

“Hands-On Rotomolding”

# Safety in Secondary Operations

...or you might know best

but OSHA has the General Duty Clause

....or Gonaenodaethat

Ken Bather



# The Key Points

**What is Safety**

**Safety Solutions**

**Engineering Controls**

**Noise**

**Work Areas**

**Solvents/Cleaners**

**Trim Tools**

**Grinding & Spin Welding**

**Safety Catalogs and Safety Products**

Is 30 minutes adequate to cover this....

.....no, but to misquote Donald Rumsfeld

You do Workshops with the time that you have, not the time that you might want or wish

# What is Safety?

It is all about Numbers

Don't believe me...ask your Insurance Agent

Still unconvinced, sit with an Actuary. Boring....., but for the first 5 minutes it is an eye-opener

Realize things will happen...i.e. Murphy's Law or simply "Stuff happens"

Your Goal is to Minimize the opportunities for things to happen

Worst case, your goal is to minimize the damage

(I hate the term Accident Prevention...why??)

# Safety Solutions

- What can you do right now
- What can WE do short term
- What is the Companies long term solution

THE BEST OPTION FOR A SAFETY SOLUTION IS USUALLY AN  
ENGINEERING CONTROL

# Engineering Control

As stated, Engineering Controls are the best option for safety issues. This sounds good but what does that mean...

To explain, let's talk about Bandsaws as a case study



# Trivia Question #1

What is the Correct or Maximum gap allowed on a Bandsaw

## **OSHA Says**

### General Duty Clause

#### **• SEC. 5. Duties**

- (a) Each employer --
  - (1) shall furnish to each of his employees employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm to his employees
  - (2) shall comply with occupational safety and health standards promulgated under this Act.
- (b) Each employee shall comply with occupational safety and health standards and all rules, regulations, and orders issued pursuant to this Act which are applicable to his own actions and conduct.

# “Gonnaenodaethat 101”

Most of the accidents either minor or recordable, that we have had came not from the Molding Area, but from people doing secondary operations

The worst incidents have been with Vertical Band Saws. If you have them, get rid of them or start getting jobs off them. We have had two incidents in the past 10 yrs. and without gory pictures here are the details...



Each time it was easy to say that the Employee should have done this or that. The reality is that the Company should have done this or that. It is our DUTY.

**So next time a job comes up that can be cut on the Bandsaw, just say “Gonaenodaethat”**

# “Gonaenodaethat 201” Engineering Controls

What can be done? Well we have been working on ways to minimize Bandsaw use

BEFORE



6 Cuts to get 2 parts

Eliminated “6” Band Saw operations.

It is now all done on the CNC.

Funny thing is...

AFTER



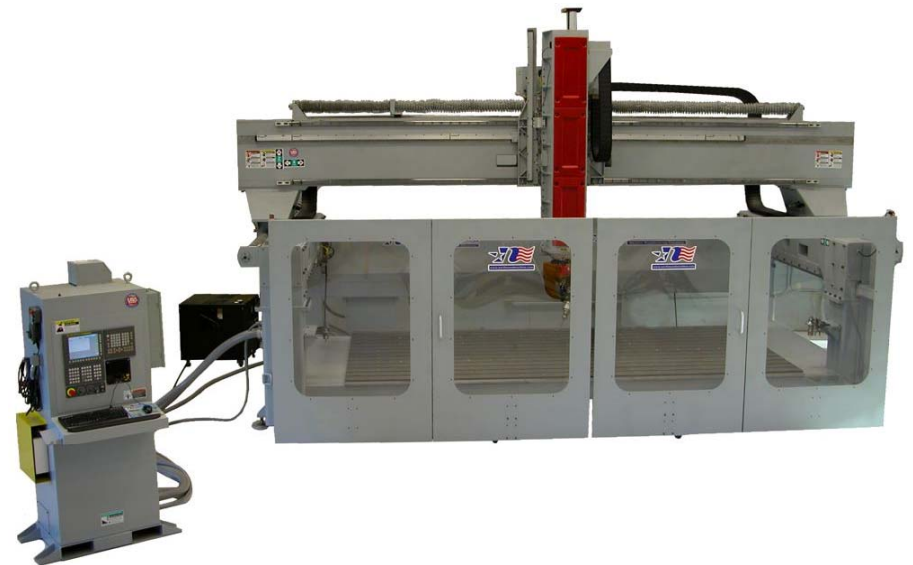
We are now not only doing it safer there are a lot less operations and handling of the part.

