

Babcox and Wilcox

- Nothing asbestos specific
- 1967 Operation/Hazard/Control Measure matrix
- 1941 dust complaint.

Babcock and Wilcox Company
Tubular Products Division
Beaver Falls, Pa. 15010

Sept. 12 & 13, 1967

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OPERATION	HAZARD	CONTROL MEASURE
Water Quenching	I.R. radiation Convective heat	Sporadic exposure General ventilation
Rotary Furnace Gas and Fuel Oil	Carbon monoxide Smoke I.R. radiation Convective heat	Thermal exhaust hood " " " Sporadic exposure General ventilation
Piercing Mill	Iron oxide dust I.R. radiation Convective heat	General ventilation Sporadic exposure & Shielding General ventilation & personal fans
Rolling Mill	I.R. radiation Convective heat Iron oxide dust	Sporadic exposure Rotation of workers Cool air brought in from outside General ventilation
Reeling Mill	Iron oxide dust Convective heat I. R. radiation	General ventilation Spot cooling Sporadic exposure
Reheating Furnace Gas & Oxygen	Carbon monoxide Convective heat I.R. radiation	General ventilation " " Sporadic exposure
Sizing Mills	Iron oxide dust Convective heat I.R. radiation	General ventilation " " Sporadic exposure
Cutoff Saw	Iron oxide dust I.R. radiation Convective heat	General ventilation Sporadic exposure General ventilation
Sharpening Saws	Iron oxide dust Silicon carbide dust	General ventilation-sporadic operation Sporadic operation-Gen. ventilation
Cooling Beds	I. R. radiation Convective heat	Sporadic exposureXXXXXX. Gen. vent.
<u>Machine Shop</u>		
Machining	Iron oxide dust	Gen. vent.
Lathe	Oil mist	" "
Drill	Dermatitis	Personal hygiene
Mill		
Grinding		

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Babcock and Wilcox Company
Tubular Products Division
Beaver Falls, Pa. 15010

Sept. 12 & 13, 1967

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OPERATION	HAZARD	CONTROL MEASURE
Welding - Arc	Iron oxide fume	Gen. vent.
	Fluoride fume	" "
	Ozone	" "
	Oxides of nitrogen	" "
	CO & CO ₂	" "
	I.R. & U.V. radiation	Welding helmet & gloves worn
Degreasing	Solvent vapor	Gen. vent.-sporadic exposure
	Sinclair Solvent Dermatitis	Personal hygiene
<u>Hot Finishing Dept.</u>		
Cutting Ends of Tubes	Iron oxide dust	Gen. vent.
	Noise	Sporadic exposure
Straightening	None apparent	None needed
Visual Inspection	" "	" "
Blowout of Pipe Prior to Pickling	Iron oxide dust	Pipes blown into waterfall booth
Caustic Cleaning	Caustic mist	Gen. vent.
	Dermatitis	Personal hygiene
Pickling (5% Sulfuric Acid)	Acid mist	Gen. vent.
	SO ₂ Gas	
	Dermatitis	Personal hygiene
Anti-misting agent is also used. This agent Sumfoam made by Parken Chemical Co., Pittsburgh, Pa.		
Heat Treating Furnaces (Gas & Fuel Oil)	Carbon monoxide	Thermal exhaust ventilation
	Smoke	" " "
	Convective heat	Gen. vent.
	I.R. radiation	Sporadic exposure
Shot Blasting	Iron oxide dust	Local exhaust vent. to outside
	Noise	Sporadic exposure
Heating Furnace (Gas)	Carbon monoxide	Gen. vent.
	Convective heat	" "
	I.R. radiation	Sporadic exposure
Swaging	Iron oxide dust	Gen. vent.
	Noise	Sporadic exposure
	I.R. radiation	" "
	Convective heat	Gen. vent.

