .25 [.010]|C	D8	CMM MX1269	.017	MTX QC 8	
E) 9X ∅ 6.315 – 6.329 *marked "D1", "D2" & "D3"*	E7 E6 E3	CMM MX1269	6.322 – 6.329	MTX QC 8	
F) *True position of "D3" holes* 2X ⊕ | .1 [.004]|A|B|C ⊕ | .03 [.0012]B|C	E3	CMM MX1269	.084 .090 .003	MTX QC 8	
F) *True position of "D2" holes* 2X ⊕ | .1 [.004]|A|B|C ⊕ | .03 [.0012]B|C	E6	CMM MX1269	.031 – .032 .005	MTX QC 8	

STAMP	INSPECTED BY	DATE	PAGE 1 OF 2	QTY ACC	QTY REJ
MTX QC 8	THOMAS G COOK	7/10/07		1	0

Metalex Customized Machinery and Parts CERTIFIED ISO 9001 QUALITY MANAGEMENT	INSPECTION PLANNING & REPORT FORM Metalex Mfg. 5750 Cornell Rd ! Cincinnati, OH 45242 ! (513) 489-0507	Job No. 2007-7558	Qty 1

Inspection Origin	Vendor (Sub-Tier Source) Identification		Customer Identification		
☐ Receiving ☐ In-Process x Final ☐ Rework/Repair ☐ First Article	Vendor Name N/A		Part No. L1430401-100400	REV 5V	P.O. Number 16185
	Date Rec'd N/A	P.O. No. N/A	Part Name Undulator Support Girder		
At Oper. 170	Serial Numbers: 03		Customer Name Hi-Tech Manufacturing		

SPECIFICATION	B/P ZONE	INSPECTION METHOD / GAGE NO.	ACTUAL DIMENSION / GAGE VERIFICATION (Range of Readings or Accept Status)		QTY ACC	QTY REJ
F) *Locations of "D1" holes* 444.50 [17.500]	E7	CMM MX1269	444.529	MTX QC 8		
1968.50 [77.500]	E4	CMM MX1269	1968.489	MTX QC 8		
3492.50 [137.500]	E2	CMM MX1269	3492.474	MTX QC 8		
2X 523.6 [20.61]	E1	CMM MX1269	523.544 523.549 523.549	MTX QC 8		
3185.26 [125.404]	D2	CMM MX1269	3185.231	MTX QC 8		
845.29 [33.179]	D6	CMM MX1269	845.280	MTX QC 8		
2X 95.10 [3.744]	D8	CMM MX1269	95.088 95.077	MTX QC 8		
SHEET 2 – SIDE VIEW						
A) -C- ⌭ .030 [.0012]	C8	CMM MX1269	.029	MTX QC 8		
SHEET 2 – BOTTOM VIEW						
A) 2X 749.78 ± .15	C7	CMM MX1269	749.774 749.795	MTX QC 8		
B) 2X 2340.00 ± .15	C5	CMM MX1269	2339.950 2339.931	MTX QC 8		
C) 4X // .05 [.002] B	B2	CMM MX1269	.004 .006 .004 .006	MTX QC 8		
D) 4X // .030 [.0012] A	B7	CMM MX1269	.002 .002 .001 .000	MTX QC 8		
SHEET 3 – SECTION B-B						
E) // .07 [.003] C	C2	CMM MX1269	.016 .012 .026 .020	MTX QC 8		
F) 4X 109.47 ± .08	C2	CMM MX1269	109.449 - 109.464	MTX QC 8		
ALL OTHER FEATURES ARE ACCEPTED PER METALEX OPERATOR ACCEPTANCE PROGRAM (OAP) MXWI17001 & OPERATOR SIGNOFF OF ROUTER OPERATIONS FOR COMPLIANCE TO ALL DRAWING FEATURES GENERATED WITHIN THAT DEFINED OPERATION.		ROUTER SIGNOFF MX5009	CONFORMS	MTX QC 8		

STAMP	INSPECTED BY	DATE	PAGE 2 OF 2	QTY ACC	QTY REJ
MTX QC 8	THOMAS G COOK	7/10/07		1	6

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Metalex Customized Machinery and Parts CERTIFIED ISO 9001 QUALITY MANAGEMENT	INSPECTION PLANNING & REPORT FORM Metalex Mfg. 5750 Cornell Rd ! Cincinnati, OH 45242 ! (513) 489-0507	Job No. 2007-7558	Qty 1

Inspection Origin	Vendor (Sub-Tier Source) Identification		Customer Identification		
☐ Receiving ☐ In-Process x Final ☐ Rework/Repair ☐ First Article	Vendor Name N/A		Part No. L1430401-100400	REV 5V	P.O. Number 16185
	Date Rec'd N/A	P.O. No. N/A	Part Name Undulator Support Girder		
At Oper. 170	Serial Numbers: 04		Customer Name Hi-Tech Manufacturing		

