

Institute of Roll Design

Spring 2024

Milwaukee, Wisconsin



Milwaukee, Wisconsin



Points of Interest



- Milwaukee Art Museum
- Harley Davidson Museum
- American Family Field
- Milwaukee Public Museum
- Historic Third Ward
- Milwaukee River Walk
- Mitchell Park Domes
- Milwaukee County Zoo
- Brewery Tours
- Potawatomi Casino



Wisconsinisms (say what)



- ***Born in a barn?***
A sarcastic question which usually means you left the door open.
- ***Brat:***
A sausage; a Wisconsin tailgate favorite; doesn't have anything to do with a spoiled kid.
- ***Bubblin':***
To the rest of the world outside Wisconsin's borders; it is known as a drinking fountain.
- ***Budge:***
To merge without permission; cut in, as in "Don't you budge in line for a brat, I was here first!"
- ***Cheese curds:***
Small pieces of fresh cheese that squeak when you bite into them
- ***Cripes:***
A Wisconsin expletive
- ***Fish fry:***
A Friday night dining ritual in Wisconsin.
- ***Farm & Fleet or Fleet Farm:***
A Cheddarhead's answer to Bloomingdale's.
- ***Frozen Tundra:***
Lambeau Field.

Wisconsinisms (say what)



- **Gots:**
Used in place of "have"; as in, "I gots my tickets to watch da Packers play on da Frozen Tundra."
- **John Deere:**
A Cheddarhead's other vehicle
- **Pert-neer:**
Near; in close proximity; just about.
- **Sheepshead:**
A card game.
- **Schmear:**
When someone piles on points while playing Sheepshead.
- **Skeeter:**
Wisconsin state bird.
- **Stop-and-go lights:**
What everyone else refers to as traffic signals.
- **Upnort:**
Where Wisconsinites go on vacation.
- **Where-bouts:**
Locality; proximity; as in, "where-bouts are youse guys from?"
- **Youper:**
Someone from even further upnort than you.

32 Minute Bus Ride



Charter Steel - Saukville



Mill Overview



- Roll 82 + different sizes of coiled rounds
- Roll 80% rod product ($7/32'' - 7/8''$)
- Roll 20% bar product ($5/16'' - 1\ 3/8''$)
- Cobble % 0.09 (2023)
- Annual capacity of 700,000 tons