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Tubular Products Division
Beaver Falls, Pa. 15010

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OPERATION	HAZARD	CONTROL MEASURE
Turning Tubes	Iron oxide dust Oil mist Dermatitis	Gen. vent. " " Personal hygiene
Cutoff (ends)	Iron oxide dust Noise	Gen. vent. Sporadic exposure
Straightening (Presses)	None apparent	None needed
Cutoff (lengths)	Iron oxide dust Noise	Gen. vent. Sporadic exposure
Surface Grinding (Manual)	Iron oxide dust Noise	Gen. vent. Sporadic exposure
Hydraulic Testing	None apparent	None needed
Ultrasonic Testing	Ultrasonic sound	Sporadic exposure
Machining & Threading	Iron oxide dust Oil mist Dermatitis	Gen. vent. " " Personal hygiene
Blowout & Reaming of Pipes	Steel dust	Sporadic exposure & blowout is away from worker
Dipping Pipes in oil preservatives	Oil mist Dermatitis	Gen. vent. Personal hygiene
<u>Cold Draw Dept.</u>		
Heating Furnace (Ends) Gas	Carbon monoxide Convective heat I.R. radiation	Gen. vent. " " Sporadic exposure
Swaging	Iron oxide dust Convective heat I.R. radiation Noise	Gen. vent. " " Sporadic exposure " "
Surface Grinding (Manual)	Iron oxide dust Silicon carbide dust Noise	Gen. vent. " " Sporadic exposure
Heat Treating Furnace (Ends & Pipes)	Carbon monoxide Smoke Convective heat I.R. radiation	Thermal exhaust ventilation " " Gen. vent. Sporadic exposure

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Babcock and Wilcox Company
Tubular Products Division
Beaver Falls, Pa. 15010

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OPERATION	HAZARD	CONTROL MEASURE
Quenching (Oil)	Carbon monoxide	Local exhaust ventilation
	Aldehyde vapors	" " "
	Smoke	" " "
	Convective heat	Gen. ventilation
	I.R. radiation	Sporadic exposure
Descaling Bath (Caustic)	Caustic mist Dermatitis	Gen. vent. Personal hygiene
Water Rinse	None apparent	None needed
Pickling (5% sulfuric acid)	Sulfuric acid mist	Gen. vent.
	Sulfur dioxide gas	" "
	Dermatitis	Personal hygiene
Same anti-misting compounds used as listed for hot finishing department.		
Phosphate Bath	Caustic mist Dermatitis	Gen. vent. Personal hygiene
Drawing Compound Dip Tank	Dermatitis Grease & Fatty Acids D. Whitfield Richards Co.	Personal hygiene
Cold Drawing Benches	Phosphate dust	Gen. vent.
	Oil mist	" "
	Dermatitis	Personal hygiene
Heat Treating (Gas) Controlled Atmosphere Furnaces (9% carbon monoxide)	Carbon monoxide	Thermal exhaust ventilation
	Convective heat	Gen. vent.
	I.R. radiation	Sporadic exposure
Surface & Internal Grinding	Iron oxide dust	Gen. vent.
	Silicon carbide dust	" "
	Noise	Sporadic exposure
Oil Dipping	Dermatitis	Gen. vent.
Sand Blasting Booths (2)	Silica dust	Local exhaust vent. to outside
	Iron oxide dust	collector " " " " "
<u>Machine Shop</u>		
Retooling Dies		
Lathes	Iron oxide dust	Gen. vent.
Drills	Oil mist	" "
Grinding Mills	Dermatitis	Personal hygiene

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350 North Street, Harrisburg, PA 17120-0000

OPERATION	HAZARD	CONTROL MEASURE
<u>South Mill</u>		
Cutting Billets	Iron oxide dust	Gen. vent.
Metal Saws	Oil mist	" "
	Dermatitis	Personal hygiene
Sharpening Saws	Iron oxide dust	Gen. vent.
	Silicon carbide dust	" "
Rotary Furnace (Gas & Fuel Oil)	Carbon monoxide	Thermal exhaust ventilation
	Smoke	" " "
	Convective heat	Gen. vent.
	I.R. radiation	Sporadic exposure
Piercing Billets	Iron oxide dust	Gen. vent.
	Convective heat	" "
	I.R. radiation	Sporadic exposure
Rolling & Sizing Mills	Iron oxide dust	Gen. vent.
	Convective heat	" "
	I.R. radiation	Sporadic exposure
Cooling Beds	Convective heat	Gen. vent.
	I.R. radiation	Sporadic exposure
Cutting Ends	Iron oxide dust	Gen. vent.
	Noise	Sporadic exposure
Ultrasonic Inspection	Ultrasonic sound	Sporadic exposure

This mill makes very small diameter tubes. All operations are automatic and controlled from control booths shielded from I.R. radiation. Tubes are finished in other departments.

