

Tapping Out



VOLUME 88 | AUGUST 2020

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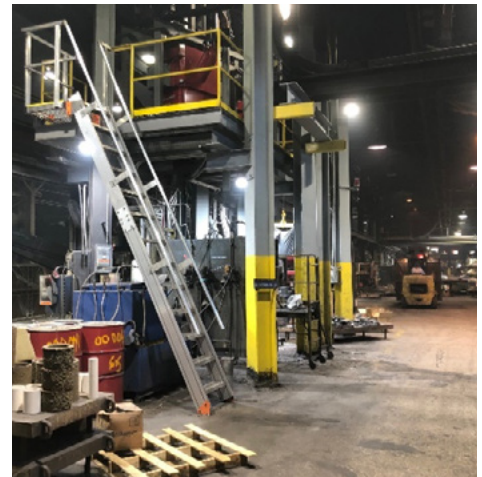
Employee survey results are in, pg. 11



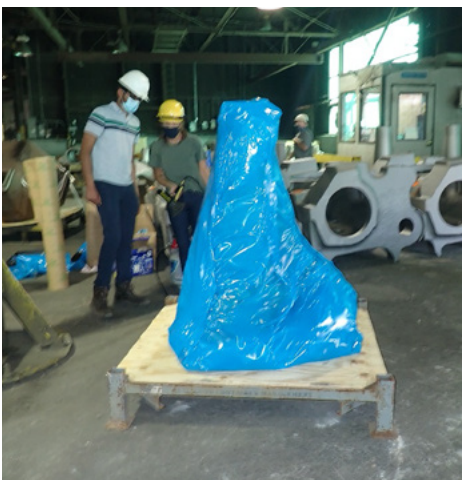
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Harrison Steel Hall of Fame

MILESTONES THIS ISSUE

NAME	YEARS OF SERVICE	ANNIVERSARY DATE
Steven Swank	45	9/8/75
Brian Niccum	25	9/11/95
KC Smith	15	9/19/05
Helen Lambka	15	10/17/05

Management Corner

Harrison Steel has been extremely fortunate that we have been able to stay open during these unprecedented moments and I am grateful for that. We are in the midst of some really crazy times. Before COVID-19, we were on a nice growth path. Our traditional customers were needing more product and we had been successful in developing new relationships. Fortunately, we are still pretty busy, but more so at a level pace. We are still in need of bringing on new employees. By last count, we have approximately 60 open positions throughout the facility.

For those of you that took the time to fill out and return the employee surveys: thank you. As we have stated in our Mission and Vision Statements, our focus is on Continuous Improvement. In this Tapping Out, HR will be summarizing the results of the survey. As we continue to do these surveys from time to time, we hope to hear from more of you.

“We believe that everyone here wants to do a good job. So it’s our job to provide the right training, tools, and procedures to support our employees and help them do it.” -Geoff Curtis

As you are all aware, we have rekindled our focus and efforts on Plant Cleanliness and Organization (5S). We are chipping away at it and it’s showing. Thank you, everyone, for your cleanup efforts so far. And let’s keep it going.

I’d like to touch on two really important projects just completed over the recent shutdown of the foundry part of our operations. One is the 271/Palmer Re-control. This is the large mixer located in the North End of the Foundry Main Bay. Included in the Re-control is the ability to alter the binder levels, additional new sand heaters and a new iron oxide feeder system. All these items will be key to producing a more consistent mold and better quality product.

The second major project was on the 271/North End Shakeout System. We have been trying to figure out how to improve the process up there for years. The main issue was needing the ability to process hot sand and not burn up the Dust Collector. We were introduced to a piece of equipment called the Quencher, that has been installed within the dust collector duct work. The inside design of the Quencher moves the air around as it passes through the device, extinguishing

any embers.

Two more exciting facility improvement projects have just been approved:

- 30 new LED lights for the Main Foundry Bay. These new lights will start south of 271 Molding Area and extend up through North Shakeout.
- The other project is the replacement of the “Green or Opaque” Translucent Paneling. The two areas just approved are the Southwest Shakeout Area and Electric Arc Furnace Area.

