



4th Quarter 2022

# THE MELTMINDER

A PUBLICATION BY BENTON FOUNDRY, INC.

Web Site: <http://www.bentonfoundry.com>

## Sustainability Award

Benton Foundry recently won the 2022 Green Foundry “Sustainability & Stakeholder Engagement” Award. This is an annual award recognized by the American Foundry Society. The dust collection systems at Benton Foundry have gone through a systemic, multi-step modification and upgrade program. These upgrades include super-efficient motors and variable frequency drives (VFD’s) on 300,000 cfm of collection. The VFD controls the blower by adjusting motor power to maintain a constant airflow set-point. In the summer months, the



warm air is directed outside. During the winter months, the system recirculates the tempered, clean air back into the facility through pre-filters and

HEPA filters. This air is used for heating purposes, as well as reducing the negative pressure in the facility. This recirculated tempered air provides a clean working environment and also results in a six-figure heating cost reduction that, in effect, pays for the system. The decrease in power plant emissions from this project alone is estimated at 700 tons annually. The amount of energy conserved has been estimated to be roughly 1.5 million kWh annually. A rebate from Pennsylvania’s Act 129 program for



\$122,000 helped fund the project. Annual savings are around \$100,000. Additionally, the bags in the collectors were changed from fabric to Teflon, which cost around \$2.00 more per bag. However, the consequence of the change was that the particulate more readily slid off the bag, which reduced the pulse frequency and pulse time, resulting in approximately a 75% reduction in compressed air. Benton Foundry was also visited by Patrick McDonnell, Pennsylvania Department of Environmental Protection Secretary, and others to celebrate the project. While touring the facility, the DEP secretary made note that there are roughly 1,800 dust collectors of this size or larger in the state of Pennsylvania. If all those collectors had these types of improvements, the energy savings would be an impressive number. This was a voluntary and cooperative effort between Benton Foundry and PA DEP.



## Congratulations - Employees of the Quarter



Congratulations to **Bill Keefe** (above), Benton Foundry's 1st shift Employee of the Quarter. Bill works in our Grinding Room as a Cage Grinder and he is retiring after 41 years. He previously worked in our Molding Department as a molder's helper. Bill lives in Noxen. He is the last of a number of Benton Foundry employees from Noxen that started in the 1980's. They were a colorful bunch and Bill is known for his sense of humor. They were all hard working and knew how to have a good time. The end of an era. *Congratulations on your retirement!*

*Great Job Bill!*

Congratulations to **Boyd Lore** (below), Benton Foundry's 2nd shift Employee of the Quarter. Boyd works in our Melt Department as a Furnace Operator. He previously was an Iron Pourer and a Tundish Ladle Operator. Boyd has been employed for 23 years and he has received this award in the past. Boyd is a long-term employee representative for the 2nd shift Melt Department. He contributes a lot of good information and ideas to the representative meetings. Boyd lives in Benton with his wife Penny and their son Boyd Jr. He enjoys hunting, fishing and camping, especially camping, when he isn't working. Boyd was nominated for this honor as he is a long-standing dedicated employee.

*Great Job Boyd!*



## New Construction Lighting

### Benton Foundry ACT129 Rebate for Phase 3 New Construction Lighting

(EA-1484269)

Benton Foundry received a rebate through its' electric utility supplier for implementing an energy efficient lighting plan in the new core room and shipping room expansion project. Benton installed nearly 200 LED's consisting of troffers, vapor tights, rack aisle and high bay fixture types. Many of the fixtures incorporate additional control devices such as occupancy and dimming sensors to automatically conserve energy in unoccupied areas. The highly efficient LEDs coupled with smart controls yielded an annual energy savings of 531,587 kWh's and 70.16 kW peak demand compared to traditional lighting. To put into perspective, these savings are equivalent to powering 50 residential homes over the course of a year (EIA Independent Statistics and Analysis). The rebate was paid out at \$0.075/kWh and \$215/kW for a total incentive amount of \$54,953. Considering the rebate incentive and reoccurring annual energy savings the LEDs will pay for themselves in 3.5 years. This successful project is yet another example of Benton Foundry's green initiative commitment.