East Works

Machine Forming & Tig	Iron oxide fume	Gen. vent.
Welding of Stainless	Nickel oxide fume	" "
Steel Tubing (Argon)	Chromium oxide fume	" "
	Ozone	" "
	Oxides of nitrogen	" "
	CO & CO ₂	" "
	U.V. & I.R. radiation	Shielded & enclosed operation
Tube Reducing Machines	Oil mist	Gen. vent.
	Noise	Sporadic exposure
Draw Benches	Iron oxide dust	Gen. vent.
	Oil mist	" "
	Dermatitis	Personal hygiene

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810 North Second Street, Harrisburg, PA 17102-0001

OPERATION	HAZARD	CONTROL MEASURE
Degreasing	Caustic mist Dermatitis	Gen. vent. Personal hygiene
Pickling & Metal Treating	Sulfuric acid mist Sulfur dioxide gas Dermatitis	Gen. vent. " " Personal hygiene
Anti-misting compound also used.		
Metal Treating	Phosphate mist Dermatitis	Gen. vent. Personal hygiene
Dipping in Oil Preservatives	Dermatitis	Personal hygiene
Heating Ends Gas	Carbon monoxide Convective heat I.R. radiation	Gen. vent. " " Sporadic exposure
Swaging	Iron oxide dust Convective heat I.R. radiation Noise	Gen. vent. " " Sporadic exposure " "
Cutoff Machines	Steel dust Noise	Gen. vent. Sporadic exposure
Magnaflux Inspection	Ultraviolet radiation Dermatitis	Low frequency blacklite used Personal hygiene
<u>Machine Shop</u>		
Heat Treating Gas & Electric Furnaces	Carbon monoxide Convective heat I.R. Radiation	Thermal exhaust ventilation Gen. vent. Sporadic exposure
Quenching Water & Oil	Carbon monoxide Aldehyde vapors Smoke Convective heat I.R. radiation	Gen. vent. " " " " " " Sporadic exposure
Chromic Acid Plating	Chromic acid mist Dermatitis	Local exhaust ventilation to outside Personal hygiene
Stripping	Caustic mist	Local exhaust ventilation

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OPERATION	HAZARD	CONTROL MEASURE
Grinding External & Internal	Iron oxide dust Silicon carbide dust Noise	Gen. vent. " " Sporadic exposure
Sand Blasting Room	Silica dust Iron oxide dust	Air supplied sand blasting hood & dust respirator provided
<u>Wallace Run Steel Plant</u>		
Loading Electric Furnaces (4)	Iron oxide dust Nickel dust Chromium dust Manganese dust Silicon dust Limestone dust Coke dust Dermatitis	Gen. vent. " " " " " " " " " " " " Personal hygiene
Operating Electric Furnace	Iron oxide fume Chromium fume Nickel fume Smoke Convective heat I.R. radiation Noise	Ceiling exhaust fans above furnaces " " " " " " " " " " " " " " " Sporadic exposure " "
Pouring Melt Into Ladle	Above fumes Convective heat I. R. radiation	Same as above Gen. vent. Sporadic exposure
Preheating Hot Tops (Gas)	Carbon monoxide Convective heat I.R. radiation	Gen. vent. " " Sporadic exposure
Relining Ladles	Silica dust	Sporadic exposure - approved respirators available
Soaking Pits (Gas and Fuel Oil)	Carbon monoxide Convective heat I.R. radiation	Thermal exhaust ventilation " " " Sporadic exposure
Repairing Soaking Pits	Silica dust Convective heat	Sporadic exposure approved respirators available Personal cooling fans
Pouring Ingots	Iron oxide fume Chromium fume Nickel fume Smoke Convective heat I.R. radiation	Ceiling exhaust fans above furnaces " " " " " " " " " " Gen. vent. Sporadic exposure

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OPERATION	HAZARD	CONTROL MEASURE
Pressing Ingots into Blooms	Iron oxide dust Convective heat Radiant heat	Gen. vent. " " Shielding and distance
Scarfig Gas & Oxygen	Iron oxide fume CO & CO ₂ Ozone Oxides of nitrogen I.R. & U.V. radiation	Gen. vent. " " " " " " Protective clothing, gloves & face shield worn
Swing Grinders	Iron oxide dust and fume Silicon carbide dust Noise	Local exhaust ventilation " " " Sporadic exposure
Hot Rolling Operation	Iron oxide dust Convective heat Radiant heat Noise	Gen. vent. " " Operations controlled from control booth
Caustic Cleaning	Caustic mist Dermatitis	Gen. vent. Personal hygiene
Pickling (5% sulfuric acid)	Sulfuric acid mist Sulfur dioxide gas Dermatitis	Gen. vent. " " Personal hygiene
Turning of Rolls	Iron oxide dust Oil mist Dermatitis	Gen. vent. " " Personal hygiene

Company does not use nodular iron rolls.

