

LOCKOUT-TAGOUT PROCEDURES

SHEET MILL

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Niagara Specialty Metals, Inc.
Emergency/Lockout-Tagout Procedures
Date Printed: 5/20/2010

Emergency/Normal/Lockout-Tagout Procedures for #9 Electric Annealing Furnace SM

Primary contact: TOM MACKIN
Primary contact phone 1: (716)704-6385
Primary contact phone 2: (716)772-5074

Backup contact: BOB SHABALA
Backup contact phone 1: (716)542-5552
Backup contact phone 2: (716)472-6672

Emergency Procedure:

EMPLOYEES SHALL NOTIFY PRIMARY OR BACKUP CONTACT IN THE CASE OF AN EMERGENCY.

Standard Procedure:

AFFECTED EMPLOYEES SHALL TURN MACHINE OFF, ATTACH A "DO NOT OPERATE" SIGN, AND NOTIFY MAINTENANCE IF THERE IS A SAFETY, QUALITY OR POSSIBILITY OF MACHINE DAMAGE PROBLEM.

Lockout/Tagout Procedure:

LOCKOUT TAGOUT SHALL ONLY BE PERFORMED BY AUTHORIZED EMPLOYEES

1. NOTIFY AFFECTED EMPLOYEES/ SUPERVISOR
2. SHUT DOWN EQUIPMENT
3. ISOLATE ALL ENERGY TO EQUIPMENT
4. LOCK AND TAG ENERGY CONTROLS AND KEEP KEYS IN YOUR POSSESSION
5. FILL OUT TAG WITH YOUR NAME/DATE
6. RELEASE ANY STORED OR RESIDUAL ENERGY
7. TEST CONTROLS TO ENSURE INADVERTENT START UP IS NOT POSSIBLE

RESTORING FROM LOCKOUT/TAGOUT

1. NOTIFY AFFECTED EMPLOYEES THAT LOCKS AND TAGS WILL BE REMOVED
2. CHECK EQUIPMENT TO ENSURE ALL GUARDS ARE IN PLACE AND TOOLS ARE REMOVED
3. ENSURE CONTROLS ARE IN THE NEUTRAL OR OFF POSITION
4. REMOVE ANY DO NOT OPERATE SIGNS

TYPE OF ENERGY

- A. ELECTRICAL**
- B. POTENTIAL (STORED)**
- C. KINETIC (IN MOTION)
- D. PNEUMATIC (AIR OR GAS)
- E. HYDRAULIC
- F. THERMAL
- G. CHEMICAL
- H. SPECIAL HAZARDS

ISOLATION LOCATION/PROCEDURE/TYPE OF DEVICE

- A.** 150 AMP SQUARE D I-LINE BREAKER LOCATED IN MAIN I-LINE PANEL WEST WALL AT SOUTH END OF FURNACE DEENERGIZES FURNACE/CONTROLS.

30 AMP SQUARE D DISCONNECT LOCATED ON EAST WALL BEHIND FURNACE REMOVES POWER TO FURNACE HOISTS/CONTROLS.

- B.** PRIOR TO REMOVING POWER TO HOISTS, LID MUST BE AT LOWEST POSITION OR PINNED AT SPECIFIC HEIGHT ON FOUR POSTS WITH PINS PROVIDED.

- C. NA.
- D. NA.
- E. NA.
- F. NA.
- G. NA.
- H. NA.

Niagara Specialty Metals, Inc.

Emergency/Lockout-Tagout Procedures

Date Printed: 5/20/2010

Emergency/Normal/Lockout-Tagout Procedures for #10 Electric Annealing Furnace SM

Primary contact: TOM MACKIN

Primary contact phone 1: (716)704-6385

Primary contact phone 2: (716)772-5074

Backup contact: BOB SHABALA

Backup contact phone 1: (716)542-5552

Backup contact phone 2: (716)472-6672

Emergency Procedure:

EMPLOYEES SHALL NOTIFY PRIMARY OR BACKUP CONTACT IN THE CASE OF AN EMERGENCY.

Standard Procedure:

AFFECTED EMPLOYEES SHALL TURN MACHINE OFF, ATTACH A DO NOT OPERATE SIGN AND NOTIFY MAINTENANCE IF THERE IS A SAFETY/QUALITY/OR POSSIBILITY OF MACHINE DAMAGE PROBLEM.