The last improvement effort I would like to mention is the work going on to improve our Processes, Process Documentation and Training Systems. We believe that everyone here wants to do a good job. So it’s our job to provide the right training, tools, and procedures to support our employees and help them do it.

Work safe, work smart, and God bless.
Geoff Curtis

Shout Outs!

CUSTOMER SPOTLIGHT: MERITOR

Meritor, over the years, has been known by many names: Rockwell, American Axle, Timken and Arvin Meritor. One thing that has been consistent through the years is being the leader in heavy axle and drive train components. They have a rich history much like Harrison Steel; founded in 1909 and family owned for many of those years. Now they are over a billion in sales with all their operations worldwide.

Harrison started working with Meritor in late 2018 on 2 cast axles that will make 8 different parts for Meritor. The applications for these axles are concrete mixers, military personnel carriers, and heavy lift fork trucks.

This product has potential volume of 200 per year and could grow, based on any new products for which Meritor is awarded contracts.

Harrison Steel is in the PPAP stage and will be supplying a machined complete part ready for assembly. We believe this could be the first of many projects with Meritor, going forward.



Backstop Extension

8/25/2020 RELEASE

Harrison Steel Announces Extension of HS COVID-19 Backstop Program Through 12/31/2020

HS Management has announced extension of the HS Backstop Program through the remainder of 2020.

We believe this program, in conjunction with the government’s Families First Coronavirus Response Act (FFCRA), is helping employees successfully navigate COVID-19 related issues.

The Backstop Program is our company-funded support for those who must miss work as a result COVID-19. Details of the program were announced in Clock Notices – 3/27/2020, hourly and 3/30/2020, salary. A summary of the program follows. Please contact Alanna at **765.762.9024** or westjohna@hscast.com to apply or ask questions.

Eligibility:
COVID related (quarantine or self-quarantine) or related illness (fever)

Benefit:

2/3 of your base pay for 2 weeks or 10 days. Benefit is available only to those who have not exhausted the ten day maximum.

Hourly:
8 hour days paid at 2/3 of your base rate. Salary: Two days of Backstop paid at full rate for every 1 day of vacation used.

Federally funded FFCRA COVID-19 sick pay and FMLA continue until 12/31/2020, as originally planned.

Please contact Alanna for those as well.