Koppel Steel Works

Loading Electric Furnaces	Coke dust Steel dust Chromium dust Nickel dust Manganese dust Silicon dust Limestone dust	Gen. vent. " " " " " " " " " " " "
Electric Furnace (remelt)	Iron oxide fume Nickel fume Chromium fume Convective heat I.R. radiation Noise Smoke	Gen. vent. " " " " " " Sporadic exposure " " Gen. vent.

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Sept. 12 & 13, 1967

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OPERATION	HAZARD	CONTROL MEASURE
Oxygen Lancing xxxxxx and Degasing	Above fumes Convective heat I.R. radiation Noise	Operation performed beneath overhead exhaust fan + noise Sporadic exposure " "
Pouring from Furnaces into Ladle	Above fumes Smoke Convective heat I.R. radiation	Same as above
Pouring Metal into Ingots	Same as above	Same as above
Pouring operations are handled automatically from remote controlled crane. booth .		
Relining of Ladles	Silica dust	Sporadic exposure - approved respirators available
Soaking Pits Gas Fired	Carbon monoxide Smoke I.R. radiation Convective heat	Gen. vent. " " Sporadic exposure Gen. vent.
Blooming Mill	Iron oxide dust Convective heat I.R. radiation	air conditioned Operations controlled from remote / control booth
Hot Rolling	Iron oxide dust I.R. radiation Convective heat Noise	Operations controlled from air con- ditioned control booth
Sawing of Blooms	Iron oxide dust Noise	Operations controlled from air con- ditioned control booth
Flame Scarfing (Gas & Oxygen)	Carbon monoxide Iron oxide fume I.R. & U.V. radiation Noise	Gen. vent. " " " " Protective clothing & face shields worn
<u>Bar Mill</u>		
Heating furnace (Gas)	Carbon monoxide Convective heat I.R. radiation	Thermal exhaust ventilation Gen. vent. Sporadic exposure
Hot Rolling	Iron oxide dust Convective heat I.R. radiation	Air conditioned control booth " " " " " " " "

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OPERATION	HAZARD	CONTROL MEASURE
Cutoff Saw (Metal Saw)	Iron oxide dust Convective heat I.R. radiation	Operations controlled from shielded control booth
Controlled Cooling Furnace (Gas)	Carbon monoxide Convective heat I.R. radiation	Thermal exhaust ventilation General ventilation Personal hygiene
Row Straightening	Iron oxide dust Oil mist Dermatitis	Gen. vent. " " Personal hygiene
Pickling (5% sulfuric acid)	Sulfuric acid mist Sulfur dioxide gas Dermatitis	Gen. vent. " " Personal hygiene
Storage and Grinding	Iron oxide dust Silicon carbide dust Noise	Gen. vent. " " Sporadic exposure
Sharpening Saws	Iron oxide dust Silicon carbide dust	Gen. vent. " "

Control Lab for Koppel Steel Works

Sample Preparation Room	Iron oxide dust	Gen. vent.
Lathe	Silicon carbide dust	" "
Mill	Noise	SPORADIC EXPOSURE
Grinders	Dermatitis	Personal hygiene
Emission Spectrometer (2)	Iron oxide fume Nickel oxide fume Chromium oxide fume Carbon monoxide Ultraviolet radiation	Operations performed under a vacuum in a shielded area

Shapes Finishing Dept.

Forming and Straightening	Iron oxide dust	Gen. vent.
Cutting (Sizing)	Iron oxide dust Oil mist Dermatitis	Gen. vent. " " Personal hygiene
Drawing	Iron oxide dust Oil mist Dermatitis	Gen. vent. " " Personal hygiene