### Reference list

EIA Independent Statistics and Analysis, *FAQS: How much electricity does an American home use?*, U.S. Energy Information Administration, viewed 2 November 2022, <<https://www.eia.gov/tools/faqs/faq.php?id=97&t=3>>.



## Benton Foundry Purchases a New Truck

Benton Foundry recently took delivery of a 2023 T680 Kenworth. The new truck replaces our 2011 Kenworth that has just shy of 2.3 million miles on it. We are licensed in 23 states, shipping to many customers and backhauling supplies and consumables.

Shawn Frey has been driving for us since 1996 and is very excited about getting out there with our new truck.



## Boy Scouts

The Columbia-Montour Council of the Boy Scouts of America is celebrating their 100th anniversary this coming summer. To celebrate this anniversary, several local businesses have coordinated their efforts to produce and donate around 200 eight-inch diameter trivets that will then be sold by the Council as a fund raiser. Benton Foundry developed the design, produced the parts and coordinated this activity. Swope and Bartholomew (Whitehall, PA) donated the pattern. Gartek (Berwick, PA) donated the painting and clear coating. K-Fab (Berwick, PA) donated the machining. The trivets will be selling for \$35 each, which will result in revenue for the council of roughly \$7,000.

All are welcome to Celebrate 100 Years of Scouting with Columbia-Montour Council at the Bloomsburg Fairgrounds Industrial Building starting at 4:00 p.m. with historic displays followed by dinner at 6:00 and a program at 7:00 on June 17, 2023. Please make your reservations at the Council Service Center by June 2, 2023.

Scouting offers many wonderful opportunities to our local youth and has had the support of our local community for a century!



## Pennsylvania's BIG Trees

**The Biggest trees in Pennsylvania:** A few species dominate the PA Big Tree Register as the largest trees in the state. The largest by far is the sycamore or American plane-tree, 17 of the 20 largest trees in the state are sycamores. The champion Kimberton sycamore in Chester County has 520 BTPs (Big Tree Points) with a circumference of over 30 feet and stands a 120 feet tall! The tallest Sycamore in the state is in the Allegheny River Islands Wilderness, and stands at an impressive 148 feet tall. Tulip poplars are also well-represented at the top of the PA Big Trees List. The state champion tulip poplar at Tyler Arboretum has a whopping 431 BTPs. The tallest tulip poplar in PA is at Longwood Gardens at 164 feet tall; this is actually the tallest recorded hardwood tree in the entire Northeast. U.S. Oaks are also very well represented on the PA Big Tree List, especially white oaks. There are 50 white oaks on register with over 300 BTPs. The State Champion white oak at London Grove Meetinghouse in Chester County is a truly spectacular sight with 385 points. The largest oak in PA, however, is a northern red oak in a little patch of old-growth forest retained behind a very residential area in Broomall, Delaware County of all places. At over 20' in circumference and over 120' tall, this tree is a true remnant forest giant. Other native trees that top the list include eastern cottonwood and black willow, two early-successional species that can reach mammoth proportions in a short time given the right conditions. The non-native trees that have gotten the biggest in the state are European beech and ginkgo.

### Why is the PA Big Tree Program Important?

The PA Big Tree Register is a vast dataset of over 2,000 trees (and a few shrubs) that have reached truly massive proportions for their species. In a state where most of the old growth forest has been lost and forested landscapes are dominated by smaller second-growth forest stands, the Register is a guide for all Pennsylvanians on where they can find the elusive Big Trees.

The list is meant to be a public asset for everyone from school children discovering trees in their back yards, to citizens wanting to recognize historic trees in their municipalities, to graduate students looking for local tree size data. We also know that big trees have a big value, both ecologically and culturally. Big trees feed and house more wildlife, sequester more carbon and mitigate erosion and storm-water runoff. They are also cultural and historic touchstones for our communities that should be recognized and honored where they stand. The PA Big Tree Program hopes to bring knowledge and information on PA's largest trees to all of the Commonwealth's tree-loving citizens.

The Pennsylvania Big Tree Program, however, measures and recognizes any tree that is significantly large for its species, regardless of nativity. Pennsylvania has a long history of plant exploration and introduction, especially in Southeast PA where



large estates owned by the Bartrams, Hamiltons, and DuPonts have been growing exotic trees for centuries. These trees can be recognized for their beauty as well as their ecological and historic value.