Pattern Shop / Foundry Engineering

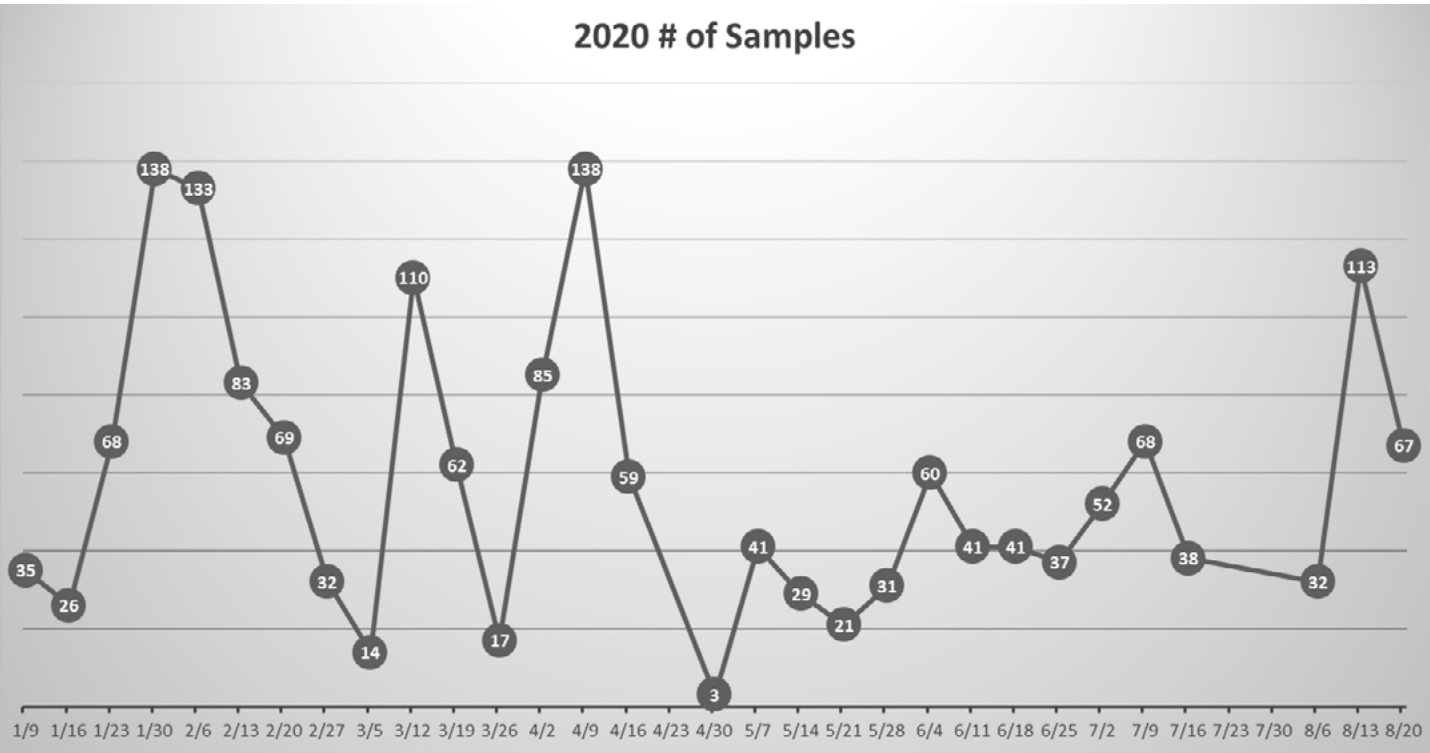
The last couple of months have been busy ones for Pattern Shop and Foundry Engineering. The addition of new motors for the 271 center vibration table and the work completed to the new sand system over shutdown means that we have a lot of data to collect in order to improve the compaction of the sand and ultimately the castings produced. Amir Baghani has been able to collect data showing better consistency in the number of variables involved with the new system and we hope to use this data to improve sand parameters

and vibration settings for each casting to yield the best result. Future work with ABAQUS and JmatPro should allow us to optimize casting rigging, core support systems, and produce castings with minimal defects.

The chart below shows the number of sample castings run weekly throughout 2020. While burn on sand is a high priority, we have also run several samples to improve casting dimensions, reduce inclusions, fins, hot tears, and porosity.

Many of these samples are run as a result of feedback from each department (especially Foundry, Cleaning Room, and Quality). Small changes to equipment or processes can have a large impact further downstream and often times there is an unexpected tradeoff when a change is made, so we appreciate the help in trying to improve the flow of castings through the entire process.

As always, have a great year and stay safe,
Paul Kelsey



Cleaning Room

BIGGER AND BRIGHTER:

Cleaning Room line 2 workstations and bay areas have been upgraded with brand new LED lights. The initial feedback from the employees and supervisor has been phenomenal. This upgrade has not only aided towards increase in visibility inside the workstation but has also given a renovated appearance to our beloved cleaning room line 2.

Another area that has seen a renovation project completed was the Paint Room that had an additional four new LED lights installed as part of the final phase of this renovation project.



Brand new LED lights



Paint room renovation

CASTING SHRINK WRAP:

As part of an ongoing project, Cleaning Room has invested time in researching a new casting shrink wrap process that has been requested by our customer. Initial onsite demos were conducted and we are further discussing the opportunities to open up a new customer market for shrink wrap.



New casting shrink wrap process

COVID-19 PROTOCOL:

As an ongoing measure, Cleaning Room is continuing to follow COVID-19 protocols set by the company. All workstations are being disinfected before the start of the shift and at the end of the shift. Initiative has been taken by the department head to split the employee lunch hours in order to minimize the number of employees taking lunch in the break room at the same time. Tables and Plexiglass dividers are being sanitized in order to ensure employee safety.