OPERATION	HAZARD	CONTROL MEASURE
Annealing Furnace (Gas)	Carbon monoxide Convective heat I.R. radiation	Thermal exhaust ventilation Gen. vent. Sporadic exposure
Abrasive Sawing	Iron oxide dust & fume Aluminum oxide dust & fume	Enclosed - gen. vent. " " "
Manual Degreasing	Trichloroethylene vapor Dermatitis	Gen. vent. - sporadic operation Personal hygiene
<u>Maintenance Shop</u>		
Welding (Gas Welding)	Iron oxide fume Fluoride fume CO & CO ₂ Ozone Oxides of nitrogen I.R. & U.V. radiation	Gen. vent. " " " " " " " " Welding helmet & gloves worn
Machining Grinding Drilling Lathe	Iron oxide dust Aluminum oxide dust Oil mist Dermatitis	Gen. vent. " " " " Personal hygiene
Shot Blasting	Iron oxide dust	Local exhaust ventilation to outside collector This unit has been installed in the plant but is not in operation at the present time
<u>Precision Fittings Dept.</u>		
Torch Cutting of Bars	Iron oxide fume CO & CO ₂ Oxides of nitrogen Ozone I.R. & U.V. radiation	Local exhaust ventilation " " " " " " " " " Protective glasses worn
Pipe Cutoff Machine	Steel dust Noise	Gen. vent. Sporadic exposure
Burning Holes in Pipes (Gas - Oxygen Torch)	Iron oxide fume Carbon monoxide gas dioxide Oxides of nitrogen Ozone I.R. & U.V. radiation	Gen. vent. " " " " " " Protective goggles and gloves worn

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OPERATION	HAZARD	CONTROL MEASURE
Hot Forming Mills (Forcing Fittings Over Mandrills)	Carbon monoxide gas Convective heat Radiant heat	Gen. vent. " " Sporadic exposure
Finish Grinding	Carborundum dust Steel dust Noise	Gen. vent. " " Sporadic exposure
Tumbling and Rotoblasting	Steel dust Noise	Local exhaust ventilation to outside collector Sporadic exposure
Heating Furnace (Gas)	Carbon monoxide Convective heat I.R. radiation	Thermal exhaust ventilation Gen. vent. Sporadic exposure
Stamping & Forming of Parts (net)	Convective heat Iron oxide dust Noise I.R. radiation	Gen. vent. " " Sporadic exposure " "
Two large stamping operations have local exhaust ventilation on them. The rest are general air dilution.		
Heat Treating Ovens (Gas)	Carbon monoxide Convective heat I.R. radiation	Thermal exhaust ventilation Gen. vent. Sporadic exposure
Water Quenching	Convective heat I.R. radiation	Gen. vent. Sporadic exposure
Shot Blasting	Steel dust	Local exhaust vent. to outside collector
Maintenance Shop Welding (Arc)	Iron oxide fume Fluoride fume CO & CO ₂ Ozone Oxides of nitrogen U.V. & I.R. radiation	Gen. vent. " " " " " " " " Welding helmet & gloves worn
Machining		
Drill Press	Iron oxide dust	Gen. vent.
Lathe	Oil mist	" "
Multiple drill machine	Dermatitis	Personal hygiene

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OPERATION	HAZARD	CONTROL MEASURE
Ultrasonic Inspection	Ultrasonic sound	Sporadic exposure
Dip Painting	Toluene vapor	Exhaust fan over dip tanks in drying area
Paint Stripping Operating	Caustic mist Oakite Stripper Q-4 Dermatitis	Gen. vent. - sporadic operation Personal hygiene
Gas Lift Trucks	Carbon monoxide Aldehyde vapors Smoke	Gen. vent. " " " "
<u>Extrusion Department</u>		
Sawing Billets	Iron oxide dust Oil mist Dermatitis	Gen. vent. " " Personal hygiene
Sharpening Saws	Iron oxide dust Silicon carbide dust	Gen. vent. " "
Degreasing of Billets	Caustic mist OH Cleaner, Wyandotte Chemical Company Dermatitis	Gen. vent. Personal hygiene
Rotary Heating Furnace (Gas Fired)	Carbon monoxide Convective heat I.R. radiation	Gen. vent. " " Sporadic exposure
Electric Induction Furnace	I.R. radiation Convective heat	Automatic operation - sporadic expos. Gen. vent.
Piercing of Billets	Iron oxide dust Glass dust Convective heat I.R. radiation	Gen. vent. " " " " Shielding & distance
Electric Induction Furnace	Convective heat I.R. radiation	Gen. vent. Automatic operation & sporadic expos.
Extrusion Press	Iron oxide XXXX dust Glass dust Convective heat I.R. radiation	Gen. vent. " " " " Automatic operation - sporadic expos. are

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OPERATION	HAZARD	CONTROL MEASURE
Electric Furnace	I.R. radiation	Enclosed-sporadic exposure
Argon Atmosphere	Convective heat	Gen. vent.