The PA Big Tree program also recognizes champions of certain distinct cultivars and varieties. For instance, we have a champion European beech and a champion weeping European beech. It wouldn't be fair to have the straight species and the varieties competing for the same champion title, as the weeping form can never grow as large, so they are considered independently. Finally, the PA Big Tree program recognizes trees that are big for their species (or variety), which means that there are many trees on the PA Big Tree register that aren't actually very big. The state champion eastern redbud is very impressive at 172 Big Tree Points, even if it doesn't come close to the state champion eastern cottonwood at 501 Big Tree Points.

### Local Trees that made the Big Tree List:

**Ricketts Glen State Park - Striped Maple - 80 Points**

**State Game Lands (Dushore) Dutch Mountain Road -  
Canadian Hemlock - 234 Points**

**Laporte - Littleleaf Linden - 216 Points**

**Moon Lake, Hunlock Creek - Northern Catalpa  
234 Points**

**Montoursville - Eastern White Pine - 327 Points**

**Danville State Hospital - 3 Siberian Elms - All over 300  
Points**

*Aaron Greenberg  
Pennsylvania Forests—Fall 2022*



## Congratulations - Employees of the Year



Congratulations to **Ana Ponce** (above), Benton Foundry's 1st shift Employee of the Year. Ana has worked at the Foundry for several years. She works in our Quality Lab as a lab technician and she is transitioning into the role of handling accounts in the Quality Lab. Ana has taken on additional responsibilities and is very helpful with her translating abilities. She lives in Berwick with her son Samuel, and she enjoys spending time with her family when she isn't working. ***Awesome Job Ana!***

Congratulations to **Xenia Ponce** (below), Benton Foundry's 2nd shift Employee of the Year. Xenia works in our Quality Lab. She previously worked in our Core Room as a Machine Operator and Core Cleaner. Xenia has been employed since January of 2021. She lives in Berwick with her two children, Christopher and Sophia. She enjoys spending time with her children when she isn't working. Xenia pays attention to detail, she addresses issues and is willing to take on new responsibilities as needed. Xenia and Ana have two other sisters that presently work at the foundry.

***Congratulations Xenia!***



## Welcome

We belatedly welcome **Morgan Hoover**. She's worked at Benton Foundry since April in the Human Resource Department.



She's spent her time here rotating through the foundry, taking AFS classes and working with the administrative staff, in an effort to learn the people, processes and procedures of Benton Foundry. Her background includes both Bachelor's and Master's degrees in Human Resource and Organizational Management and fifteen years of experience working in the field. That background and experience serve her well in her role as Human Resource Manager. Morgan lives locally with her family. We look forward to her continued contributions to Benton Foundry.