EMPLOYEES COME FIRST:

Cleaning Room understands the need to help our new employees reach their full potential. This paved the way for the implementation of our On The Job Training Program. This program is a combination of learning contract, training videos, and training documents.

We also have all new interactive training videos with background voice over. Job specific procedures and techniques are covered in these 2-5 minute long training videos, as well as a dedicated training period to go over casting manipulation videos.



SUMMER INTERNS:

We welcomed two new interns, Ben Hiller and Will Becker, for the summer. Cleaning Room is grateful to have two new bright minds invested in improving existing processes and researching continuous process improvement.



On The Job Training Program

Designed To Help Employees Reach Full Potential



Learning Contract



▶ Training Videos



Training Documents

Engineering / Maintenance

It has been a busy and exciting last month for us in the Engineering and Maintenance Department. The shutdown at the end of July provided an opportunity to complete many projects and general cleanup tasks.

Both the North Shakeout and 271 Molding received some much-needed upgrades in July. 271 Molding was outfitted with new

controls, sand heaters, and oxide-feeder system. Additionally, the old mezzanine platform above the Palmer mixer was demolished and a new, easier access was installed in its place. The new controls and sand heaters will give us tighter control over sand temperatures and catalyst % allowing us to control our work time in an effort to reduce burnt on sand. The new

oxide system uses a remote control hoist and super-sacks which the operator can load from the ground. No more climbing the ladder and dumping bags of oxide into the feeder from over the rail! New LED lights were installed around and under the new mezzanine making for a brighter work area.



Old



New



Old



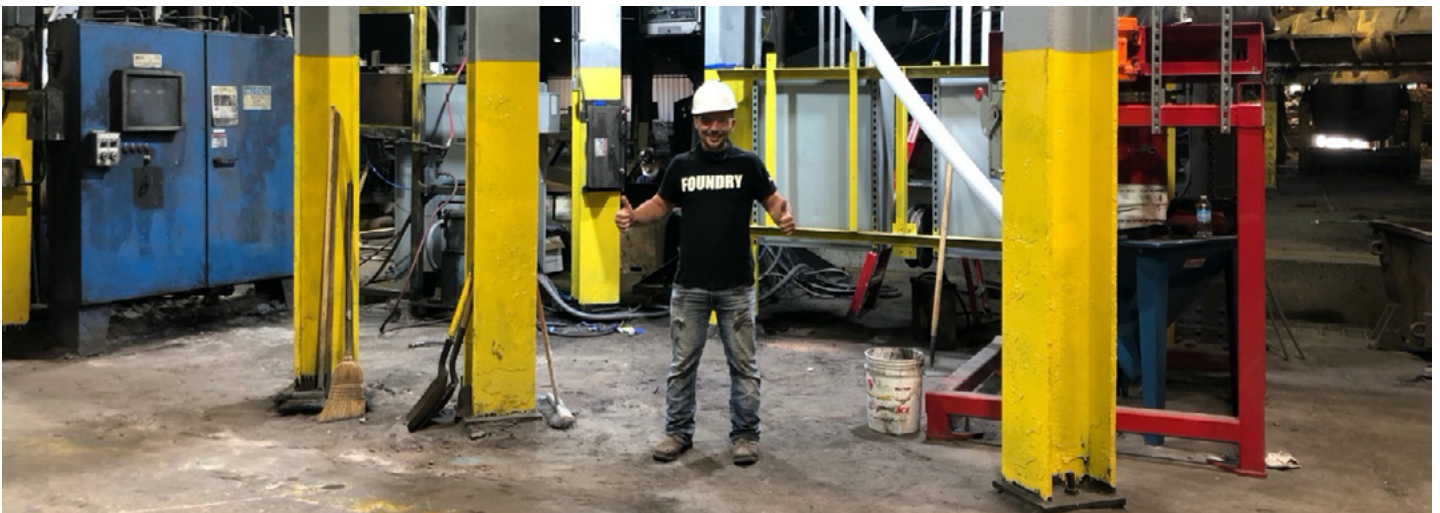
New



New



New



Second Shift Supervisor Chris Kirby approves of all the changes!