Extrusion Department was not inspected before. All operations are controlled automatically. Ground glass is used as a lubricant at the piercing and extrusion operations.

Maintenance Shop

Arc Welding	Iron oxide fume	Gen. vent.
	Fluoride fume	" "
	Ozone	" "
	Oxides of nitrogen	" "
	CO & CO ₂	" "
	I.R. & U.V. radiation	Welding helmet & gloves worn

Machining		
Drill	Iron oxide dust	Gen. vent.
Lathe	Aluminum oxide dust	" "
Grinder	Oil mist	" "
Saw	Dermatitis	Personal hygiene

Mold Shop

Mixing	Silica dust	Gen. vent.
	Resin dust	Sporadic operation
	Durez Resin, Hooker Chemical Company and SS-64-47 Shell Coated Sands, Cleveland, Ohio	

Molding	Same as above	Local exhaust vent.
	Formaldehyde vapor	" " "
	Ammonia gas	" " "
	Dermatitis	Personal hygiene

Company prepares ~~one~~ molds for dyes in the Extrusion Department. Molds are shipped out to outside foundry for casting.

Machine Shop

Diesel Repair	Solvent vapor	Gen. vent.
	Sinclair Solvent	
	Dermatitis	Personal hygiene
Testing Engines	Carbon monoxide	Performed outside
	Aldehyde vapors	" "
	Smoke	" "
	Noise	Sporadic operation

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OPERATION	HAZARD	CONTROL MEASURE
Burning (Oxygen-Gas)	Iron oxide fume	Gen. vent.
	CO & CO ₂	" "
	Ozone	" "
	Oxides of nitrogen	" "
	I.R. & U.V. radiation	Welding goggles & gloves worn
Machining Drill Lathe Planer Grinder Mill Saws	Iron oxide dust	Gen. vent.
	Stainless steel dust	" "
	Aluminum dust	" "
	Brass dust	" "
	Aluminum oxide dust	" "
	Silicon carbide dust	" "
	Oil mist	" "
	Dermatitis	Personal hygiene
<u>Welding Department</u>		
Submerged arc welding	Iron oxide fume	Gen. vent.
Arc Welding	Fluoride fume	" "
Tig Welding	Ozone	" "
Mig Welding	Oxides of nitrogen	" "
	CO & CO ₂	" "
	I.R. & U.V. radiation	Welding helmet & gloves worn

Company has two flexible duct local exhaust systems that can be operated in any of the above welding station whenever they are necessary.

X-raying of Welds	Ionizing radiation	Shielding, warning signs, distance
Steam Cleaning	Caustic mist	Local exhaust ventilation
	Sprax	
	Dubois Chemical Co.	
	Dermatitis	Personal hygiene
<u>Electric Shop</u>		
Motor Repair	Solvent vapors	Gen. vent.
	Sinclair solvent	Personal hygiene
	Dermatitis	
Steam Cleaning of Motors	Caustic mist	Booth exhaust ventilation
	Sprax	
	Dubois Chemical Co.	
	SS-25 VAPOR	" " "
	Chemsearch Corp.	
	Dermatitis	Personal hygiene

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OPERATION	HAZARD	CONTROL MEASURE
Lead Soldering	Lead oxide fume Tin oxide fume Fluoride fume Dermatitis	Gen. vent. - sporadic " " " " " " Personal hygiene
No silver soldering operations performed.		
<u>Pipe Shop</u>		
Cutting	Iron oxide dust	Gen. vent.
Threading	Oil mist	" "
Grinding	Dermatitis	Personal hygiene
Arc Welding	Iron oxide fume Fluoride fume CO & CO ₂ Ozone Oxides of nitrogen I.R. & U.V. radiation	Gen. vent. " " " " " " " " Welding helmet & gloves worn
<u>Paint Shop</u>		
Mixing of Paint	Solvent vapor Toluene Mineral Spirits	Gen. vent. - sporadic operation
<u>Carpenter Shop</u>		
Sawing	Wood dust	Gen. vent. xxxxxxxxxxxxxxxx
Planing	Noise	Sporadic exposure
Nailing		
<u>Power Plant</u>		
Boiler Room (Oil Fired)	Carbon monoxide Convective heat I.R. radiation	Thermal exhaust ventilation Gen. vent. Sporadic exposure
xxxxxxxxxx		
Generator Room	Noise	Sporadic exposure
<u>Quality Control Lab</u>		
<u>Physical Test Bay</u>		
Sample Preparation		
Lathe	Iron oxide dust	Gen. vent.
Grinder	Aluminum oxide dust	" "
Mill	Oil mist	" "
	Dermatitis	Personal hygiene