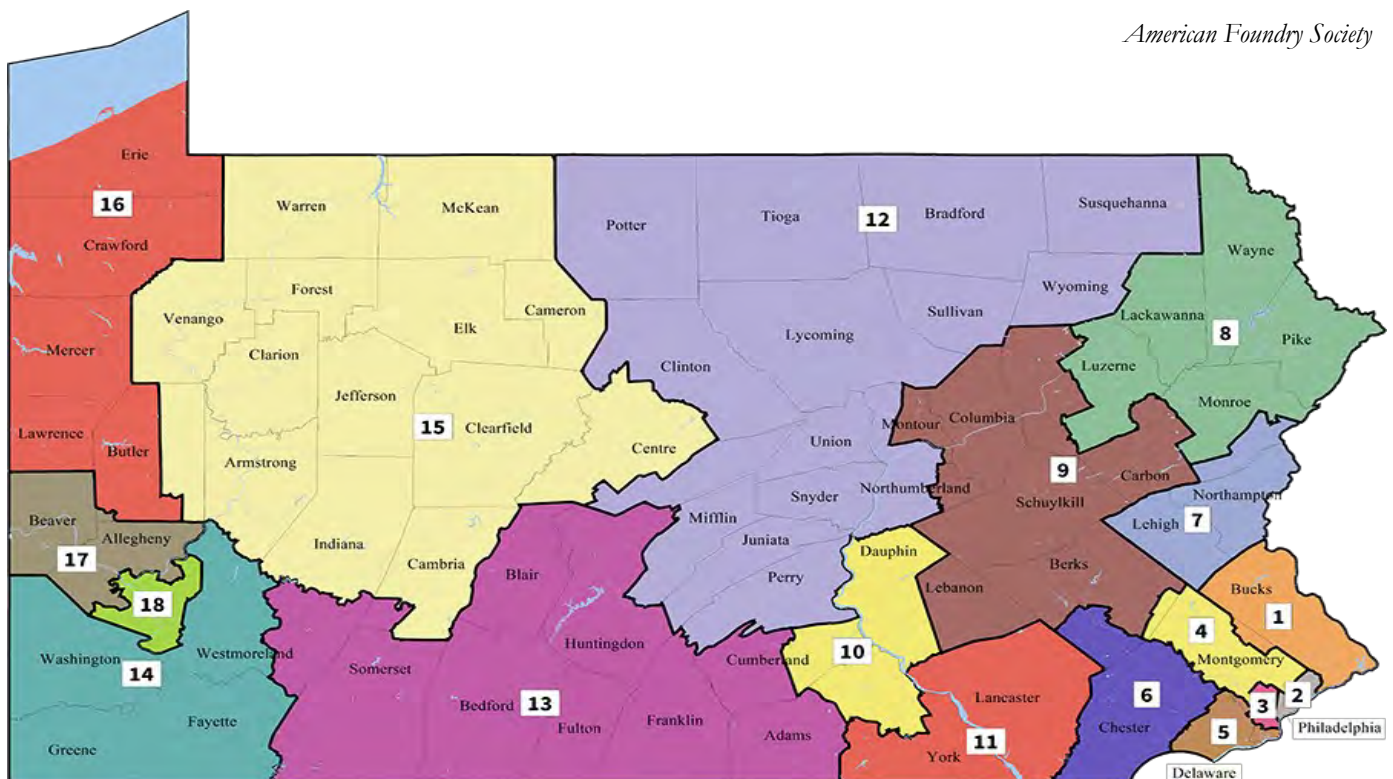
Welcome to the newest member of the Production Control Department, **Tamara Mabus**. Tamara began working at Benton Foundry in October 2022. She's currently on a plant rotation program that will enable her to better know the people and processes at Benton Foundry. She brings over 20 years experience in Operations Management and Logistics with her. That background will serve the Muncy resident well in the Production Control Department.



## Metal-Casting Matters

DISTRICT	JOB	WAGES	ECONOMIC IMPACT	TOTAL IMPACT
District 1 - See Map	75	\$4,990,100	\$17,761,900	\$208,590,100
District 2	21	\$1,406,600	\$5,006,700	\$123,082,700
District 3	5	\$351,500	\$1,260,700	\$308,511,200
District 4	314	\$24,260,500	\$88,171,300	\$405,068,100
District 5	256	\$17,247,200	\$61,445,600	\$257,463,500
District 6	145	\$11,626,000	\$42,459,500	\$279,480,300
District 7	328	\$24,307,700	\$87,856,800	\$281,839,600
District 8	176	\$11,971,700	\$42,733,500	\$220,685,700
District 9	1,613	\$119,856,100	\$433,289,200	\$612,311,200
District 10	157	\$13,012,200	\$47,721,700	\$281,009,700
District 11	2,065	\$155,423,400	\$562,868,600	\$754,782,300
District 12	1,000	\$78,962,800	\$287,809,400	\$470,705,200
District 13	837	\$62,670,000	\$226,788,600	\$426,627,400
District 14	382	\$27,583,800	\$99,306,700	\$304,252,200
District 15	171	\$11,870,000	\$42,484,000	\$249,695,300
District 16	1,652	\$116,311,700	\$417,185,600	\$629,378,600
District 17	300	\$24,104,800	\$88,057,900	\$348,314,000
District 18	726	\$55,917,000	\$203,155,400	\$544,240,300
Total:	10,223	\$761,873,100	\$2,755,363,100	\$6,706,037,400