Lockout/Tagout Procedure:

LOCKOUT TAGOUT SHALL ONLY BE PERFORMED BY AUTHORIZED EMPLOYEES

1. NOTIFY AFFECTED EMPLOYEES/ SUPERVISOR
2. SHUT DOWN EQUIPMENT
3. ISOLATE ALL ENERGY TO EQUIPMENT
4. LOCK AND TAG ENERGY CONTROLS AND KEEP KEYS IN YOUR POSSESSION
5. FILL OUT TAG WITH YOUR NAME/DATE
6. RELEASE ANY STORED OR RESIDUAL ENERGY
7. TEST CONTROLS TO ENSURE INADVERTENT START UP IS NOT POSSIBLE

RESTORING FROM LOCKOUT/TAGOUT

1. NOTIFY AFFECTED EMPLOYEES THAT LOCKS AND TAGS WILL BE REMOVED
2. CHECK EQUIPMENT TO ENSURE ALL GUARDS ARE IN PLACE AND TOOLS ARE REMOVED
3. ENSURE CONTROLS ARE IN THE NEUTRAL OR OFF POSITION
4. REMOVE ANY DO NOT OPERATE SIGNS

TYPE OF ENERGY

A. ELECTRICAL

B. POTENTIAL (STORED)

C. KINETIC (IN MOTION)

D. PNEUMATIC (AIR OR GAS)

E. HYDRAULIC

F. THERMAL

G. CHEMICAL

H. SPECIAL HAZARDS

ISOLATION LOCATION/PROCEDURE/TYPE OF DEVICE

A. 150 AMP SQUARE D I-LINE BREAKER LOCATED IN NORTH I-LINE SUB-PANEL ON WEST WALL BEHIND #10 FURNACE REMOVES POWER TO FURNACE/CONTROLS.

30 AMP SQUARE D DISCONNECT LOCATED ON WEST WALL BEHIND FURNACE REMOVES POWER TO FURNACE HOISTS/CONTROLS.

B. PRIOR TO REMOVING POWER TO HOISTS, LID MUST BE AT LOWEST POSITION OR PINNED AT SPECIFIC HEIGHT ON FOUR POSTS WITH PINS PROVIDED.

C. NA.

D. NA.

E. NA.

F. NA.

G. NA.

H. NA.

Niagara Specialty Metals, Inc.

Emergency/Lockout-Tagout Procedures

Date Printed: 5/20/2010

Emergency/Normal/Lockout-Tagout Procedures for **L&L #1 Electric Furnace SM**

Primary contact: TOM MACKIN

Primary contact phone 1: (716)704-6385

Primary contact phone 2: (716)772-5074

Backup contact: BOB SHABALA

Backup contact phone 1: (716)542-5552

Backup contact phone 2: (716)472-6672

Emergency Procedure:

EMPLOYEES SHALL NOTIFY PRIMARY OR BACKUP CONTACT IN THE CASE OF AN EMERGENCY.

Standard Procedure:

AFFECTED EMPLOYEES SHALL TURN MACHINE OFF, ATTACH A DO NOT OPERATE SIGN AND NOTIFY MAINTENANCE IF THERE IS A SAFETY/QUALITY/OR POSSIBILITY OF MACHINE DAMAGE PROBLEM.

Lockout/Tagout Procedure:

LOCKOUT TAGOUT SHALL ONLY BE PERFORMED BY AUTHORIZED EMPLOYEES

1. NOTIFY AFFECTED EMPLOYEES/ SUPERVISOR
2. SHUT DOWN EQUIPMENT
3. ISOLATE ALL ENERGY TO EQUIPMENT
4. LOCK AND TAG ENERGY CONTROLS AND KEEP KEYS IN YOUR POSSESSION
5. FILL OUT TAG WITH YOUR NAME/DATE
6. RELEASE ANY STORED OR RESIDUAL ENERGY
7. TEST CONTROLS TO ENSURE INADVERTENT START UP IS NOT POSSIBLE

RESTORING FROM LOCKOUT/TAGOUT

1. NOTIFY AFFECTED EMPLOYEES THAT LOCKS AND TAGS WILL BE REMOVED
2. CHECK EQUIPMENT TO ENSURE ALL GUARDS ARE IN PLACE AND TOOLS ARE REMOVED
3. ENSURE CONTROLS ARE IN THE NEUTRAL OR OFF POSITION
4. REMOVE ANY DO NOT OPERATE SIGNS