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OPERATION	HAZARD	CONTROL MEASURE
Degreaser	Trichloroethylene vapor Dermatitis	Local exhaust ventilation Thermostatic controls Personal hygiene
Electric Heat Treating Furnace	Convective heat I.R. radiation	Gen. vent. Sporadic exposure
Oil Quenching	Carbon monoxide Aldehyde vapor Smoke Convective heat I.R. radiation	Local exhaust ventilation " " " " " " Sporadic exposure " "
Physical Testing Machines	Iron oxide dust	Gen. vent.
Metallurgical Testing Labs		
Etching	Alcohol vapor Acid mist Dermatitis	Chemical fuming hood " " " Personal hygiene
Polishing	Iron oxide dust Polisher dust (Rouge)	Enclosed operation - wet material " " " "
Testing Machines X-ray Diffractometer (40 KV)	Ionizing radiation	Shielded & isolated operation
<u>Analytical Lab</u>		
Emission Spectrometer (2)	Iron oxide fume CO & CO ₂ Ozone Oxides of nitrogen U.V. radiation	Gen. vent. " " " " " " Shielded source
Wet Chemical Lab	Various acids, bases & solvents Dermatitis	Laboratory fume hood Personal hygiene

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SUBJECT: Babcock and Wilcox Co.
Beaver Falls, Pa.

1101 Arrott Building
Pittsburgh, Pa.

No Date

TO: Mr. Allen E. Dooley

Rec'd 10/24/41

FROM: *A. M. Stang*
A. M. Stang and J. S. Sharrah

In response to a complaint made by Mrs. David R. Turnbull on October 5, 1941 and received in this office on October 9, 1941 against the Babcock and Wilcox Co. of Beaver Falls an investigation was made on October 9, 1941.

Mrs. Turnbull was contacted first at her home. Her son who worked at the polishing machine during the summer was also present at the interview. Mrs. Turnbull stated that the men working at the polishing machine were subjected to a concentration of "emery" dust and steel particles in the air during operation of the machine.

Mr. F. A. Weber, personnel director of the Babcock and Wilcox Co. was then interviewed. The plant was shut down at this particular time, so a later visit was necessary. However, at this time Mr. Weber stated that to have a condition such as this exist, was not the company's policy and that if such a condition did exist, it was not known to him. He assured the interviewers that he would give us every opportunity to investigate the conditions surrounding, not only the bending room, but the entire plant as soon as they resumed operation.

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350 North Street, Harrisburg, PA 17120-0030
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SUBJECT: Babcock & Wilcox Tube Mill
Beaver Falls, Pa.

October 21, 1941

TO: Wm. B. Fulton, M.D., Director,
Bureau of Industrial Hygiene

FROM: Allan E. Dooley

Mr. Stang made a preliminary investigation of the bending shop in the above-named plant in response to a complaint received from Mrs. David R. Turnbull, 3215 College Avenue, Beaver Falls, Pa. It was impossible to visit the bending shop because of a strike but Mr. Stang interviewed Mr. F.A. Weber, Personnel Director, who said that he was unaware of the condition which caused the complaint. Mr. Weber promised to see that the blower on the polisher would be repaired. When the plant resumes work, an engineer of the Pittsburgh office will make an inspection of the operation.

Allan E. Dooley

AED:LCS

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PA Historical & Museum Commission

October 27, 1941

SUBJECT: Babcock and Wilcox Co.
Beaver Falls, Pa.

TO: Mr. B. Fulton, M.D., M.P.H., Director
Bureau of Industrial Hygiene

FROM: Allan E. Dooley

Mr. Stang revisited this plant on October 17 in response to a complaint from Mrs. David R. Turnbull, 3215 College Ave., Beaver Falls, Pa. Mr. Grau, Safety Director, explained that the plant is being modernized and enlarged. It was found on inspection of the operation referred to in the letter of complaint, that local exhaust ventilation was provided. The abrasive material used is carborundum. Atmospheric samples may be collected and analyzed at a later date when the reconstruction is complete. There are no recommendations at this time.

W/

OCT 27 1941

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