



# Excellence Award



Plant WM/Fibers Division  
Shaw Industries Group, Inc.

*February 25, 2011*



# Company Profile

- **Shaw Industries Group, Inc.**, a subsidiary of Berkshire Hathaway, Inc., is the world's largest carpet manufacturer and a leading floor covering provider with more than \$5 billion in annual sales and approximately 25,000 associates.
- **Headquartered in Dalton, GA**, the company manufactures and distributes carpeting, rugs, hardwood, laminate and ceramic tile for residential and commercial product applications worldwide.
- **Plant WM of Shaw's Fibers Division** has ~ 335 associates involved in the manufacturing of carpet yarn.

# Plant WM Hearing Conservation Team

- **Ken Dillard**, Plant WM Safety Training Manager and Hearing Conservation Program Administrator
- **Joel Corn**, Plant WM Technical Manager
- **Tom Huntebrinker**, Corporate Industrial Hygiene Manager



# Our Initiative

- Plant WM had high noise levels; dual hearing protection was required in two primary departments. Through different implemented engineering controls, noise levels were reduced to 100 – 104 dBA.
- Associates' hearing was being impacted – STS's occurred.
- Approach:
  - Noise reduction at source
  - Improve hearing protector effectiveness through fit testing and training

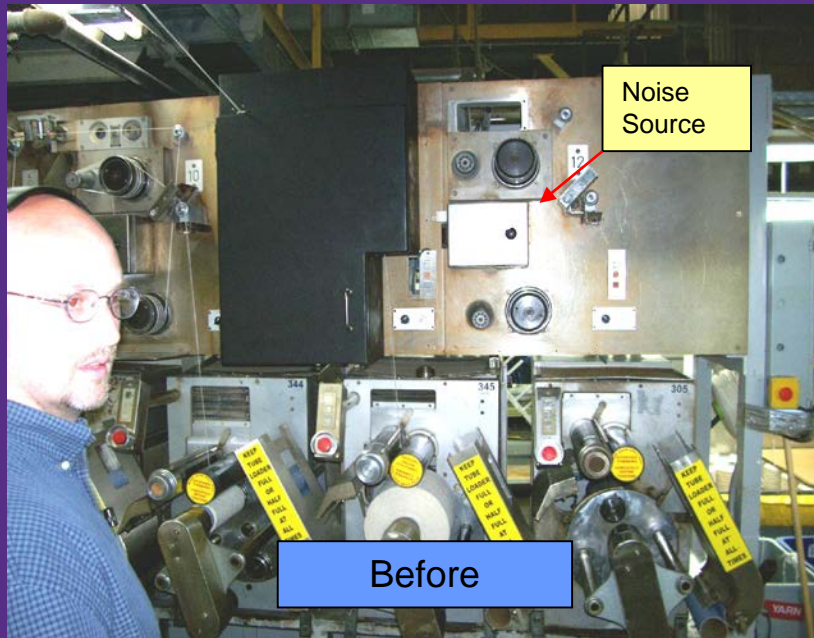
# Initiative Details

## Reduce machinery noise and associate exposure

- **Engineering Controls** – installed double enclosures around noise emanating sources.
- **Administrative Controls/ Improved Education** – introduced fit test verification system.
- **Personal Protective Equipment (PPE)** – expanded selection of hearing protection devices (HPDs).

# Initiative Details - Engineering

Example of double enclosure on Filteco Extrusion Equipment :