The North Shakeout was upgraded with a larger dust collector fan along with changes to the main shaker ducting system and the hood itself. A quencher module (spark arrestor) was added to the exhaust duct to allow shaking hotter sand on the deck. The Facilities crew also rebuilt the cooler/classifier inlet and outlet and replaced the connecting chutes from the elevator. The end-result is a cleaner working zone around this shaker and improved product flow.



The east side of the Furnace Department received a fresh paint job along with the dust collectors in front of the building. Before/after photos are shown below:



Facilities finished installing new LED lights in the storage area east of the AML. Made quite the difference! 30 new LED lights were just approved for the North Shakeout, Palmer molding and finishing area. Once these are installed there will be much more light available for employees in these areas. These are just the latest projects in Harrison Steel's effort to improve lighting in all areas throughout the plant.



Old



New



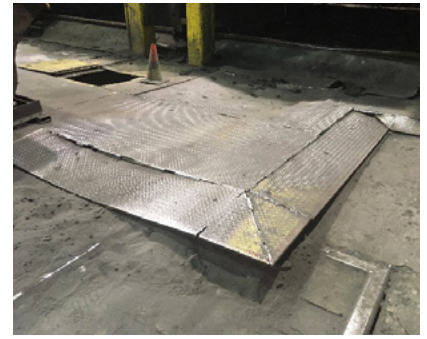
Our department also received a new maintenance cart!

There were many cleanup projects going on throughout the plant during shutdown as well. Among them were cleaning of the north shakeout (inside and outside areas), removal of the snap bench mixer, painting of the 271 Molding chemical room, removal of the old north dock, and new stacks for the Lift Top furnace.



Other projects completed during the July shutdown include:

- Replacement of the DM1 mixer trough
- Slat belt 6 rebuild
- New flowmeter for CM7 mixer
- New auger for Plant 2 grinding booth dust collector
- New controls for the Lift Top furnace
- AML shaker approach replacement. Remove and replace the damaged and bent steel deck as well as the structural support beneath it. Now provides a smooth, flat path when driving the skid steer to the shakers.
- North Thermal Reclaim Dust Collector interior blasting and painting
- L3 3-wheel new ductwork for dust collector
- AML mixer belt replacement
- Several concrete and asphalt projects
- Many other scheduled PMs and needed repairs