Company Confidential

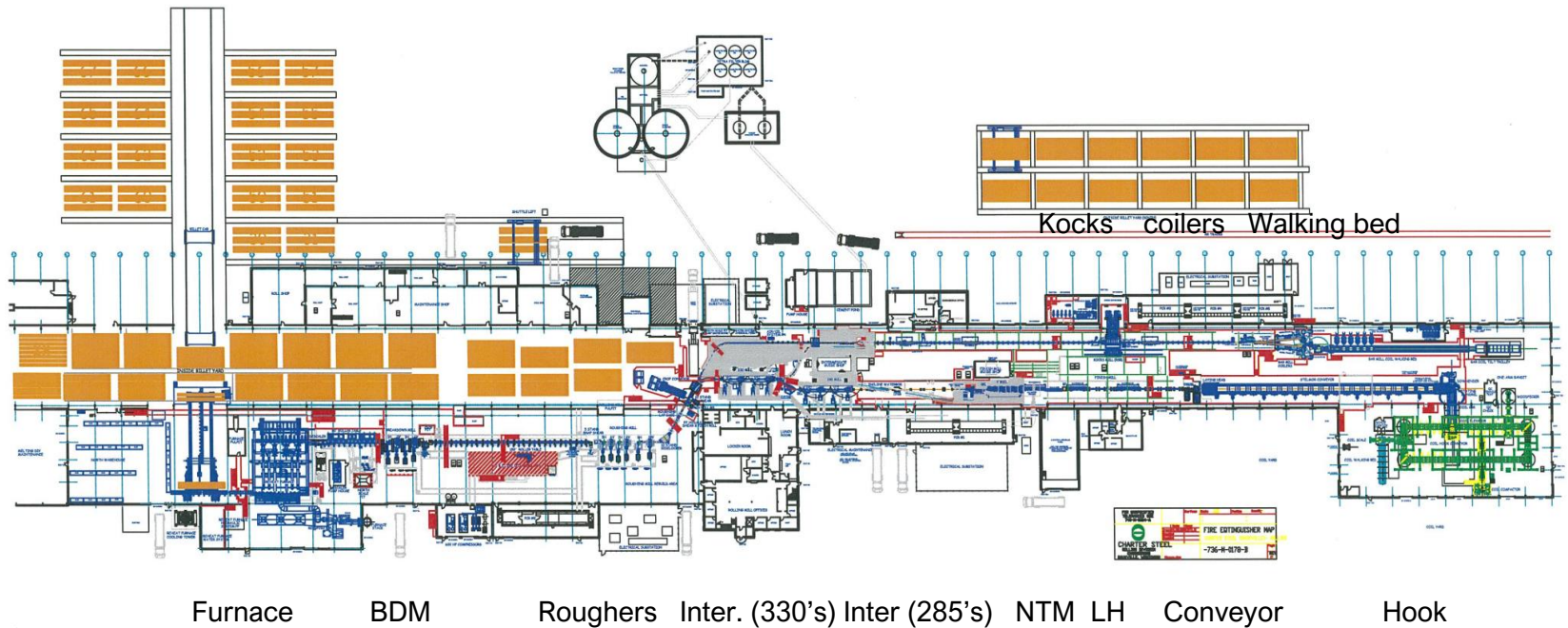
Schedule



- **Work 5-2-2-5 schedule**
(Work Mon. & Tue. or work Wed. & Thur. and rotate weekends)
(Every other weekend you get 5 days off in a row)
- **Maintenance down day on Thursday**
Hours depend on maintenance need and steel demand
Melting is also down on Thursday's
- **Roll changes on Thursday during Maintenance outage**

April						
SUN	MON	TUES	WED	THURS	FRI	SAT
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

Mill Overview



Billets 5.5" x 5.5" x 40'



Reheat Furnace (transfer car / skid bed / scale / bar code)



Reheat Furnace



- Danieli Centro-Combustion
- Walking Beam Furnace
- Holds 58 billets
- Has 3 zones (Recuperator / Heat / Soak)
- 36 burners
- Built for 100 TPH (well exceed that rating – up to 130 TPH short terms)

Reheat Furnace



Reheat Furnace



Furnace discharge / Descaler



Breakdown Mill (4 Danieli 685mm Cantilevers)



Roughing Mills (6 Danieli 450mm Cantilever)



