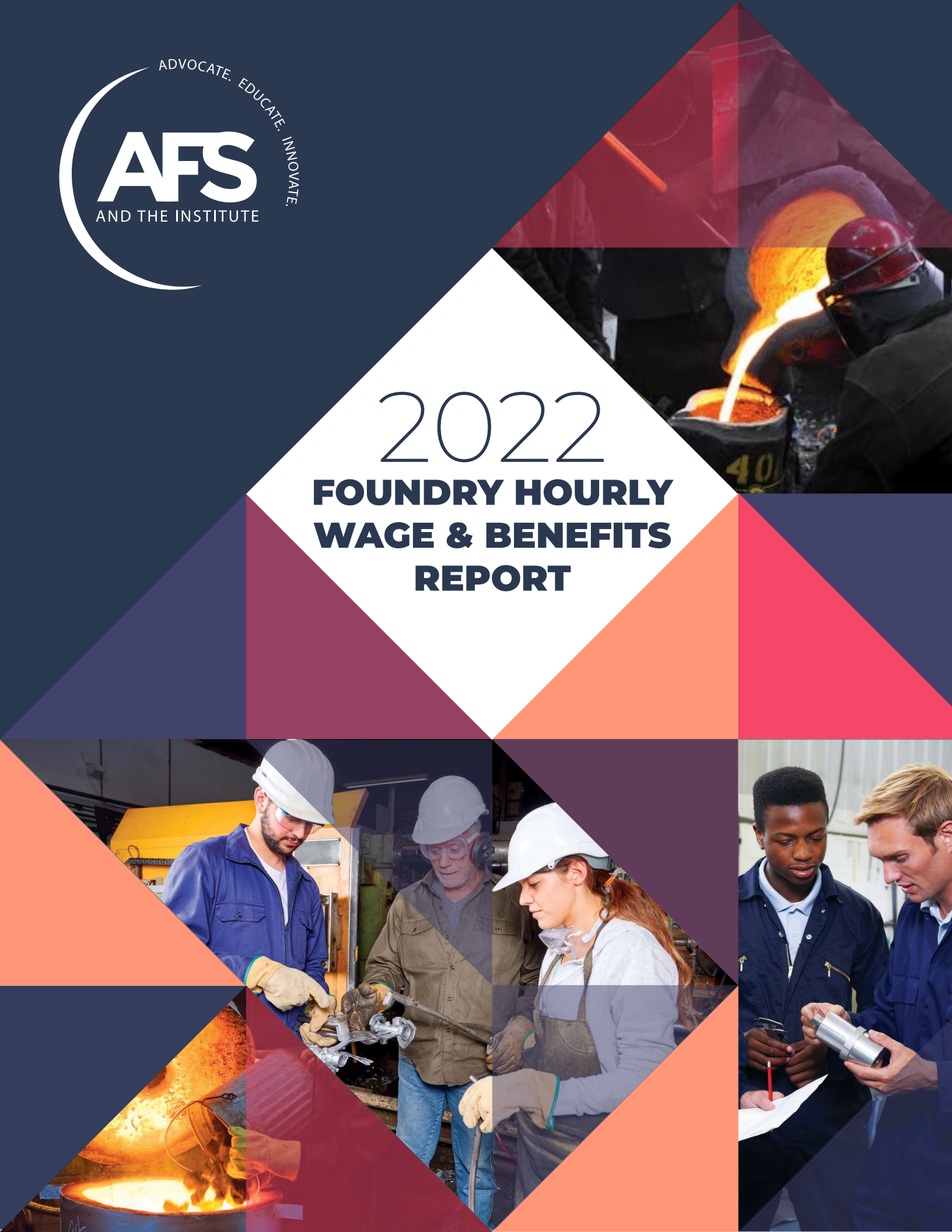




# 2022

## **FOUNDRY HOURLY WAGE & BENEFITS REPORT**





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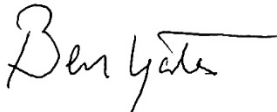
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# FOREWORD

With companies in a seemingly endless hiring cycle and production capacity peaking, your ability to be profitable likely comes down to your ability to locate, hire, and retain quality employees for all positions throughout your organization. A key aspect to building the right team is ensuring that you reward your staff appropriately compared to what they might receive elsewhere. This includes compensation in the form of wages, incentives, and benefits.