This of course means.....\$\$\$\$\$



# “Gonaenodaethat 301” Engineering Controls CNC

- Hopefully obvious, but worth pointing out



## Trivia Question #2

After an In-Plant Noise Assessment, what was identified as our biggest noise generator, exceeding safe decibel levels.



# NOISE

Ear Plugs vs. Ear Muffs which is better



NRR 32



NRR 27

NRR (NOISE REDUCTION RATING): The higher the decibel rating, the more effective the product.

## Trivia Question #3

Which work area is intuitively safer?



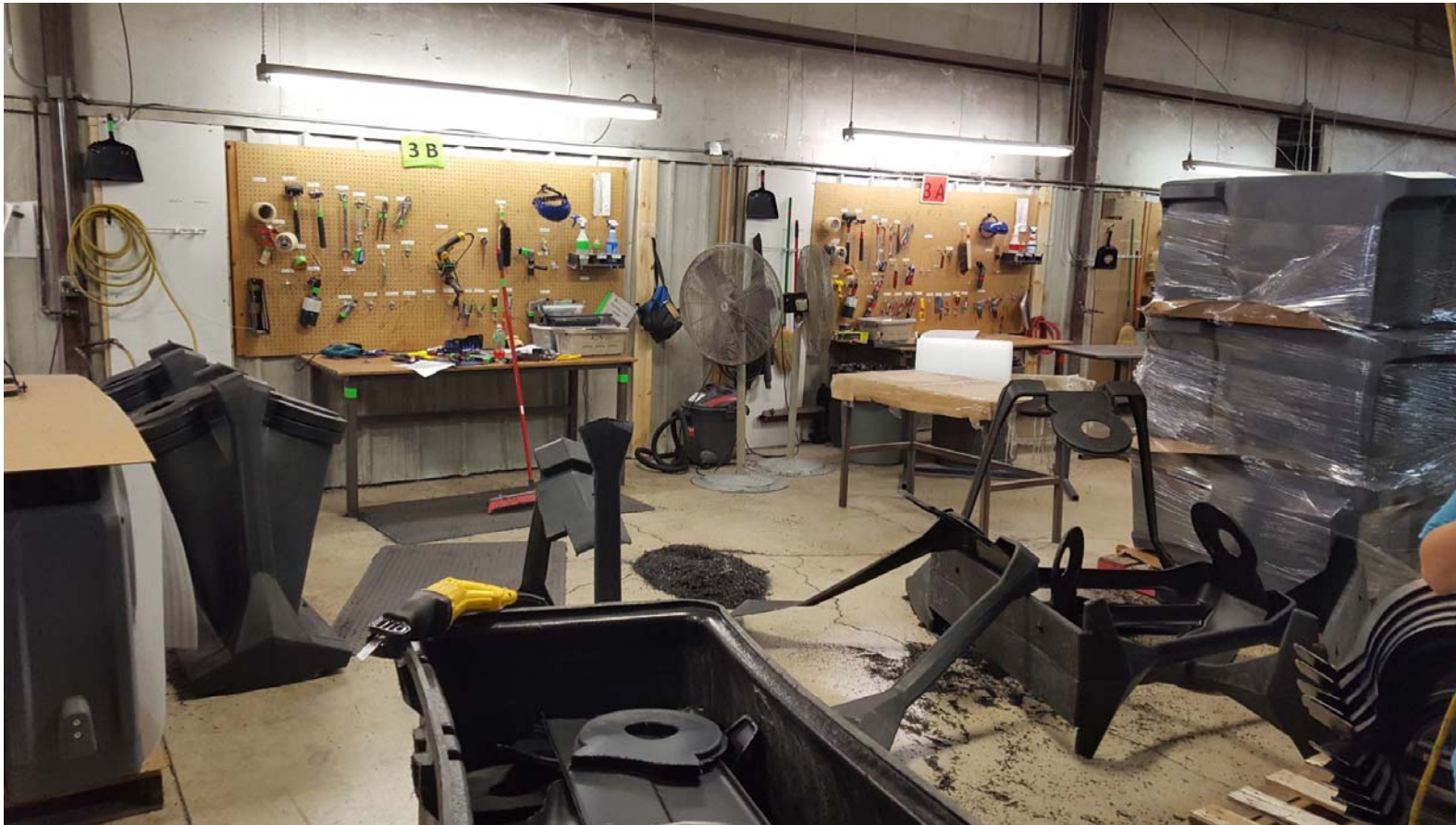
Well maybe it is just how I look at things.....



