

LOCKOUT-TAGOUT PROCEDURES

SANDBLAST

TABLE OF CONTENTS

EQUIPMENT	PAGE
SANDBLAST #1	2
SANDBLAST #2	3

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

Date Printed: 5/20/2010

Emergency/Normal/Lockout-Tagout Procedures for Sandblast #1 SA

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. 70 AMP SQUARE D I-LINE BREAKER IN MAIN 480V I-LINE PANEL ON WEST WALL IN SHOTBLAST BAY REMOVES POWER TO SANDBLAST AUGERS, RECLAIM SYSTEM, AND DUST COLLECTOR.

60 AMP SQUARE D I-LINE BREAKER IN 480V MAIN PANEL REMOVES POWER TO MICROLOGIX, 120V CONTROLS, HYDRAULIC PUMP FOR ARM, AND BRIDGE CRANE.

15 AMP SQUARE D BREAKER LOCATED IN MAIN 480V PANEL REMOVES POWER TO HYDRAULIC PUMP FOR SANDBLAST TABLE CYLINDER.

200 AMP SQUARE D DISCONNECT REMOVES POWER TO 75HP AIR COMPRESSOR ON SOUTH WALL BEHIND #1 SANDBLAST.

- B. NA.
- C. NA.

D. PRIOR TO REMOVING POWER TO SANDBLAST CONTROLS, AIR MUST BE REMOVED FROM HOPPER SO THERE IS NO STORED PRESSURE.

- E. NA.
- F. NA.

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

Date Printed: 5/20/2010

Emergency/Normal/Lockout-Tagout Procedures for Sandblast #2 SA

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 SQUARE D DISCONNECT ON WEST WALL WEST OF SANDBLAST CABINET REMOVES POWER TO SANDBLAST AUGERS, RECLAIM SYSTEM, AND DUST COLLECTOR.

150 AMP SQUARE D I-LINE BREAKER IN 480V MAIN PANEL REMOVES POWER TO 75HP AIR COMPRESSOR BEHIND SHOTBLASTER.

125 AMP SQUARE D I-LINE BREAKER LOCATED IN MAIN 480V PANEL REMOVES POWER TO 75HP AIR COMPRESSOR BEHIND #1 SANDBLAST WHICH IS IN PARALLEL WITH #2 SANDBLAST AIR COMPRESSOR BECAUSE OF DOUBLE BLASTING FEATURE.

- B. NA.
- C. NA.

- D. ALL AIR MUST BE REMOVED FROM SAND HOPPER AND LINES BEFORE POWERING DOWN AND WORK CAN BE DONE.

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