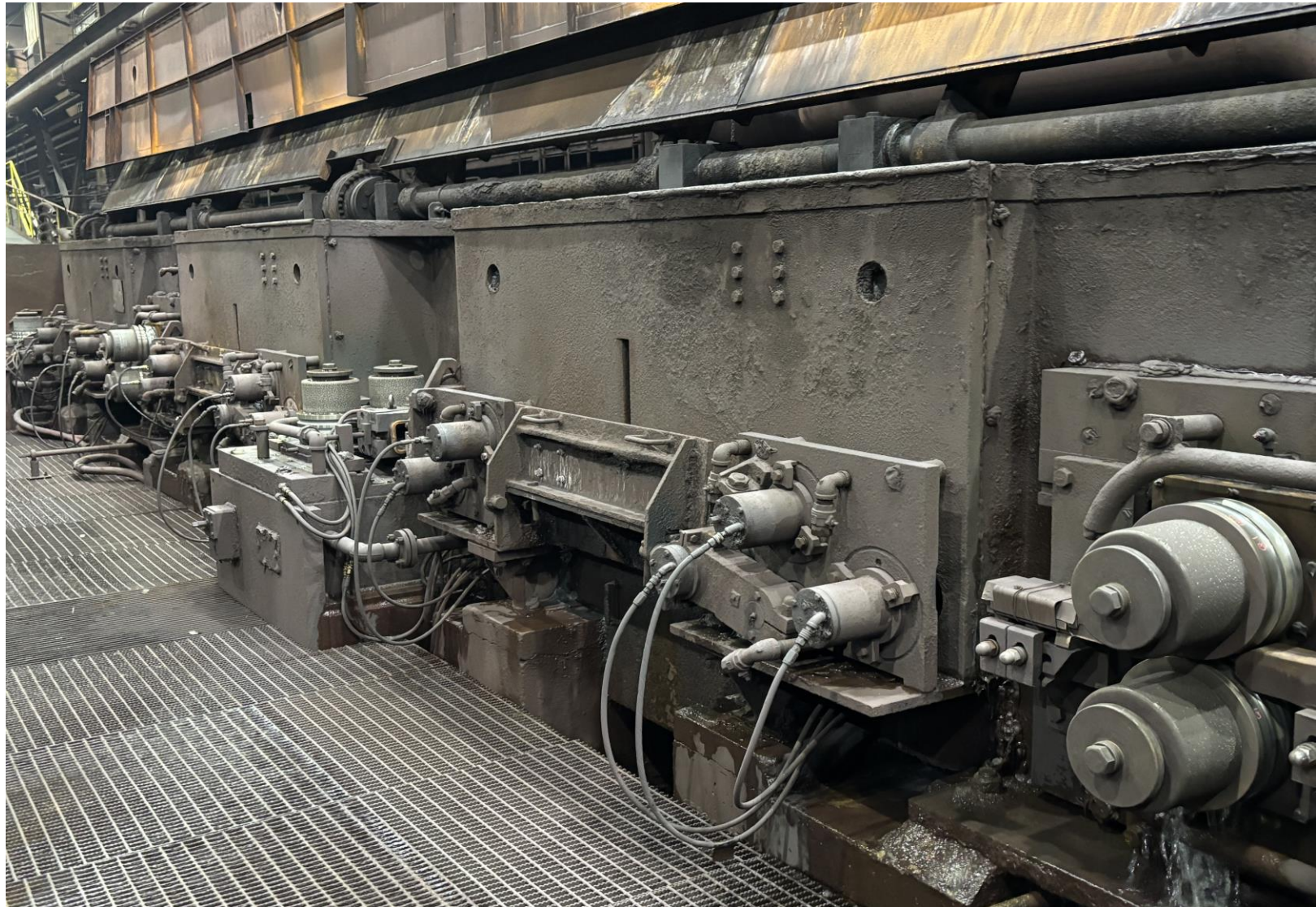
Pulpit



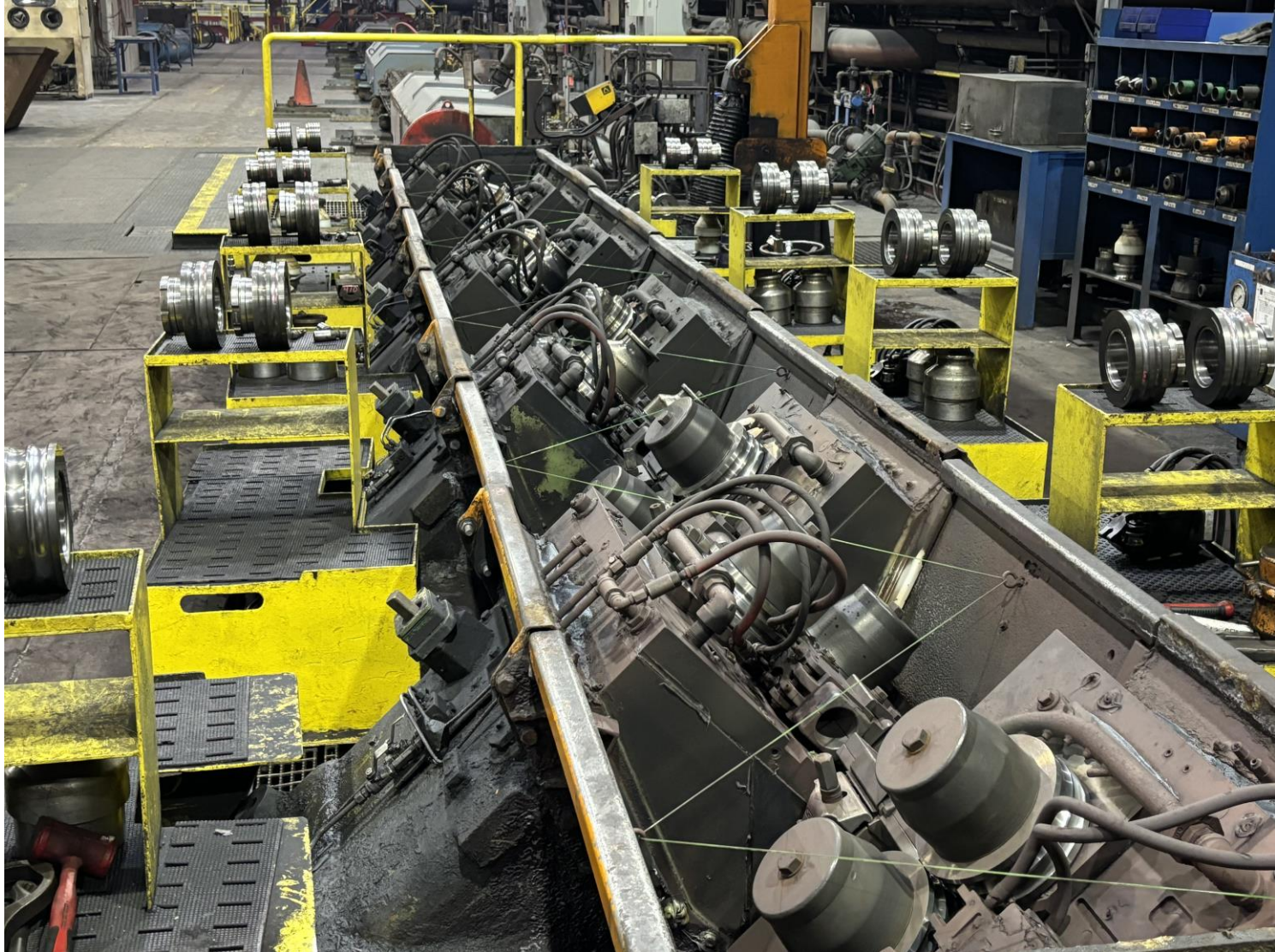
Intermediates (4 Primetals - 330mm)