*American Foundry Society*





# Employee Savings and Retirement Plan

Contribution Source						
	Balance As Of 01/01/2022	Contributions	Withdrawals	Gains/ (Losses)	Balance As Of 12/31/2022	Vested Balance
EMPLOYER PROFIT SHARING	\$86,282	\$0	(\$2,178)	(\$14,410)	\$69,694	\$69,694
EMPLOYER MATCH	\$3,406,101	\$193,665	(\$187,824)	(\$533,127)	\$2,878,815	\$2,850,601
EMPLOYEE 401(k)	\$9,600,880	\$549,234	(\$616,210)	(\$1,475,784)	\$8,058,120	\$8,058,120
EMPLOYEE ROLLOVER	\$257,349	\$0	(\$12,079)	(\$26,386)	\$218,883	\$218,883
BENEFICIARY	\$0	\$0	\$0	\$0	\$0	\$0
<b>TOTAL</b>	<b>\$13,350,613</b>	<b>\$742,899</b>	<b>(\$818,292)</b>	<b>(\$2,049,707)</b>	<b>\$11,225,512</b>	<b>\$11,197,298</b>

Activity By Fund						
	Balance As Of 01/01/2022	Contributions	Withdrawals	Exchanges	Gains/ (Losses)	Balance As Of 12/31/2022
American Funds New Perspective Fund A	\$756,783	\$31,020	(\$30,540)	(\$11)	(\$195,464)	\$561,788
American Funds Growth Fund of America A	\$1,756,284	\$67,403	(\$57,206)	(\$127,866)	(\$515,847)	\$1,122,769
American Funds Fundamentallnv A	\$875,191	\$29,478	(\$36,158)	(\$3,899)	(\$144,965)	\$719,647
American Funds American Mutual Fund A	\$959,677	\$35,119	(\$40,329)	\$126,170	(\$47,577)	\$1,033,059
American Funds American Balanced Fund A	\$1,805,846	\$83,498	(\$384,577)	(\$99,958)	(\$192,345)	\$1,212,465
American Funds Bond of America A	\$378,001	\$22,149	(\$25,093)	\$2,034	(\$47,590)	\$329,502
American Funds SMALLCAP World Fund A	\$796,894	\$30,218	(\$8,024)	(\$18,916)	(\$229,052)	\$571,120
American Funds New World Fund A	\$286,846	\$14,166	(\$3,002)	\$2,998	(\$63,431)	\$237,577
American Funds Capital Income Bldr	\$326,186	\$16,326	(\$13,358)	\$0	(\$23,013)	\$306,140
American Funds Cap World Growth IncA	\$320,676	\$15,203	(\$3,097)	(\$2)	(\$55,693)	\$277,087
American Funds Inv Company Of Ameri	\$189,148	\$15,323	(\$21,462)	(\$62)	(\$29,554)	\$153,393
MFS Mid Cap Growth R3	\$204,586	\$14,249	(\$3,063)	\$5,041	(\$58,714)	\$162,099
VanEck Global Resources A	\$271,924	\$28,447	(\$18,827)	\$1,283	\$19,947	\$302,774
Invesco Gold And Spec Minerals R	\$734,193	\$43,518	(\$15,554)	\$37,511	(\$158,731)	\$640,937
American Funds Money Market Fund A	\$1,629,559	\$127,694	(\$89,712)	\$75,783	\$22,931	\$1,766,254
American Funds Trgt Date Ret 2020A	\$42,536	\$2,073	(\$11,808)	\$0	(\$4,313)	\$28,489
American Funds Trgt Date Ret 2025A	\$336,189	\$24,497	\$0	\$0	(\$44,387)	\$316,299
American Funds Trgt Date Ret 2030A	\$639,040	\$18,040	(\$6,621)	(\$7)	(\$94,411)	\$556,040
American Funds Trgt Date Ret 2035A	\$78,661	\$14,317	(\$0)	\$0	(\$13,407)	\$79,571
American Funds Trgt Date Ret 2040A	\$595,687	\$20,763	\$0	\$0	(\$106,695)	\$509,755
American Funds Trgt Date Ret 2045A	\$51,077	\$24,502	\$0	\$0	(\$10,122)	\$65,457
American Funds Trgt Date Ret 2050A	\$204,068	\$29,378	(\$3,323)	(\$0)	(\$39,700)	\$190,423
American Funds Trgt Date Ret 2055A	\$57,802	\$4,596	(\$46,538)	(\$100)	(\$5,728)	\$10,032
American Funds Trgt Date Ret 2060A	\$45,465	\$22,032	\$0	\$0	(\$9,903)	\$57,595
American Funds Trgt Date Ret 2065A	\$8,293	\$8,891	\$0	\$0	(\$1,943)	\$15,241
<b>TOTAL</b>	<b>\$13,350,613</b>	<b>\$742,899</b>	<b>(\$818,292)</b>	<b>(\$0)</b>	<b>(\$2,049,707)</b>	<b>\$11,225,512</b>