The *2022 Foundry Hourly Wage & Benefits Report* is an analysis of 2021 compensation practices that is intended to serve as a resource for metalcasting companies developing recruitment and retention strategies. The report is the result of a survey of 65 metalcasting facilities throughout North America, and was compiled and produced with the assistance of the Profit Planning Group Inc, as a confidential, third-party administrator.

Please contact us if you have any questions about the report or would like to participate in future American Foundry Society surveys.



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# The Study

This report presents the results of the 2022 American Foundry Society Employee Compensation Study. The study analyzes 2021 compensation data submitted by the 66 participating North American companies.

To protect the sensitive data collected for this study, Profit Planning Group confidentially conducted this project for AFS. Survey questionnaires were distributed to AFS members. Participants returned surveys directly to Profit Planning Group. AFS did not have access to any individual participant data. The data analysis and compilation of results were conducted only by the authorized staff of Profit Planning Group. At the conclusion of the study, surveys submitted for the project were destroyed by Profit Planning Group.

The compensation data were collected and analyzed separately for two groups of employees.

- Salaried Professional and Technical Employees: average annual compensation for 23 positions.
- Hourly Foundry Employees: average hourly wages for day work and for piecework in 27 positions.

Benefits data in the following categories were also collected and analyzed separately for each group.

- Healthcare
  - Medical Plans Offered
    - Coverage, deductibles, and employer contributions Co-pay and co-insurance for office visits and drugs
  - Wellness Programs
  - Managed Care
  - Short-Term Disability
  - Other Health Benefits
- Retirement
  - Profit Sharing
  - 401(k) Plans and Details
- Time-Off
  - Personal Time Off Programs Sick Time, Holidays, Vacation
  - Other Paid Time-Off
- Other Benefits
  - Life Insurance
  - Other Benefits and Policies

Additionally, data were collected and analyzed for the following selected employment practices.

- Shift Premiums
- Determination of Bonuses
- Determination of Raises
- Severance

# The Results

## Statistics

The total sample was analyzed as a whole and also in the following categorical sub-sets.

- All Firms
- Sales Revenue <\$6M
- Sales Revenue \$6M - \$16M
- Sales Revenue \$16M - \$40M
- Sales Revenue >\$40M

The following statistics were calculated for each item in each category.

- Sample Size (N), Minimum, Maximum
- 25th Percentile, Median (50th percentile), 75th Percentile
- Average (Mean), Standard Deviation (the average "distance" from the mean)

Note that some items just measure the portion of responses matching a specific value or condition (e.g. % of firms offering retirement). The only statistics reported for these are the sample size and the average. The other statistics do not apply. For these items, the value of the average is the matching portion of the sample expressed as a percentage of the sample.

**It is important to consider the following when interpreting these statistics.**

### Sample Size

Use caution interpreting results for small samples. The statistics for these items may not be as representative as those for larger samples. Since small samples may have too few responses to develop a strong central range (central tendency), statistics for these samples may be less reliable.

### Independent Samples

The samples for each item in each category are independent. Some items imply a relationship (e.g. total compensation and bonus) but none exists in the analysis. Participants did not always respond to every question so samples for each item are not necessarily from a consistent group of respondents.

### Averages

Be very wary of the average. Averages are very easily skewed by just one unusual response. Profit Planning Group recommends using the median instead. The median is the middle response in the sorted list of all responses in a sample. Medians are not skewed by an unusual response.

### Min and Max Values

Be wary of min and max values. These are frequently extreme outliers in a sample. To better understand the typical variability in a sample, Profit Planning Group recommends using the 25th and 75th percentiles instead. They quantify the range of the middle half of responses. The middle half can be considered a "normal" range for most samples.

# The Results

## Full-Time Equivalent Employees

For this study, an FTE employee is defined as one unit of 2080 annual work hours.

## Average Annual Compensation for Salaried Employee Positions

Respondents were asked to report the average of the compensation shown on W2 forms for all employees that can be classified into each position. Bonuses and commissions are included.

## Average Straight-Time Hourly Earnings for Hourly Employee Positions

Respondents were asked to report the average of the straight-time hourly earnings for the first full payroll period ending after January 1, 2021 for employees that can be reasonably classified into each position.

Apprentices, learners, trainees and probationary workers were excluded. Only grade A workers were included for positions with job grades. Premium pay for overtime or for work on holidays, weekends and late shifts was excluded but all cost-of-living adjustments were included.