Intermediates (4 Primetals - 285mm)



NTM (Primetals – 10 stand V Mill)



Waterboxes & Equalizer Trough

(3 size coolers / shiftable on HMI)



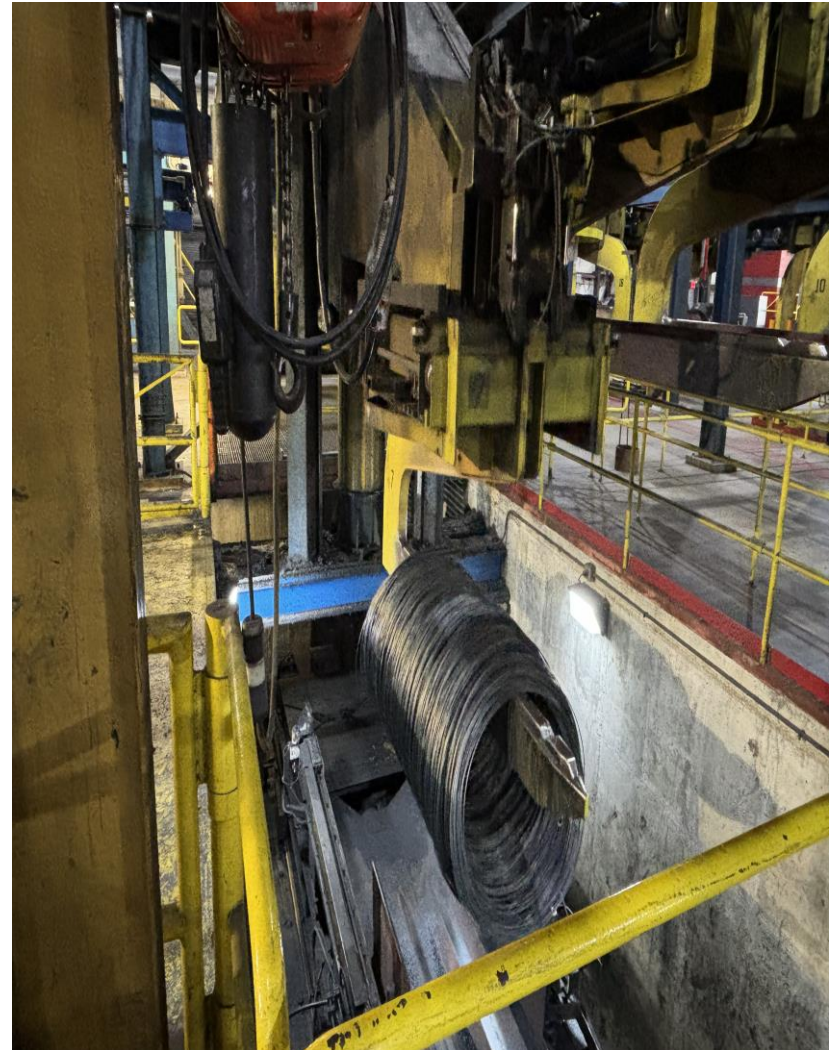
Layinghead (Primetals)