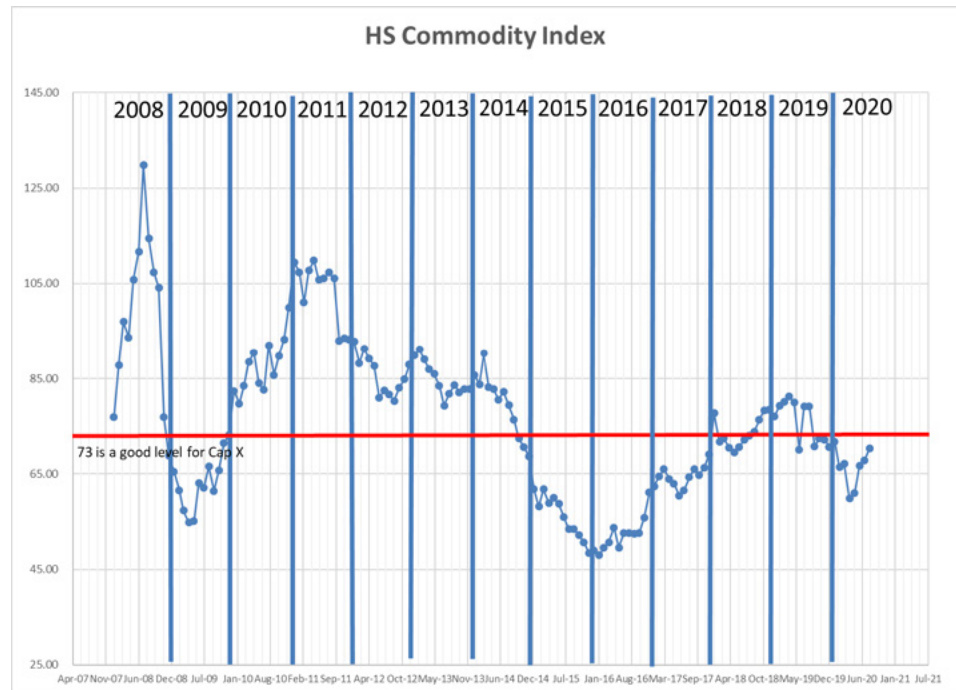


Commodity Watch

We anticipate that orders will stabilize and begin to increase going forward. HS commodity index pricing trends are rebounding from April lows as illustrated in the graph:

Prices for copper, gold, and iron ore are at good levels to drive investment. Coal, oil, and natural gas prices are still low, though recovering. This pricing differential will likely result in more orders for our largest parts as large mining equipment demand is heavily reliant upon copper and iron ore prices. Conversely, we are unlikely to see positive activity in energy related equipment until oil and gas prices improve. Most of our customers have been reducing budgets and lowering inventory in response to the shock of the COVID-19 pandemic. We believe this behavior will change with the world's ability to adapt and overcome the virus as well as continued commodity price improvements.

-Robert S. Harrison



Quality Corner

With summer ending it is time for another Tapping Out. We have all been busy helping Natalia with her Gauge Project. She collected gauges throughout the plant in order to update work instructions, PSI's, checking them against our gauge calibration software and also adjusting years' worth of inventory. Cheers and great thanks to everyone that made it happen.

Speaking of gauge calibration software, we have also updated it! We were previously using Powerway Gauge Manager, which was so old that it only worked on a computer supporting Microsoft Office 2013. We tested 2 or 3 other gauge software programs, but decided GAGEpack was the best fit for Harrison Steel. This new software has the capabilities to print labels

for our gauges, along with sending emails directly from it to the person/department responsible for calibrations. We currently are not utilizing these pieces of GAGEpack yet, but once we are more familiar with it, these will be great additions and time savers. Please bear with me while I learn the program myself and get all of the features figured out, such as changing the reports. Right now, they are nothing like what everyone is used to receiving, but hopefully we will get there!

Layout has also been doing some trials on different Faro arms for scanning. Technology is changing rapidly, and it's never a bad thing to see what is offered out there that may help our Harrison Steel workflow.

Quality also has some new faces, so if you see these people, introduce yourself! New to us since the last article is Kyle Stringer (Layout), James Gerard (Inspector) and Brittney Bushman (Casting Indexer). Not shown is Anthony Watson (Gamma Ray).

Earlier this month, we also finished up our SRI ISO Audit. Steve Ritchie was here for a couple of days and went around the plant and office auditing different areas that were not audited virtually back in April. Thanks to everyone's help if you were one of the lucky areas audited! He gave us a couple of ideas for better accountability, but we passed with no findings being issued to us. Great job to all employees!



This is the most recent demo that Layout has tried. It is an ABSOLUTE ARM.



Some new faces! Kyle Stringer (Layout), James Gerard (Inspector) and Brittney Bushman (Casting Indexer)



Updated gage collaboration software: GAGEpack

Machining

Recently, I was given the task of writing another article for Tapping Out. The email I received referenced it as the “summer in the year of the virus” edition. Those words really struck home. As I said in the last edition, I was one of the ones who contracted the virus. I was very fortunate to not have any issues with it. I did my 14 days of quarantine with my wife and came back to a different workplace. We are now asked to wipe things down with bleach water, stay at least 6 feet apart, and wear a mask when in close contact with another employee. Not at all what we were used to. Now it seems like we live in a world where masks are the norm. We cannot be in a big group of people and are constantly reminded to wash our hands (which we should not have to be reminded to do, as we are all adults). It’s a little bit of sacrifice on our parts, though, to help ensure the health and well-

being of our co-workers, family, and friends. Please continue to do your part so that we can get back to a normal world.

