### No-Bake Foundry System Specification Worksheet

#### THE BASICS  
NOTE: Most fields are required. If no answer, please enter N/A.

<table>
<thead>
<tr>
<th>Field</th>
<th>Information</th>
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<tbody>
<tr>
<td>Company Name</td>
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<tr>
<td>Contact</td>
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<td>Address</td>
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#### MOLDING

1. **Size of Area for Molding (Site drawing would be helpful)?**

2. **Half Mold Size (cope or drag)**  
   First (2) Values should be the overall minimum and maximum size to be made in this area.  
   - **Minimum** - Length x Width x Height  
   - **Maximum** - Length x Width x Height  

   Next (2) Values should be the typical minimum and maximum size to be made in this area that will cover 80-90% of the work for the area. In many jobbing foundries, there are often odd large or small sizes that are run very rarely. These values should be for the sizes that are run regularly and are NOT the rare items that are encompassed in above.  
   - **Minimum** - Length x Width x Height  
   - **Maximum** - Length x Width x Height  

   **Average Size to be used for Molds/Hour Calculations**  
   - Length x Width x Height  
   
   (If left blank, we will assume halfway between the Typical Minimum and Typical Maximum)

3. **Estimated Maximum Half Mold Weight?** ______ lbs.  
   **Estimated Average Half Mold Weight?** ______ lbs.

4. **Estimated Maximum Closed Mold Weight?** ______ lbs.  
   **Estimated Average Closed Mold Weight?** ______ lbs.

5. **Number of Mold/Core Boxes to Run Simultaneously on the Loop?**

6. **Desired Full Mold Production Rate per Hour?**  
   (We will assume 2 mold halves per full mold unless otherwise specified.)

7. **Estimated Strip Time?**

8. **Level of Automation?**  
   - Full  
   - Semi  
   - Manual

9. **Flaskless Cope/Drag Boxes**  
   - In-Flask Cope/Drag with Separate Pattern Plates  
   - In-Flask Dual Sided Matchplate Patterns

10. **Bottom Board Type?**  
    - Wood  
    - Plastic  
    - Aluminum  
    - Steel  
    - Iron  
    - Other: ____________

11. **Pattern Mount Board Type?**  
    - Wood  
    - Plastic  
    - Aluminum  
    - Steel  
    - Iron  
    - Other: ____________

12. **Pattern/Board Material?**  
    - Wood  
    - Plastic  
    - Aluminum  
    - Steel  
    - Iron  
    - Other: ____________

13. **How Many Shifts Will the Molding System Run?**

14. **Additional Molds/Hour Capacity to Design into the System?** ______ %

15. **Do you require the following?**  
    - Sand Heater  
    - Sand Cooler  
    - Primary Sand  
    - All Sands
### MIXER

1. Type(s) of Sand to be Used and Grain Size (e.g., Silica, Reclaim, etc.)?

2. Need for Facing or Backing Sand?  ☐ Yes  ☐ No

3. Binder System to Use?

4. Powder Feeder Required?  ☐ Yes  ☐ No
   If Yes, what additive material?

### MOLD HANDLING

#### Mold Wash

1. ☐ Water  ☐ Alcohol
2. ☐ Flow-coat  ☐ Spray  ☐ Swab
3. ☐ Mold Handler  ☐ Tilt Device  ☐ Rolling Device
4. Drying Oven?  ☐ Gas  ☐ Electric Microwave
5. Preheat Required before Mold Wash Application?  ☐ Yes  ☐ No

#### Mold Closing

1. Mold Handler Required?  ☐ Yes  ☐ No
   If yes:  ☐ Scissor Style  ☐ Gantry Style
2. Minimum Number of Cores Per Mold?
3. Maximum Number of Cores Per Mold?
4. Average Number of Cores Per Mold?
5. Current Average Time for Core Placement?

#### Pouring

1. Primary Metal Poured?  ☐ Yes  ☐ No
   Maximum Casting Weight:  ☐ Average Casting Weight:  
2. Type of Castings Produced?
3. Is Separation of Alloy or Heat Required?  ☐ Yes  ☐ No
4. Is Pouring Continual or Batch-Poured?  ☐ Continual  ☐ Batch
5. Estimated Number of Molds Staged for Pouring?
6. ☐ Conveyor Pouring  ☐ Floor Pouring
7. Average Cooling Time per Mold?
8. Is There Sufficient Pouring Capacity to Match Above Molding Requirements?  ☐ Yes  ☐ No
9. Is Mold Clamping Required for Pouring?  ☐ Yes  ☐ No
<table>
<thead>
<tr>
<th>Question</th>
<th>Options</th>
<th>Yes</th>
<th>No</th>
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<tbody>
<tr>
<td>1. Shakeout Method?</td>
<td>☐ Shakeout Deck</td>
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<td></td>
<td>☐ Manual on Floor</td>
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<td>or Other: ________________</td>
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<tr>
<td>2. How Many Shifts will the Reclamation System Run?</td>
<td>_________________________</td>
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<td>3. Estimated Average Sand Temperature at Shakeout (°F)?</td>
<td>_________________________</td>
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<td>4. Magnetic Separation Required?</td>
<td>☐ Yes</td>
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<td></td>
<td>☐ No</td>
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<td>5. Sand Cooling Required?</td>
<td>☐ Yes</td>
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<td></td>
<td>☐ No</td>
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<td>6. Mechanically Reclaimed Sand Will be fed to:</td>
<td>☐ Mixer</td>
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<tr>
<td></td>
<td>☐ Thermal Reclaimer</td>
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<td></td>
<td>☐ Both Mixer and Thermal Reclaimer</td>
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<td>7. Does a Thermal Reclaimer already exist in facility?</td>
<td>☐ Yes</td>
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<td>☐ No</td>
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<td>If no, are there any plans to add one in the future?</td>
<td>☐ Yes</td>
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<td></td>
<td>☐ No</td>
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