TYPE OF ENERGY

- A. ELECTRICAL**
- B. POTENTIAL (STORED)
- C. KINETIC (IN MOTION)
- D. PNEUMATIC (AIR OR GAS)**
- E. HYDRAULIC
- F. THERMAL
- G. CHEMICAL
- H. SPECIAL HAZARDS

ISOLATION LOCATION/PROCEDURE/TYPE OF DEVICE

- A.** 100 AMP SWITCH ON CONTROL PANEL CAN BE LOCKED OUT TO REMOVE POWER TO THE FURNACE CONTROLS.
THE ABSENCE OF POWER MUST BE VERIFIED BY A QUALIFIED ELECTRICIAN BEFORE ANY WORK CAN BE PERFORMED.
- B. NA.
- C. NA.
- D.** PRIOR TO REMOVING POWER, THE FURNACE DOOR CYLINDER MUST BE AT THE LOWEST POSITION OR SECURE AT A SPECIFIC HEIGHT, THEN PLACE PNEUMATIC SWITCH IN DOWN POSITION AND REMOVE AIR SUPPLY BY CLOSING VALVE OR REMOVING HOSE USING QUICK CONNECT.
- E. NA.
- F. NA.
- G. NA.
- H. NA.

Niagara Specialty Metals, Inc.

Emergency/Lockout-Tagout Procedures

Date Printed: 5/20/2010

Emergency/Normal/Lockout-Tagout Procedures for **L&L #2 Electric Furnace SM**

Primary contact: TOM MACKIN

Primary contact phone 1: (716)704-6385

Primary contact phone 2: (716)772-5074

Backup contact: BOB SHABALA

Backup contact phone 1: (716)542-5552

Backup contact phone 2: (716)472-6672

Emergency Procedure:

EMPLOYEES SHALL NOTIFY PRIMARY OR BACKUP CONTACT IN THE CASE OF AN EMERGENCY.

Standard Procedure:

AFFECTED EMPLOYEES SHALL TURN MACHINE OFF, ATTACH A DO NOT OPERATE SIGN AND NOTIFY MAINTENANCE IF THERE IS A SAFETY/QUALITY/OR POSSIBILITY OF MACHINE DAMAGE PROBLEM.

Lockout/Tagout Procedure:

LOCKOUT TAGOUT SHALL ONLY BE PERFORMED BY AUTHORIZED EMPLOYEES

1. NOTIFY AFFECTED EMPLOYEES/ SUPERVISOR
2. SHUT DOWN EQUIPMENT
3. ISOLATE ALL ENERGY TO EQUIPMENT
4. LOCK AND TAG ENERGY CONTROLS AND KEEP KEYS IN YOUR POSSESSION
5. FILL OUT TAG WITH YOUR NAME/DATE
6. RELEASE ANY STORED OR RESIDUAL ENERGY
7. TEST CONTROLS TO ENSURE INADVERTENT START UP IS NOT POSSIBLE

RESTORING FROM LOCKOUT/TAGOUT

1. NOTIFY AFFECTED EMPLOYEES THAT LOCKS AND TAGS WILL BE REMOVED
2. CHECK EQUIPMENT TO ENSURE ALL GUARDS ARE IN PLACE AND TOOLS ARE REMOVED
3. ENSURE CONTROLS ARE IN THE NEUTRAL OR OFF POSITION
4. REMOVE ANY DO NOT OPERATE SIGNS

TYPE OF ENERGY

- A. ELECTRICAL**
- B. POTENTIAL (STORED)
- C. KINETIC (IN MOTION)
- D. PNEUMATIC (AIR OR GAS)**
- E. HYDRAULIC
- F. THERMAL
- G. CHEMICAL
- H. SPECIAL HAZARDS

ISOLATION LOCATION/PROCEDURE/TYPE OF DEVICE

- A.** 200 AMP SWITCH ON CONTROL PANEL CAN BE LOCKED OUT TO REMOVE POWER TO THE FURNACE CONTROLS.
THE ABSENCE OF POWER MUST BE VERIFIED BY A QUALIFIED ELECTRICIAN BEFORE ANY WORK CAN BE PERFORMED.
- B. NA.
- C. NA.
- D.** PRIOR TO REMOVING POWER, THE FURNACE DOOR CYLINDER MUST BE AT THE LOWEST POSITION OR SECURE AT A SPECIFIC HEIGHT, THEN PLACE PNEUMATIC SWITCH IN DOWN POSITION AND REMOVE AIR SUPPLY BY CLOSING VALVE OR REMOVING HOSE USING QUICK CONNECT.
- E. NA.
- F. NA.
- G. NA.
- H. NA.