Designed by Joel Corn, Shaw Plant WM

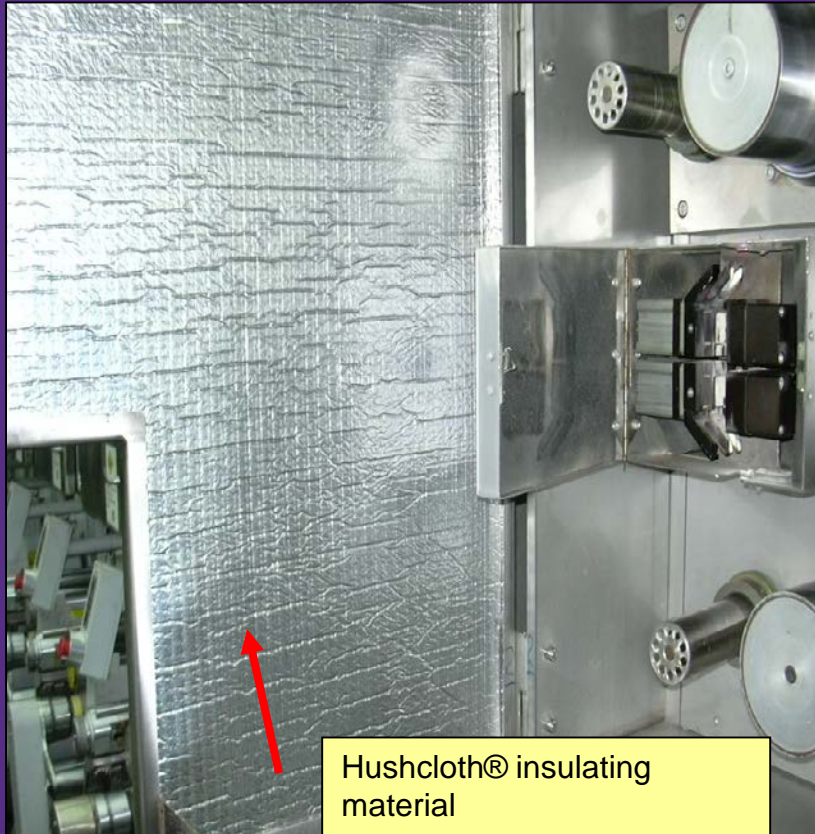
# Initiative Details - Engineering

Example of noise control results from double enclosure on Filteco Extrusion Equipment:

Location	Pre-enclosure dBA	Post-enclosure dBA	Hood Insulation dBA	Total Reduction dB
F/16 #2	111.4	104.9	103.9	7.5
F/16 #6	110.8	102.7	101.8	9
F/16 #11	107.3	100.2	99.7	7.6
Packout table	106.4	98.6	96.8	9.6