Since our last Tapping Out, we have hired one new employee. Welcome to Ignacio Herrera Bautista, we know you will become an asset to the machine department. We also have a new process engineer in the shop. Rony Mascreeen (pronounced Ronnie, just the opposite of Sony) is done with his classroom education and ready to set out on a long and prosperous employment with H.S.

In the last article I was lax in mentioning our intern for the summer. Jalen Young came to us from Seeger High School and was a big help in getting some of our processes put in order. Good luck, Jalen, in your future endeavors. Also, Jacob Demumbrum has gone back to school after helping out this

summer in our maintenance machining area. We hope that maybe Jacob will come back to us in a full-time position after his schooling is complete.

We have a few of what I would call master gardeners in our department. Every now and then, the guys will share their bounty with us. We have had tomatoes, squash, zucchini, cucumbers, and green beans. There is nothing better than fresh vegetables from the garden. Thanks for keeping us well fed, guys! Also, we have a couple guys that supply some of us with fresh farm eggs. These are way better than what you pick up at the store. Thanks to Rocky, JD, and Ron.

Respectfully,
Matt Coats



How to wear a mask to prevent COVID-19



Recent bounty from one of our master gardeners

IT

The IT department is always looking for new technologies to help Harrison Steel thrive. Coming from our latest initiatives is a new wireless infrastructure in development to be deployed, hopefully, by the end of the year. The goal is to have the whole company covered under wireless to use for different data collection options. One of the new data collection points will be on iPads where a new mobile app has been developed in-house to collect training information on the floor.

Besides the new wireless infrastructure, the IT department will soon be implementing Edge Computing from Scale Computing.

We will be installing very small server clusters at the endpoint of the network. These smaller servers will be in the plant near the equipment instead of being in the data center. This will allow data collection from many different devices including PLC without overloading our current network. We will then move the data that’s collected to database servers to be analyzed in any way needed.

We have many other initiatives in IT to help streamline processes and secure the network as this year ends and 2021 begins. I’ll be sure to keep everyone informed on these as we go along.



Proof of Concept for Edge servers by Scale Computing to capture data at the endpoint of the network.

Employee Survey Findings

HS employees may recall, we distributed an employee survey near the end of July. The survey was created for us by our marketing firm, Rare Bird Inc., and your responses were sent directly and anonymously to them for tabulation.

The results are back and your Management Team has been poring over them ever since. We boldly asked the hard questions and your responses were honest and helpful.

There were 188 responders in all. We are sharing our findings here.

Question			
1	Are you Hourly or Salary?	Hourly	151
		Salary	33
2	Did you have a good idea of what the work would be like before you accepted the position?	Yes	141
		No	43
3	How long have you been at Harrison Steel?	<6 mos	16
		6-12 mos	27
		1-5 yrs	59
		>=5	81
		Other	4
4	How long is your commute home from Harrison Steel?	<=10 min	99
		11-30 min	59
		>=31 min	27
5	Do you feel pay is fair?	Yes	68
		No	99
		Other	19
6	Would you recommend Harrison Steel to a colleague, friend or family member?	Yes	130
		No	53
8	Do you feel there are opportunities to advance?	Yes	85
		No	77

Benefits - Add/Change Requests		
Key Words	Count	%
Paid Time Off	13	6.9%
Felxible Spending Account	5	2.7%
Medical	5	2.7%
Vacation	5	2.7%
Bereavement	4	2.1%
Additional Holiday(s)	3	1.6%
Attendance Program	3	1.6%
Chiropractic	3	1.6%
Dental	3	1.6%
Fitness Center	3	1.6%
Improve Retirement Plan	3	1.6%

"My area is like a tight little family."

"They worked with me while dealing with health issues."