Niagara Specialty Metals, Inc.

Emergency/Lockout-Tagout Procedures

Date Printed: 5/20/2010

Emergency/Normal/Lockout-Tagout Procedures for **L&L #3 Electric Furnace SM**

Primary contact: TOM MACKIN

Primary contact phone 1: (716)704-6385

Primary contact phone 2: (716)772-5074

Backup contact: BOB SHABALA

Backup contact phone 1: (716)542-5552

Backup contact phone 2: (716)472-6672

Emergency Procedure:

EMPLOYEES SHALL NOTIFY PRIMARY OR BACKUP CONTACT IN THE CASE OF AN EMERGENCY.

Standard Procedure:

AFFECTED EMPLOYEES SHALL TURN MACHINE OFF, ATTACH A DO NOT OPERATE SIGN AND NOTIFY MAINTENANCE IF THERE IS A SAFETY/QUALITY/OR POSSIBILITY OF MACHINE DAMAGE PROBLEM.

Lockout/Tagout Procedure:

LOCKOUT TAGOUT SHALL ONLY BE PERFORMED BY AUTHORIZED EMPLOYEES

1. NOTIFY AFFECTED EMPLOYEES/ SUPERVISOR
2. SHUT DOWN EQUIPMENT
3. ISOLATE ALL ENERGY TO EQUIPMENT
4. LOCK AND TAG ENERGY CONTROLS AND KEEP KEYS IN YOUR POSSESSION
5. FILL OUT TAG WITH YOUR NAME/DATE
6. RELEASE ANY STORED OR RESIDUAL ENERGY
7. TEST CONTROLS TO ENSURE INADVERTENT START UP IS NOT POSSIBLE

RESTORING FROM LOCKOUT/TAGOUT

1. NOTIFY AFFECTED EMPLOYEES THAT LOCKS AND TAGS WILL BE REMOVED
2. CHECK EQUIPMENT TO ENSURE ALL GUARDS ARE IN PLACE AND TOOLS ARE REMOVED
3. ENSURE CONTROLS ARE IN THE NEUTRAL OR OFF POSITION
4. REMOVE ANY DO NOT OPERATE SIGNS

TYPE OF ENERGY

- A. ELECTRICAL**
- B. POTENTIAL (STORED)
- C. KINETIC (IN MOTION)
- D. PNEUMATIC (AIR OR GAS)**
- E. HYDRAULIC
- F. THERMAL
- G. CHEMICAL
- H. SPECIAL HAZARDS

ISOLATION LOCATION/PROCEDURE/TYPE OF DEVICE

- A.** 200 AMP SWITCH ON CONTROL PANEL CAN BE LOCKED OUT TO REMOVE POWER TO THE FURNACE CONTROLS.
THE ABSENCE OF POWER MUST BE VERIFIED BY A QUALIFIED ELECTRICIAN BEFORE ANY WORK CAN BE PERFORMED.
- B. NA.
- C. NA.
- D.** PRIOR TO REMOVING POWER, THE FURNACE DOOR CYLINDER MUST BE AT THE LOWEST POSITION OR SECURE AT A SPECIFIC HEIGHT, THEN PLACE PNEUMATIC SWITCH IN DOWN POSITION AND REMOVE AIR SUPPLY BY CLOSING VALVE OR REMOVING HOSE USING QUICK CONNECT.
- E. NA.
- F. NA.
- G. NA.
- H. NA.

Niagara Specialty Metals, Inc.

Emergency/Lockout-Tagout Procedures

Date Printed: 5/20/2010

Emergency/Normal/Lockout-Tagout Procedures for **L&L #4 Electric Furnace SM**

Primary contact: TOM MACKIN

Primary contact phone 1: (716)704-6385

Primary contact phone 2: (716)772-5074

Backup contact: BOB SHABALA

Backup contact phone 1: (716)542-5552

Backup contact phone 2: (716)472-6672

Emergency Procedure:

EMPLOYEES SHALL NOTIFY PRIMARY OR BACKUP CONTACT IN THE CASE OF AN EMERGENCY.