Stelmor Conveyor (9 Zones with fans / hoods)



Coil Handling



Sund Birsta (Hook system / compactor)

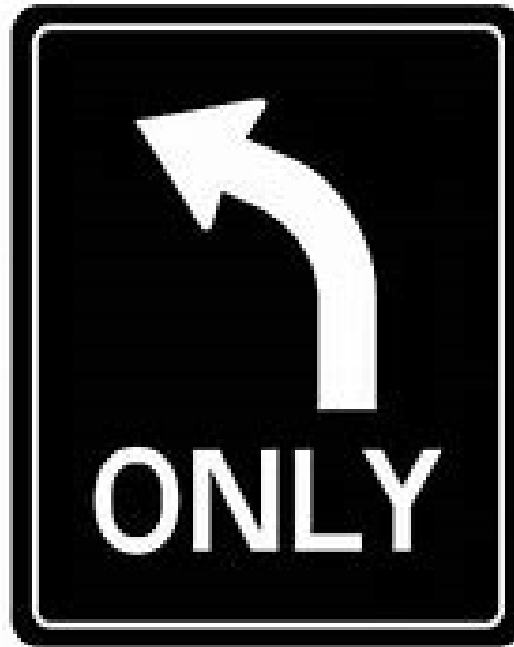




The Switch



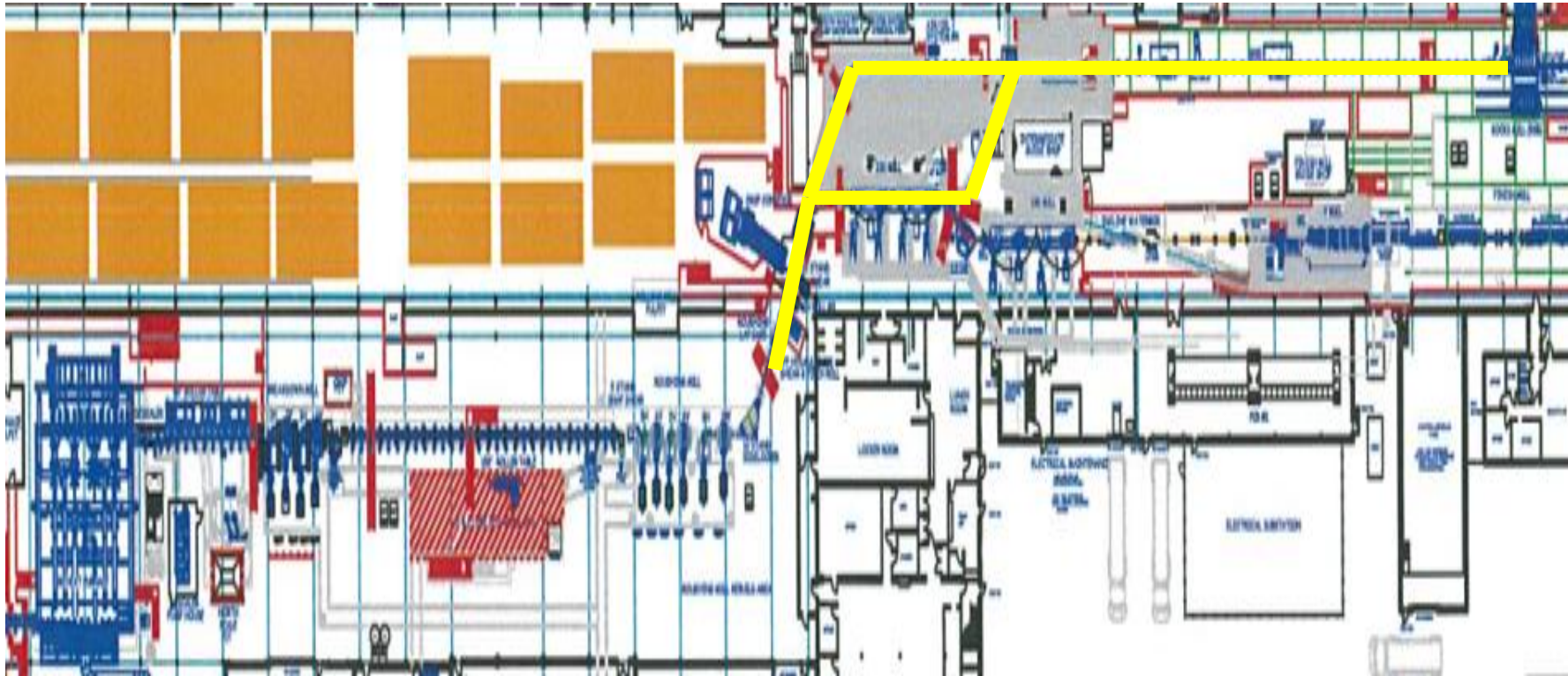
Bar Side



Rod Side



The Switch (Avg. size change time 4.1 min)



Kocks Mill (5 stands)



Coilers (Danieli)



Company Confidential

Coilers (Danieli)



Bar Mill Walking Bed (Danieli)



Proxaut (AGV)



Proxaut (AGV)



Kocks Shop



Primetals / Kocks Re-build Shop



Roll Shop



Shop Upgrades (ROMI C-1000 lathe - 2015)



Shop Upgrades (Weldon AGN4 Grinder - 2020)



Shop Upgrades (ROMI C-420 lathe – 2021)



Shop Upgrades (Comparators - Refurbished 2021)



J & L Epic 230 (30")



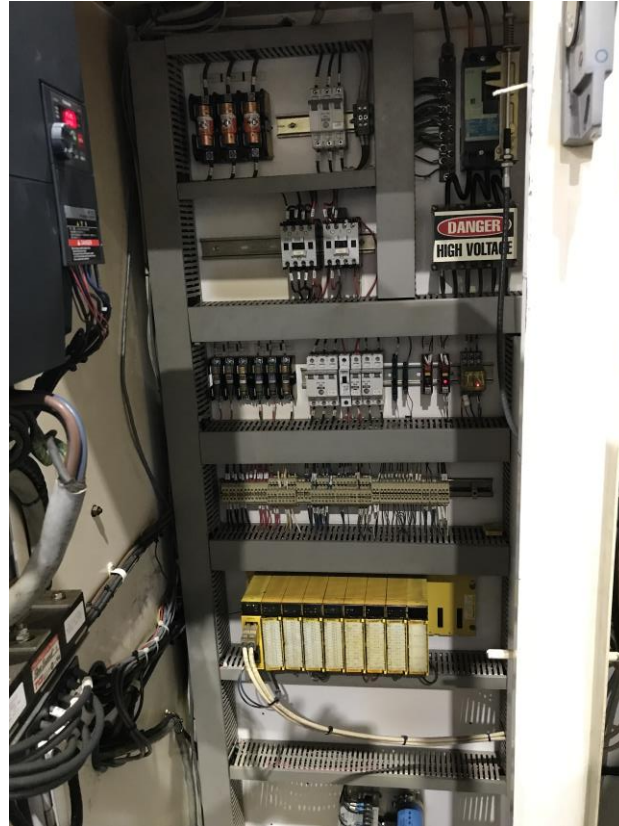
J & L Legacy FC-14 (14")



Shop Upgrades (Weldon Midas 320S Grinder – 2022)



Shop Upgrades (s. Weldon controls – 2023)



Sustainability



Solar Fields (55 Acres – will supply 8% of our total electrical energy)



Charter Steel Tour Guidelines



All visitors must review and follow Charter Steel
safety rules and tour guidelines

Charter Steel Tours (Saukville)

Tour Guide Responsibilities

Tour Guides are responsible for ensuring the safety of the tour group. The tour will only be as safe as you make it. Prior to starting the tour, ensure that all have an understanding of the rules below.

NOTE: Please review the attached tour maps for approved routes and Video (MESNET) before starting tour.

Tour Guide bullet points to group prior to leaving

- Stay with the group at all times
- Contact the tour lead or caboose if you need to leave the tour
- No cell phone, texting, etc while on the tour
- Do not touch anything other than railing while on the tour
- This is a working mill and railings will have mill dust on them
- No cameras
- Questions can be answered in quiet areas
- Disruptive behavior will end the tour
- PPE must be worn throughout the tour



Required PPE

Tour guide and caboose personal protective equipment requirements.