Price Per Share By Fund						
	12/31/2017	12/31/2018	12/31/2019	12/31/2020	12/31/2021	12/31/2022
American Funds New Perspective Fund A	\$43.16	\$37.67	\$47.26	\$60.49	\$66.41	\$47.31
American Funds Growth Fund of America A	\$49.54	\$42.76	\$51.13	\$67.54	\$74.30	\$49.49
American Funds Fundamentallnv A	\$62.21	\$52.29	\$62.02	\$69.15	\$75.96	\$60.25
American Funds American Mutual Fund A	\$40.80	\$37.51	\$43.52	\$44.61	\$53.15	\$48.43
American Funds American Balanced Fund A	\$27.15	\$24.90	\$28.50	\$30.20	\$33.47	\$28.76
American Funds Bond of America A	\$12.89	\$12.57	\$13.09	\$13.79	\$13.39	\$11.38
American Funds SMALLCAP World Fund A	\$55.80	\$46.90	\$58.83	\$79.55	\$80.03	\$56.10
American Funds New World Fund A	\$66.92	\$57.36	\$70.55	\$87.95	\$86.03	\$66.46
American Funds Capital Income Bldr	\$62.82	\$56.33	\$63.32	\$63.01	\$70.16	\$62.99
American Funds Cap World Growth IncA	\$51.11	\$42.81	\$52.28	\$59.39	\$63.67	\$51.58
American Funds Inv Company Of Ameri	\$40.39	\$33.91	\$39.57	\$44.42	\$51.80	\$41.26
MFS Mid Cap Growth R3				\$28.02	\$30.71	\$21.95
VanEck Global Resources A				\$33.51	\$39.21	\$41.22
Invesco Gold And Spec Minerals R	\$15.74	\$13.64	\$19.88	\$26.63	\$24.82	\$20.55
American Funds Money Market Fund A	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00
American Funds Trgt Date Ret 2020A	\$12.56	\$11.69	\$12.96	\$13.75	\$14.26	\$12.17
American Funds Trgt Date Ret 2025A	\$13.44	\$12.43	\$14.07	\$15.39	\$16.09	\$13.46
American Funds Trgt Date Ret 2030A	\$14.42	\$13.17	\$15.16	\$16.80	\$17.79	\$14.53
American Funds Trgt Date Ret 2035A	\$14.84	\$13.38	\$15.77	\$17.85	\$19.53	\$15.46
American Funds Trgt Date Ret 2040A	\$15.20	\$13.63	\$16.20	\$18.57	\$20.61	\$15.92
American Funds Trgt Date Ret 2045A	\$15.43	\$13.84	\$16.51	\$19.00	\$21.21	\$16.21
American Funds Trgt Date Ret 2050A	\$15.10	\$13.56	\$16.22	\$18.72	\$20.98	\$15.84
American Funds Trgt Date Ret 2055A		\$16.92	\$20.29	\$23.45	\$26.32	\$19.75
American Funds Trgt Date Ret 2060A		\$11.24	\$13.56	\$15.72	\$17.75	\$13.38
American Funds Trgt Date Ret 2065A				\$14.58	\$16.81	\$12.98

\* Share price does not reflect fund dividends.

## Education

### *Good Job to the following personnel*

**Tamara Mabus** and **Sheila Vansock** for being among the top five AFS (e-learning) students in the month of November.

**Joe Tabor** for doing very well in his Advanced Process Control classes at Penn State. Joe's certification program is to be complete in May of this year! *Way to Go!*

**Tim Antoniello**, **Ana Ponce** and **Chad Davis** for their completion of Excel I, II and III.

**Colin Jandrasitz**, **David Buma Jr.**, **Tim Schechterly Jr.** and **Nicolas Wilson** for an average GPA of 3.62. These four students are attending college at Penn Tech and Penn State.