## The Results Spreadsheet

The results are presented in an Excel spreadsheet on two worksheets.

- The Index worksheet
- The Results worksheet

For convenient navigation, the index sheet has a table of topics and categories with links into the results sheet. Clicking a link will position the cursor on the results sheet on the row for the topic in the left-most column for the category (e.g. on the row for the Compensation Practices topic in the left-most column for the Sales >\$40M category).

Since the results sheet has around 20,000 cells, printing is not recommended. The sheet is not formatted for printing, results can be selected then copied to another document for formatting.

The table on the results sheet is formatted with a compact font. If the table is difficult to view it can be enlarged using Excel's zoom feature.

There are many versions of Excel on many platforms so the spreadsheet cannot be tested with every combination. The spreadsheet was developed on a Windows platform in a stable version of Excel that should be compatible with most if not all versions of Excel. Some minor formatting issues may be observed with some versions of Excel and/or on other platforms.

**American Foundry Society**  
**2022 SURVEY OF WAGES AND ECONOMIC BENEFITS**  
**Job Descriptions**

1. FLOOR OR BENCH MOLDER—Makes mold on floor or bench from loose pattern equipment.
2. ROLLOVER OR HEAVY MACHINE MOLDER—Makes molds from mounted equipment on machines which jolt and draw the pattern.
3. SQUEEZER MOLDER—Makes molds from matchplate patterns on jolt squeeze machine.
4. AUTOMATIC MOLD MACHINE OPERATOR—Sets up and operates fully automatic molding machine.
5. AUTOMATIC GRINDING MACHINE OPERATOR—Sets up and operates fully automatic grinding machine.
6. SHELL MOLD AND/OR SHELL COREMAKER—Operates shell machine to make shell molds and/or cores.
7. FLOOR COREMAKER—Works with coreboxes of a size that must be handled on the floor. Must be able to determine rodding, ramming and venting requirements.
8. BENCH COREMAKER—Makes cores in boxes of a size that can be handled on a bench.
9. LAB TECHNICIAN— Performs tests to ensure metallurgical and/or sand quality.
10. MACHINE COREMAKER (BLOWER)—Makes cores on a machine that blows or shoots sand into box cavity.
11. CORE ASSEMBLER AND FINISHER—Cleans sand fins from cores. Pastes and assembles core components. Mud seals joints and does other work necessary to prepare core for use in a mold.
12. CNC OPERATOR—Machinist that operates CNC equipment.
13. SAND MULLER OPERATOR—Mixes core or molding sand in a mechanical mixer.
14. CUPOLA OR FURNACE OPERATOR—Has charge of cupola operation or air furnace melting. Responsible for metal temperature and rate of melt or for determining when metal is ready to be tapped.
15. MELTER, ELECTRIC FURNACE—Has charge of electric furnace operation. Directs charging crew and has responsibility for quality of the heat.
16. LIFT TRUCK OPERATOR—Operates lift truck in hauling sand, flasks or castings within and outside the plant.
17. POURER—Pours metal into molds from a ladle filled from furnace or bull ladle.
18. SHAKEOUT—Conveys molds into shakeout pit, grate or conveyer.
19. BLAST CLEANER MACHINE—Operates, loads and unloads blast cleaning machine.
20. GRINDER (ROUGH)—Removes excess metal from casting using stationary grinder or hand tools.
21. GRINDER (FINISH)—Using stationary grinder or hand tools, grinds casting to finished state.
22. WELDER (PROCESS)—Uses welding equipment to repair casting defects.
23. CRANE OPERATOR—Operates overhead crane inside or outside the plant.
24. GENERAL LABORER—Performs any general laboring work.
25. INSPECTOR/QUALITY ASSURANCE TECHNICIAN—Ensures compliance with a quality standard using visual or routine instrumental methods.
26. HEAT TREAT OPERATOR—Operates heat treating equipment to treat castings.
27. PATTERNMAKER/PATTERN REPAIR—Works from drawings to make wood or metal pattern and corebox equipment; makes minor repairs to patterns and rigs the risers and gates to the pattern.
28. ELECTRICIAN, MAINTENANCE—Maintains and repairs the electric and electronic equipment in plant.
29. MAINTENANCE MECHANIC—Maintains and repairs the mechanical equipment in plant.