- Hard hat
- Hearing protection
- Safety glasses w/side shields
- Metatarsal safety shoes
- Appropriate work uniform
- Hi VIS FR Jacket
- Gloves (Required in Melt)
- Full FR clothing (Only if deviating from prescribed tour route)



Visitor requirements.

- Must notify Charter of any health issues or special requirements (i.e. heat issues, stairs issues, heart issues, etc.).
- Long pants to the ankle
- Closed toe shoe with flat heel and **must** cover top of foot to ankle
- Steel Toed Safety Shoes (Required only if guests will be venturing off designated tour path)
- No exposed skin on lower extremities

Charter supplied visitor personal protective equipment.

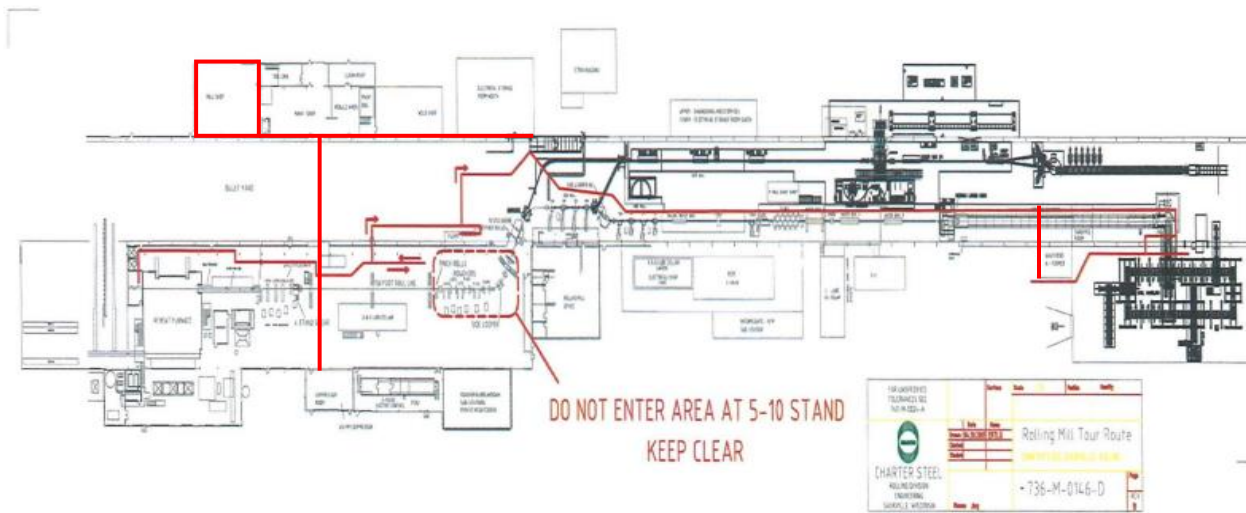
- Hard Hat
- Safety glasses w/side shields
- Hearing protection
- HI VIS FR jacket
- Tour Gloves (Required in Melt)
- Full FR Clothing (Only if deviating from prescribed tour route)

****All items must be Charter Steel approved****

Additional Notes

- The minimum age requirement for tour participants is 16 years old.
- **ALWAYS ASK AND BE SURE** that no one in the group is wearing a pacemaker, magnetic fields in the melt shop will interfere with a pacemaker.
- Man Doors are the only entrance and exits to the plants
 - Overhead doors cannot be used for pedestrians
- Tour groups that are larger than **10** participants should not enter plant pulpits.
- Cameras or cell phones **shall not** be used while on tour.
- Avoid work in progress that poses additional risk - cutting, torching, grinding.
- Follow all signs posted in plants
- Restricted areas are not to be entered.
- Be familiar with the nearest exits, or escape routes.
- Stay with tour guide/group at all times.
- Tour guide must make an announcement over the radio that a tour will be coming through the mill