SPECIFICATION	B/P ZONE	INSPECTION METHOD / GAGE NO.	ACTUAL DIMENSION / GAGE VERIFICATION (Range of Readings or Accept Status)	QTY ACC	QTY REJ
**** ALL DIMENSIONS TO BE RECORDED IN MILLIMETERS **** **** ALL TEMPERATURES TO BE RECORDED IN CELSIUS ****					
ALL DIMENSIONS APPLY AT A TEMPERATURE OF 20 DEGREES CELSIUS. PART MUST BE IN THERMAL EQUILIBRIUM DURING MEASUREMENTS AND AT THE SAME TEMPERATURE AT THE BEGINNING AND CONCLUSION OF THE MEASUREMENTS WITHIN +/-2 DEG. CELSIUS.					
PART TEMPERATURE ***BEFORE*** INSPECTION (Record in Celsius)	SOW 4.5.4	CONTACT THERMOMETER MX1794	20.55° C	MTX QC 8	
PART TEMPERATURE ***DURING*** INSPECTION (Record in Celsius)	SOW 4.5.4	CONTACT THERMOMETER MX1794	20.54° C	MTX QC 8	
PART TEMPERATURE ***AFTER*** INSPECTION (Record in Celsius)	SOW 4.5.4	CONTACT THERMOMETER MX1794	20.52° C	MTX QC 8	
CRITICAL DIMENSIONS PER SECTION 4.5.2.2 OF DOC. # L143-00093					
SHEET 2 – TOP VIEW					
A) Flatness of Datum B of .030 [.001]	N/A	CMM MX1269	.012 mm	MTX QC 8	
B) *Perpendicularity of Datum B to Datum C* ⊥ | .25 [.010]|A|C	E8	CMM MX1269	.014 mm	MTX QC 8	
C) Flatness of datum A of .030 [.001]	N/A	CMM MX1269	.021 mm	MTX QC 8	
D) *Perpendicularity of Datum A to Datum C* ⊥ | .25 [.010]|C	D8	CMM MX1269	.059 mm	MTX QC 8	
E) 9X ∅ 6.315 – 6.329 *marked "D1", "D2" & "D3"*	E7 E6 E3	CMM MX1269	6.321 - 6.327	MTX QC 8	
F) *True position of "D3" holes* 2X ⌖ | .1 [.004]|A|B|C ⌖ | .03 [.0012]B|C	E3	CMM MX1269	.060 .048 .006	MTX QC 8	
F) *True position of "D2" holes* 2X ⌖ | .1 [.004]|A|B|C ⌖ | .03 [.0012]B|C	E6	CMM MX1269	.020 .052 .015	MTX QC 8	

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MTX QC 8	THOMAS G COOK	7/10/07		1	0

Metalex Customized Machinery and Parts CERTIFIED ISO 9001 QUALITY MANAGEMENT	INSPECTION PLANNING & REPORT FORM Metalex Mfg. 5750 Cornell Rd ! Cincinnati, OH 45242 ! (513) 489-0507	Job No. 2007-7558	Qty 1

Inspection Origin	Vendor (Sub-Tier Source) Identification		Customer Identification		
☐ Receiving ☐ In-Process x Final ☐ Rework/Repair ☐ First Article	Vendor Name N/A		Part No. L1430401-100400	REV 5V	P.O. Number 16185
	Date Rec'd N/A	P.O. No. N/A	Part Name Undulator Support Girder		
At Oper. 170	Serial Numbers: 04		Customer Name Hi-Tech Manufacturing		

SPECIFICATION	B/P ZONE	INSPECTION METHOD / GAGE NO.	ACTUAL DIMENSION / GAGE VERIFICATION (Range of Readings or Accept Status)	QTY ACC	QTY REJ
F) *Locations of "D1" holes* 444.50 [17.500]	E7	CMM MX1269	444.564	MTX QC 8	
1968.50 [77.500]	E4	CMM MX1269	1968.504	MTX QC 8	
3492.50 [137.500]	E2	CMM MX1269	3492.455	MTX QC 8	
2X 523.6 [20.61]	E1	CMM MX1269	523.573 523.574 523.576	MTX QC 8	
3185.26 [125.404]	D2	CMM MX1269	3185.188	MTX QC 8	
845.29 [33.179]	D6	CMM MX1269	845.275	MTX QC 8	
2X 95.10 [3.744]	D8	CMM MX1269	95.087 95.135	MTX QC 8	
SHEET 2 – SIDE VIEW					
A) -C- ⏥ .030 [.0012]	C8	CMM MX1269	.028	MTX QC 8	
SHEET 2 – BOTTOM VIEW					
A) 2X 749.78 ± .15	C7	CMM MX1269	79.769 79.780	MTX QC 8	
B) 2X 2340.00 ± .15	C5	CMM MX1269	2339.951 2339.939	MTX QC 8	
C) 4X // .05 [.002] B	B2	CMM MX1269	.010 .000 .004 .001	MTX QC 8	
D) 4X // .030 [.0012] A	B7	CMM MX1269	.001 .004 .006 .004	MTX QC 8	
SHEET 3 – SECTION B-B					
E) // .07 [.003] C	C2	CMM MX1269	.012 .024 .026 .033	MTX QC 8	
F) 4X 109.47 ± .08	C2	CMM MX1269	109.408 – 109.413	MTX QC 8	
ALL OTHER FEATURES ARE ACCEPTED PER METALEX OPERATOR ACCEPTANCE PROGRAM (OAP) MXWI17001 & OPERATOR SIGNOFF OF ROUTER OPERATIONS FOR COMPLIANCE TO ALL DRAWING FEATURES GENERATED WITHIN THAT DEFINED OPERATION.	ROUTER SIGNOFF MX5009	CONFORMS		MTX QC 8	

STAMP	INSPECTED BY	DATE	PAGE 2 OF 2	QTY ACC	QTY REJ
MTX QC 8	THOMAS G COOK	7/10/07		1	0