"What I like most is the people, the learning experience and opportunity."

"HS understands that life happens."

"WeCare is the best thing to happen at HS."

The employee survey was conducted to better understand where our focus should be toward improving Harrison Steel.

188 responses out of 430 employees is a decent response rate. We will focus on the top issues cited to improve your experience at the company. Thank you for your responses. We hope our next survey will capture even more participation.

3 to 5 Words that Describe Harrison Steel (Categorized)			Changes Desired (Categorized)		
Positive	Count	%	Negative	Count	%
Integrity	20	10.6%	Working Conditions	40	21.3%
Family Oriented	12	6.4%	Hard Work	11	5.9%
Reasonable Expectations	10	5.3%	General Frustration	10	5.3%
Rich Legacy	9	4.8%	Low Pay	10	5.3%
Enjoyable	8	4.3%	Outdated	7	3.7%
Friendly	7	3.7%	Dishonorable	5	2.7%
Rewarding	6	3.2%	Favoritism	3	1.6%
Community Minded	5	2.7%	Micro-Managed	3	1.6%
Growth/Modernization	5	2.7%	Lack of Cooperation and Coordination	3	1.6%
Competitive Pay	4	2.1%			
Familiar	2	1.1%			
Great People	2	1.1%			
Close to Home	2	1.1%			
Equal Opportunity Emp	2	1.1%			
Improvement	2	1.1%			
Quality Product	2	1.1%			
			Changed Desired	Count	%
			Make Wages Competitive	34	18.1%
			Nothing/Don't know	21	11.2%
			Improvements in Merit Pay System	13	6.9%
			More Advancement Opportunities	12	6.4%
			Employee Recognition	7	3.7%
			Reduce Workload	7	3.7%
			Better Communication	7	3.7%
			Respect for Employees	6	3.2%
			Chance to Try out other Jobs	5	2.7%
			Better Attendance Policy	4	2.1%
			Better Training	4	2.1%
			More detailed job/ project content	4	2.1%
			Reject Favoritism	4	2.1%
			Reinstate Attendance Bonus	3	1.6%
			Paid Time Off	3	1.6%
			Better PPE	3	1.6%
			Collaboration / Cooperation	3	1.6%
			Consistent Policy	3	1.6%

WeCare at Harrison Steel



Make appointments & more thru the portal * <https://clinic.wecaretlc.com/>
765.762.6789 | 101 Suzie Ln.

CLINIC HOURS			*PORTAL ACCESS
Monday	10 am to 6 pm	MD	Group Id: HS1001
Tuesday	6 am to 6 pm	MD	User Id: SSN+gender+Year of birth
Wednesday	10 am to 6 pm	MD	Example: 123456789F1970
Thursday	11 am to 6 pm	MD	Password: Last name in ALL caps JONES
Friday	6 am to 1 pm	NP	

Travel



Are you considering traveling? To avoid a Harrison Steel mandated 10-day quarantine, verify your place of destination isn't listed as a red alert level.

Go to globalepidemics.org






(<https://globalepidemics.org/key-metrics-for-covid-suppression/>)

For daily updates on risk areas based on current COVID trends.

BridgeHealth Planned Surgery Program

BridgeHealth saves you money and gives you access to top-rated hospitals and surgery centers for planned, non-emergent procedures.

MOST COMMON PROCEDURES

 Cardiac Coronary artery bypass graft, valve repair and replacement	 General Gall bladder removal, hernia repair	 Orthopedic ACL repair, hip and knee replacement, shoulder repair and replacement	 Spine Spinal fusion, artificial disc replacement	 Women's Health Hysterectomy
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Emergency, vision, dental, pediatric (under age 12), and diagnostic procedures are not available through BridgeHealth.

Contact HR for Details

YOU PAY	\$0 No deductible, no coinsurance
COVERED TRAVEL BENEFITS	Airfare, lodging, and a meal allowance are paid for the patient and a companion if you need to travel over 100 miles one way to the provider



HARRISON STEEL
CASTINGS COMPANY