**Randy Kadtke**, **Chad Davis** and **Don Copeland** - WTTI (Welder Training and Testing Institute) for (NDT) Non-Destructive Testing) Level I UT Certification.

**Cody Snyder** ASM Practical Fractography

**Eric Piatt**, **Mike McDonald** and **Matt Herr** Crane Institute of America - Overhead Crane Inspector Certification

**Kyle Hall** and **Tom Boatman** AFS (American Foundry Society) - Safety 101

## Anniversary Milestones

Tom Foust	45 Years
Bill Keefe	40 Years
Mike Machuga	35 Years
Tim Kepner	35 Years
Albert Phillips	35 Years
Dave Eveland	35 Years
Donna Remley	35 Years
Annette Brown	35 Years
Sherry Steele	30 Years
David Travelpiece	25 Years
Dustin Burke	15 Years
Aric Strauch	15 Years
Fred Kessler	15 Years
Marty Pelas	10 Years
Greg Woodside	10 Years
Tom Boatman	10 Years
Boyd Lore	10 Years

## Congratulations

**Awesome Job** to **Annette Brown** for all of her hard work and the great job she does in the Human Resource Department.

**Good Job** to **Shawn Nevel** and **Ray Campbell** for their versatility between the Molding and Melt Departments.

**Kudos** to **Yesslan Ruiz Barrientos** for a successful transition from the Core Room to the Melt Department.

**Awesome Job** to **Walt Lutcavage** for his increased responsibilities in the Grinding Room.

**Good Job** by **Maintenance** for moving Quality into the "New and Improved" Inspection area.

**Kudos** to the **Grinding Room**, during the process of re-shaping their whole department in the last several months.

**Good Job** by **Ana Ponce** for helping coordinate training in the Core Room and Grinding Room in both English and Spanish, along with helping with the H2B Program.

**Ana Ponce** won the AirPods. The criteria to be entered into the drawing was to refer an individual and have them interviewed/hired by the December 20th. Tim Antoniello drew Ana's name.

**Good Job to our Lab!** Twice a year Benton Foundry participates in the Iron Casting Research Institute's (ICRI) testing. This was the 51st round of Spectrometer Proficiency Testing. These tests measure repeatability and consistency between various technicians within a lab and reproducibility and consistency between different labs. Certified reference standards with unknown concentrations of numerous elements are analyzed and results forwarded to the ICRI. They found no statistically significant differences for repeatability and reproducibility. Benton Foundry's Lab has continually been recognized for consistently high performance in these exercises. Thanks to Ron Steward, Ana Ponce, Jackie Showers, Tim Antoniello, Cody Snyder, Brittany Masakowski, Xenia Ponce, Don Copeland and Bill Simback.



### **Congratulations to the following personnel for their 4th Quarter 2022 performance.**

**Kristhian Ponce** - Highest Core Operator Efficiency

**Myriam Mayorga** - Highest Assembly Efficiency

**Tom Foust** - Lowest Internal Molding Scrap

**David Straub** - Highest Molding Efficiency

**Luis Cruz Luquis** - Highest Grinding Efficiency

**Gilberth Mayorga** - Highest Foxall Running Time



## Seacoal

**S**eacoal is a part of the pre-blended bentonite we use in the sand muller. It has been used for many years. What follows is a brief history with characteristics and effect:

The use of “coal dust” in molding sand originated in England.

It was later introduced to the North American foundrymen as “seacoal.” One particular English or Welsh coal seam appeared to be the most satisfactory for foundry purposes and became the standard with which other coals were compared. Some authors believe that since the coal seam was near the Welsh coast and the mines were deep under the ground, extending under the sea, the term “seacoal” emphasized both its origin and its sea transportation to the USA.