# Engineering Controls

## Filteco Extrusion Equipment



Hushcloth® insulating material



Another noise source, covered with guarding and insulating material

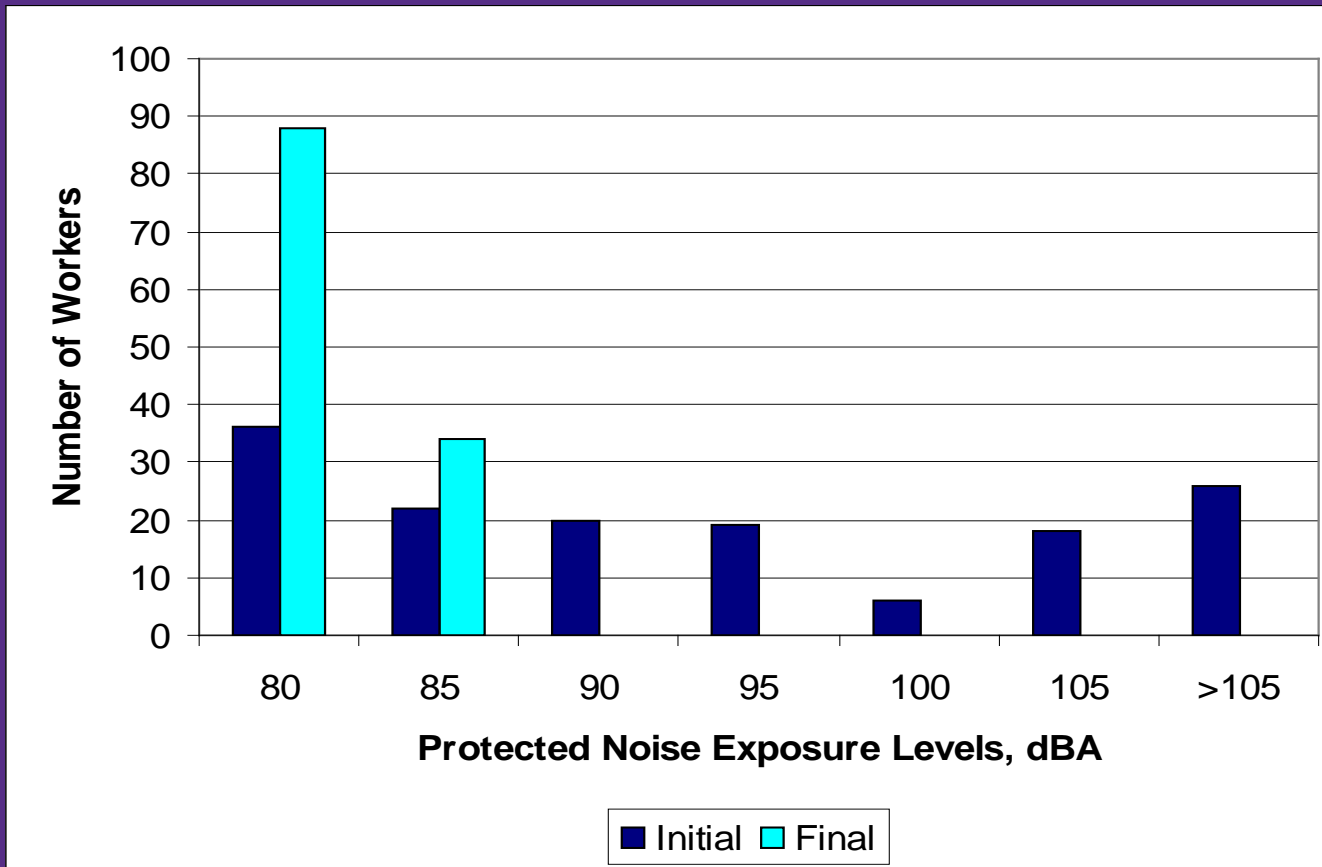


# Initiative — Administrative/Education

Use fit test verification system to match the HPD to the associate for their work environment.



# Protected Exposure Levels: before and after fit-testing



# Initiative Details - Administrative

- Expanded HPD offerings from 3 to 6 choices.
- Associates are certified to a single HPD using the fit test verification unit. Ongoing fit test verification is administered with annual audiometric test.
- Identified less noisy areas in the work area, encouraged employees to go there when not engaging machinery.
- Instituted in-house audiometric testing.
- Mandated job rotation in each department.
- We strongly encourage employees to immediately submit work orders to repair defective noise abatement equipment.

# Initiative Results

- Efforts have resulted in lower noise exposures, as well as increased assurance of hearing protector effectiveness, and focus on hearing conservation by all associates.
- Confirmed STS Rates Reduced.
- Some of the best practices developed at Shaw Plant WM have been adopted by other Shaw facilities.

# Initiative Results

Confirmed STS Rates Reduced:

YEAR	CONFIRMED STS	COMMENT
2006	5	Prior to noise control
2007	0	
2008	0	
2009	1	Non-production associate
2010	0	

# Initiative Results: Paradigm Shift Reactions to Fit-test verification

- In the days before fit testing, there was...
  - “...yeah, that looks about right.”
  - “...here, try these. I like them.”
  - “...load up on the NRR, baby! That should do it!”
  - “...now what’s that OSHA de-rating formula again?”
- Now, there is...
  - “...not even close. Lets try again.”
  - “...lets determine what HPD gives YOU the best protection.”
  - “...NRR is irrelevant. These 27’s work just fine.”
  - “...Mrs. Smith, your PAR is \_\_\_\_\_. Worn correctly, this HPD offers plenty of protection for your work environment.”

# Future of the Initiative

- Set aside money in each year's capital budget for additional noise abatement projects.
- Installation of double sound enclosures in another department.
- Continue to research and implement new engineering, administrative, and PPE controls as they become available.

# Lessons Learned

- Buy-in for engineering controls can be hard to get but is worth pursuing.
- One location's engineering control may not translate to another location.
- Before intervention we had a false sense of security with our Hearing Protection Devices.
- People generally want to do the right thing to protect their hearing.



# Significance of the Award

- This award provides recognition for successes gained, and lays the groundwork for future noise abatement projects and other interventions company wide.
- Our successes have encouraged our team to seek out additional challenges.

# Contact information

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