Standard Procedure:

AFFECTED EMPLOYEES SHALL TURN MACHINE OFF, ATTACH A DO NOT OPERATE SIGN AND NOTIFY MAINTENANCE IF THERE IS A SAFETY/QUALITY/OR POSSIBILITY OF MACHINE DAMAGE PROBLEM.

Lockout/Tagout Procedure:

LOCKOUT TAGOUT SHALL ONLY BE PERFORMED BY AUTHORIZED EMPLOYEES

1. NOTIFY AFFECTED EMPLOYEES/ SUPERVISOR
2. SHUT DOWN EQUIPMENT
3. ISOLATE ALL ENERGY TO EQUIPMENT
4. LOCK AND TAG ENERGY CONTROLS AND KEEP KEYS IN YOUR POSSESSION
5. FILL OUT TAG WITH YOUR NAME/DATE
6. RELEASE ANY STORED OR RESIDUAL ENERGY
7. TEST CONTROLS TO ENSURE INADVERTENT START UP IS NOT POSSIBLE

RESTORING FROM LOCKOUT/TAGOUT

1. NOTIFY AFFECTED EMPLOYEES THAT LOCKS AND TAGS WILL BE REMOVED
2. CHECK EQUIPMENT TO ENSURE ALL GUARDS ARE IN PLACE AND TOOLS ARE REMOVED
3. ENSURE CONTROLS ARE IN THE NEUTRAL OR OFF POSITION
4. REMOVE ANY DO NOT OPERATE SIGNS

TYPE OF ENERGY

- A. ELECTRICAL**
- B. POTENTIAL (STORED)
- C. KINETIC (IN MOTION)
- D. PNEUMATIC (AIR OR GAS)**
- E. HYDRAULIC
- F. THERMAL
- G. CHEMICAL
- H. SPECIAL HAZARDS

ISOLATION LOCATION/PROCEDURE/TYPE OF DEVICE

- A.** 400 AMP SWITCH ON CONTROL PANEL CAN BE LOCKED OUT TO REMOVE POWER TO THE FURNACE CONTROLS.
THE ABSENCE OF POWER MUST BE VERIFIED BY A QUALIFIED ELECTRICIAN BEFORE ANY WORK CAN BE PERFORMED.
- B. NA.
- C. NA.
- D.** PRIOR TO REMOVING POWER, THE FURNACE DOOR CYLINDER MUST BE AT THE LOWEST POSITION OR SECURE AT A SPECIFIC HEIGHT, THEN PLACE PNEUMATIC SWITCH IN DOWN POSITION AND REMOVE AIR SUPPLY BY CLOSING VALVE OR REMOVING HOSE USING QUICK CONNECT.
- E. NA.
- F. NA.
- G. NA.
- H. NA.

Niagara Specialty Metals, Inc.

Emergency/Lockout-Tagout Procedures

Date Printed: 5/20/2010

Emergency/Normal/Lockout-Tagout Procedures for **L&L #5 Electric Furnace SM**

Primary contact: TOM MACKIN

Primary contact phone 1: (716)704-6385

Primary contact phone 2: (716)772-5074

Backup contact: BOB SHABALA

Backup contact phone 1: (716)542-5552

Backup contact phone 2: (716)472-6672

Emergency Procedure:

EMPLOYEES SHALL NOTIFY PRIMARY OR BACKUP CONTACT IN THE CASE OF AN EMERGENCY.

Standard Procedure:

AFFECTED EMPLOYEES SHALL TURN MACHINE OFF, ATTACH A DO NOT OPERATE SIGN AND NOTIFY MAINTENANCE IF THERE IS A SAFETY/QUALITY/OR POSSIBILITY OF MACHINE DAMAGE PROBLEM.

