

No-Bake Foundry System Specification Worksheet

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

Company Name: _____ Contact: _____

Address: _____ City: _____ State / Province: _____

Zip: _____ Country: _____ E-Mail: _____

Telephone: _____ Fax: _____

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.

Estimated Maximum Closed Mold Weight? _____ lbs. Estimated Average Closed Mold Weight? _____ lbs.

4. Number of Mold/Core Boxes to Run Simultaneously on the Loop? _____

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

6. Estimated Strip Time? _____

7. Level of Automation? Full Semi Manual

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

9. Bottom Board Type? Wood Plastic Aluminum Steel Iron Other: _____

10. Pattern Mount Board Type? Wood Plastic Aluminum Steel Iron Other: _____

11. Pattern/Board Material? Wood Plastic Aluminum Steel Iron Other: _____

12. How Many Shifts Will the Molding System Run? _____

13. Additional Molds/Hour Capacity to Design into the System? _____ %

14. 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? _____ 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

RECLAMATION

1. Shakeout Method? Shakeout Deck Manual on Floor or Other: _____
2. How Many Shifts will the Reclamation System Run? _____
3. Estimated Average Sand Temperature at Shakeout (°F)? _____
4. Magnetic Separation Required? Yes No
5. Sand Cooling Required? Yes No
6. Mechanically Reclaimed Sand Will be fed to: Mixer Thermal Reclaimer Both Mixer and Thermal Reclaimer
7. Does a Thermal Reclaimer already exist in facility? Yes No
If no, are there any plans to add one in the future? Yes No