Tour Route

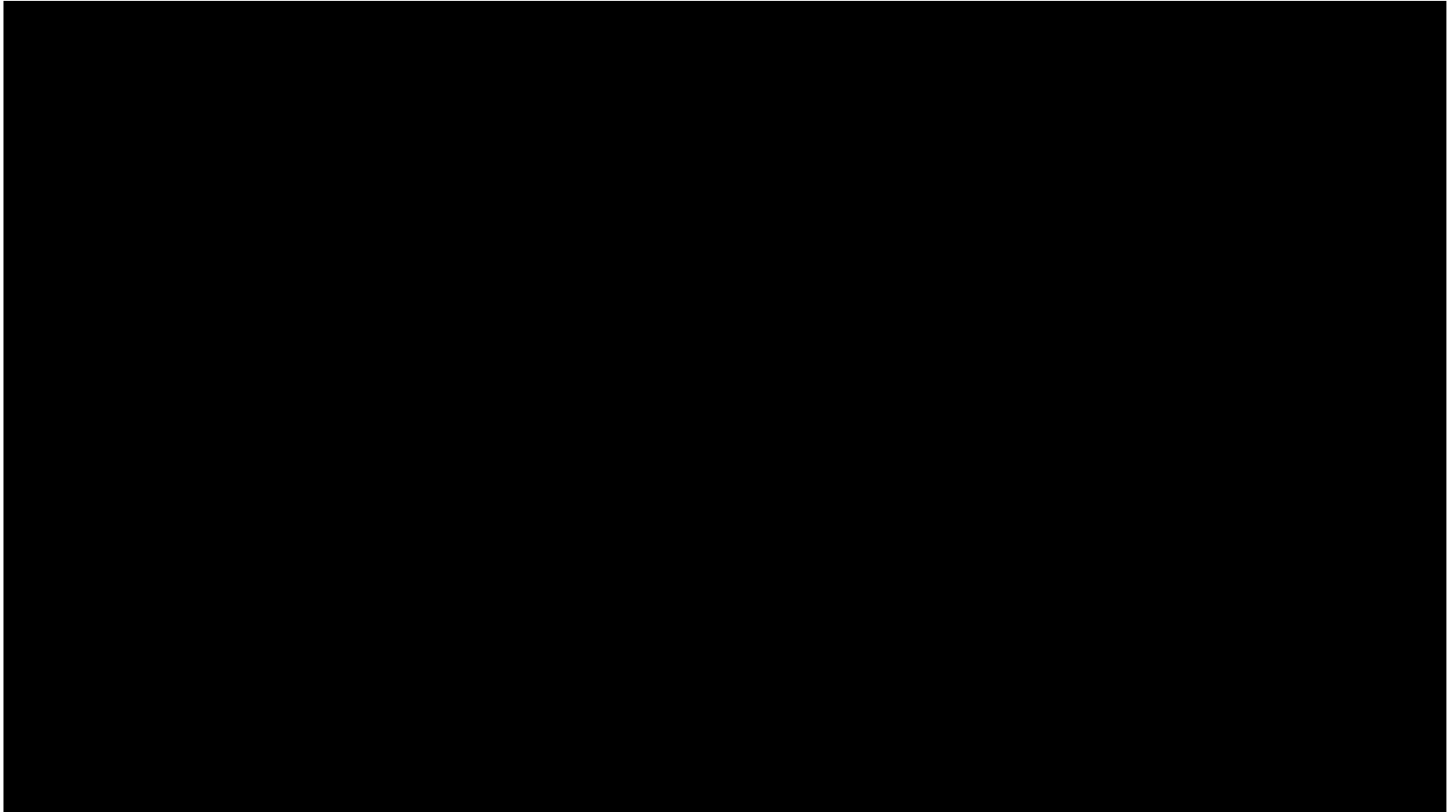


Rolling Mill Tour Route

Revision Date: 3/29/19

M:\Safety\Written Safety Programs\Saukville\ Mill Tour Guidelines

Safety Video



Agenda (Friday April 26th)



- Bus # 1 leaves hotel at 9:00am
- Arrives Saukville – Charter Steel 9:40am
- Distribute safety equipment
- First Mill Tour departs 10:00am
- Tour groups will be spaced 10 minutes apart

- Bus # 2 leaves hotel at 10:15am
- Arrives Saukville – Charter Steel 10:55am
- Distribute safety equipment
- First Mill Tour departs 11:15am
- Tour groups will be spaced 10 minutes apart

- Lunch will be served after the Mill Tours

Thanks for coming enjoy your stay