Lockout/Tagout Procedure:

LOCKOUT TAGOUT SHALL ONLY BE PERFORMED BY AUTHORIZED EMPLOYEES

1. NOTIFY AFFECTED EMPLOYEES/ SUPERVISOR
2. SHUT DOWN EQUIPMENT
3. ISOLATE ALL ENERGY TO EQUIPMENT
4. LOCK AND TAG ENERGY CONTROLS AND KEEP KEYS IN YOUR POSSESSION
5. FILL OUT TAG WITH YOUR NAME/DATE
6. RELEASE ANY STORED OR RESIDUAL ENERGY
7. TEST CONTROLS TO ENSURE INADVERTENT START UP IS NOT POSSIBLE

RESTORING FROM LOCKOUT/TAGOUT

1. NOTIFY AFFECTED EMPLOYEES THAT LOCKS AND TAGS WILL BE REMOVED
2. CHECK EQUIPMENT TO ENSURE ALL GUARDS ARE IN PLACE AND TOOLS ARE REMOVED
3. ENSURE CONTROLS ARE IN THE NEUTRAL OR OFF POSITION
4. REMOVE ANY DO NOT OPERATE SIGNS

TYPE OF ENERGY

- A. ELECTRICAL**
- B. POTENTIAL (STORED)
- C. KINETIC (IN MOTION)
- D. PNEUMATIC (AIR OR GAS)**
- E. HYDRAULIC
- F. THERMAL
- G. CHEMICAL
- H. SPECIAL HAZARDS

ISOLATION LOCATION/PROCEDURE/TYPE OF DEVICE

- A.** 200 AMP SWITCH ON CONTROL PANEL CAN BE LOCKED OUT TO REMOVE POWER TO THE FURNACE CONTROLS.
THE ABSENCE OF POWER MUST BE VERIFIED BY A QUALIFIED ELECTRICIAN BEFORE ANY WORK CAN BE PERFORMED.
- B. NA.
- C. NA.
- D.** PRIOR TO REMOVING POWER, THE FURNACE DOOR CYLINDER MUST BE AT THE LOWEST POSITION OR SECURE AT A SPECIFIC HEIGHT, THEN PLACE PNEUMATIC SWITCH IN DOWN POSITION AND REMOVE AIR SUPPLY BY CLOSING VALVE OR REMOVING HOSE USING QUICK CONNECT.
- E. NA.
- F. NA.
- G. NA.
- H. NA.

Niagara Specialty Metals, Inc. Emergency/Lockout-Tagout Procedures

Date Printed: 5/20/2010

Emergency/Normal/Lockout-Tagout Procedures for McKay Flattener SM

Primary contact: TOM MACKIN

Primary contact phone 1: (716)704-6385

Primary contact phone 2: (716)772-5074

Backup contact: BOB SHABALA

Backup contact phone 1: (716)542-5552

Backup contact phone 2: (716)472-6672

Emergency Procedure:

EMPLOYEES SHALL NOTIFY PRIMARY OR BACKUP CONTACT IN THE CASE OF AN EMERGENCY.

Standard Procedure:

AFFECTED EMPLOYEES SHALL TURN MACHINE OFF, ATTACH A DO NOT OPERATE SIGN AND NOTIFY MAINTENANCE IF THERE IS A SAFETY/QUALITY/OR POSSIBILITY OF MACHINE DAMAGE PROBLEM.

Lockout/Tagout Procedure:

LOCKOUT TAGOUT SHALL ONLY BE PERFORMED BY AUTHORIZED EMPLOYEES

1. NOTIFY AFFECTED EMPLOYEES/ SUPERVISOR
2. SHUT DOWN EQUIPMENT
3. ISOLATE ALL ENERGY TO EQUIPMENT
4. LOCK AND TAG ENERGY CONTROLS AND KEEP KEYS IN YOUR POSSESSION
5. FILL OUT TAG WITH YOUR NAME/DATE
6. RELEASE ANY STORED OR RESIDUAL ENERGY
7. TEST CONTROLS TO ENSURE INADVERTENT START UP IS NOT POSSIBLE

RESTORING FROM LOCKOUT/TAGOUT

1. NOTIFY AFFECTED EMPLOYEES THAT LOCKS AND TAGS WILL BE REMOVED
2. CHECK EQUIPMENT TO ENSURE ALL GUARDS ARE IN PLACE AND TOOLS ARE REMOVED
3. ENSURE CONTROLS ARE IN THE NEUTRAL OR OFF POSITION
4. REMOVE ANY DO NOT OPERATE SIGNS

TYPE OF ENERGY

- A. ELECTRICAL
- B. POTENTIAL (STORED)
- C. KINETIC (IN MOTION)
- D. PNEUMATIC (AIR OR GAS)
- E. HYDRAULIC
- F. THERMAL
- G. CHEMICAL
- H. SPECIAL HAZARDS

ISOLATION LOCATION/PROCEDURE/TYPE OF DEVICE

- A. 100 AMP ITE DISCONNECT REMOVES POWER TO MCKAY FLATTENER. LOCATED ON WEST WALL ENTRY SIDE.