People are involved & People like to help



# Work Areas



## Work Areas

- Work Layout
- Lighting
- Tools
- Trim Stock
- Housekeeping

# Solvents



## Solvents

- Sign out Sheet
- Disposal can



# Trim Tools





# Grinding & Spin Welding

## Grinding

Flapper Wheel or Blue Pad

## Spin Welding

Full Face Shield, Glasses, Apron  
and Long Sleeves





## Trivia Question #4

We run Crosslink and did an Air Quality assessment. Guesses on the result??



**ENGINEERING CONTROL**

# Safety Catalogs and Products

- Do not rely on quick fix products. They are crutches. Some of them can help but don't base your Safety Response for an employee on them.....



## **Contains**

Isolation Gown

Latex Gloves

Mask WITH Visor

Wipes

Antimicrobial Wipes

Shoe Covers

Bio Scoop

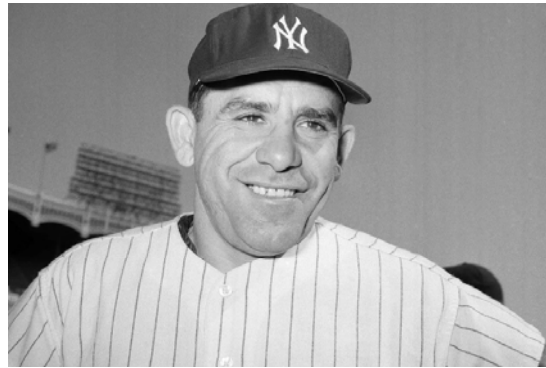
Package of Absorbent material

**MEETS REQUIREMENTS FOR  
BLOOD BORNE PATHOGEN**

**OSHA Compliant**

Let me tell you about my daughters cat.

# How to Improve?



You can observe a lot  
...by just watching.

Yogi Berra

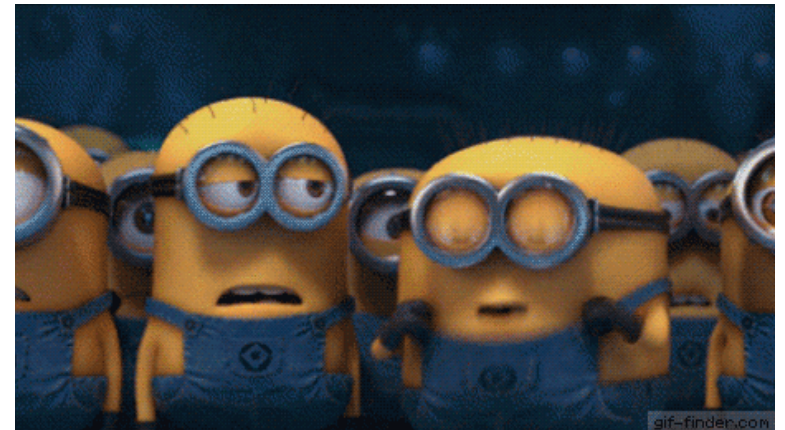
# The End Talk

Do you see your Secondary Operation Team like this



Courtesy of 2012books.lardbucket.org

or like this



Courtesy of navtipsandtraining.com

“Hands-On Rotomolding”

# Safety in Secondary Operations

Thank You