However, the author has pursued the term “seacoal” for many years and believes that it originated from Lord Dudley’s nomenclature in his patent applications in 1620. Lord Dudley applied for a patent on behalf of his son, “Dud” Dudley, for “melting iron ewre (ore) and of making the same into caste works or barrs with “Sea-Coles” or “pit-coles” in furnaces with bellows.” These “sea-coles” were described as being low in ash, Sulphur and impurities for making the metal. The foundryman thought the same coal should be used in making sand molds. After a long and tiring search by the author, an old English file produced this answer after many years of investigation.

### Characteristics:

Seacoal (coal dust) is a highly volatile bituminous coal, ground to various degrees of fineness by



pulverizing mills which is then graded by screening or by air classification methods. It is mixed and mulled with molding sand in various proportions. When it, or the products of its destructive distillation come into direct contact with molten iron, seacoal seems to improve the casting finish. Where molds are cast which contain seacoal, the sand peels more freely from the castings and the cleaning of the castings is more easily accomplished. Seacoal is one of the least expensive materials used in molding sand to give these results. Seacoal has been termed a “facing” in the foundry as a result of this property.

### Effect:

The effect of seacoal is so well known that it is accepted as a requirement in the production of gray iron, ductile (nodular or S.G.) iron and malleable castings. The many advantages it offers have perpetuated its foundry use.

*Clyde A. Sanders*

*Foundry Sand Practice 1973*

*American Colloid Company*

## Condolences



### *Don Nevel*

Our condolences go out to the family of Don Nevel. Don worked in Shakeout at the foundry for a number of years when we still had manual molding. He dumped molds, cleaned boards, as well as, worked in our Grinding Room. Don retired in 1999, after 37 years at the foundry. Don

received a 70-year-old Yankee Clipper sled for Christmas, just three days before he passed. Don passed on December 28, 2022. This is Don’s picture from our 2022 Knoebel’s picnic. It is people like Don that have helped make Benton Foundry.

## Knoebels



## Birthdays

### February

Amanda Hartman  
Jacob Hartman  
Glenda Melendez  
Noel Melendez  
Scott Vandine  
Randy Kadtko  
Boane Berg  
Eddie Gates  
Shawn Frey  
Fred Hittle  
Matt Lobos  
Gene Ryman  
Mark Coleman  
Marty Pelas  
Val Fowler  
Brady Matthews  
Kenny O'Brecht  
Colton Young  
Cecily De Flores  
Kodey Hummel  
Matt Shultz  
Mike Shultz  
Eric Barnes  
Joe Sharkuski  
Ryan Bown  
Harry Fry  
Jose Rodriguez  
Martha Ponce

### March

Paul Simko  
Mike Modla  
Jeff Jones  
Lou Sappé  
James White  
Orlando Segundo  
Ron Steward  
Miguel Fuentes  
Lynn Sheatler  
Stuart Wolfe  
Jeremy Hospodar  
Joe Timko  
Nate Foust  
Erick Vallecillo  
Maria Arcia  
John Andrews  
Jaiden Hayman  
Tom Foust  
Douglas Cruz  
Corban Peterson  
Nick Stefanowicz  
Greg Vandine  
Ryan Keeler  
Tim Shepherd  
David Straub  
Dominique Hatch  
Austin Puterbaugh  
Sherry Nerio

### April

Ray Campbell  
Mike Machuga  
Garrett Remley  
Mary Alice Green  
Chris Madl  
Katherine Arriaza  
Gerson Flores  
Francisco Barrientos  
Bob Little  
Sindy Hernandez  
Della Norton  
Annette Brown  
Ed Whitmoyer  
Andy Spencer  
Mike Schumacher  
Jonas Roper  
Carrie Yost  
Brenda Mendez  
Gilberth Mayorga  
Bernardo Rios  
Cristian Ballen



## Trivia Question???

***In what year did Fritz Hall become President of Benton Foundry?***

Answer will be in 1st Quarter 2023.

***Answer from 3rd Quarter question:***

***In what year did the name change from Harrington Foundry to Benton Foundry?***  
***1958***



Want



**\$500?**

## Company Referral Plan

Refer a Potential Employee to Lou  
(Before They Come In)

If Hired,

After 90 days of Employment

You Get \$250.

After 6 months of Employment

You Get Another \$250.

## IRONY



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## "The Wisdom Well"

**"A government which robs Peter to pay Paul can always depend on the support of Paul."**

~George Bernard Shaw