30 AMP SQUARE D DISCONNECT LOCATED ON WEST WALL EXIT SIDE REMOVES POWER TO EXIT TABLE HYDRAULIC PUMP.

- B. NA.
- C. NA.
- D. NA.

- E. PRIOR TO REMOVING POWER TO THE PUMP, THE EXIT TABLE MUST BE IN LOWEST POSITION.

- F. NA.
- G. NA.
- H. NA.

Niagara Specialty Metals, Inc.

Emergency/Lockout-Tagout Procedures

Date Printed: 5/20/2010

Emergency/Normal/Lockout-Tagout Procedures for **Rolling Mill** 1 SM

Primary contact: TOM MACKIN

Primary contact phone 1: (716)704-6385

Primary contact phone 2: (716)772-5074

Backup contact: BOB SHABALA

Backup contact phone 1: (716)542-5552

Backup contact phone 2: (716)472-6672

Emergency Procedure:

EMPLOYEES SHALL NOTIFY PRIMARY OR BACKUP CONTACT IN THE CASE OF AN EMERGENCY.

Standard Procedure:

AFFECTED EMPLOYEES SHALL TURN MACHINE OFF, ATTACH A DO NOT OPERATE SIGN AND NOTIFY MAINTENANCE IF THERE IS A SAFETY/QUALITY/OR POSSIBILITY OF MACHINE DAMAGE PROBLEM.

Lockout/Tagout Procedure:

LOCKOUT TAGOUT SHALL ONLY BE PERFORMED BY AUTHORIZED EMPLOYEES

1. NOTIFY AFFECTED EMPLOYEES/ SUPERVISOR
2. SHUT DOWN EQUIPMENT
3. ISOLATE ALL ENERGY TO EQUIPMENT
4. LOCK AND TAG ENERGY CONTROLS AND KEEP KEYS IN YOUR POSSESSION
5. FILL OUT TAG WITH YOUR NAME/DATE
6. RELEASE ANY STORED OR RESIDUAL ENERGY
7. TEST CONTROLS TO ENSURE INADVERTENT START UP IS NOT POSSIBLE

RESTORING FROM LOCKOUT/TAGOUT

1. NOTIFY AFFECTED EMPLOYEES THAT LOCKS AND TAGS WILL BE REMOVED
2. CHECK EQUIPMENT TO ENSURE ALL GUARDS ARE IN PLACE AND TOOLS ARE REMOVED
3. ENSURE CONTROLS ARE IN THE NEUTRAL OR OFF POSITION
4. REMOVE ANY DO NOT OPERATE SIGNS

TYPE OF ENERGY

A. ELECTRICAL

B. POTENTIAL (STORED)

C. KINETIC (IN MOTION)

D. PNEUMATIC (AIR OR GAS)

E. HYDRAULIC

F. THERMAL

G. CHEMICAL

H. SPECIAL HAZARDS

ISOLATION LOCATION/PROCEDURE/TYPE OF DEVICE

A. 400 AMP SWITCH ON GE LIMITAMP MOTOR CONTROL CENTER LOCATED ON EAST WALL SOUTH OF MILL MOTOR REMOVES POWER TO 1250HP MILL MOTOR.

125 AMP SQUARE D I-LINE BREAKER IN SOUTH 480V BREAKER PANEL (1200 AMP) REMOVES POWER TO BULL GEAR OIL PUMP, RETURN OIL PUMP, COOLING FAN FOR 1250HP MILL MOTOR, AND SCREW-DOWN MOTOR.

30 AMP SQUARE D DISCONNECT ON WEST WALL, NORTH OF MILL PIT REMOVES POWER TO HYDRAULIC PUMP FOR CATCHER'S TABLE.

30 AMP SQUARE D DISCONNECT ON WEST WALL, SOUTH OF MILL PIT REMOVES POWER TO 10 TON CRANE AND PLATFORM LIFT ON ENTRY SIDE OF MILL.

B. PRIOR TO REMOVING POWER TO THE EXIT TABLE AND PLATFORM LIFT, THEY NEED TO BE AT LOWEST POSITION OR SECURED AT A SPECIFIC HEIGHT.

C. NA.

D. NA.

E. NA.

F. NA.