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| **American-Made Geothermal Manufacturing Prize** **SUBMISSION FOR MAKE!**  |
| **PROJECT NAME**Innovation tagline (e.g., your mission in a few words)*Keyword tags* **TEAM** Names, geographic locations, contact info, and LinkedIn profiles**PARTNERS AND AMERICAN-MADE NETWORK SUPPORT**Key project partners and organizations (if any)The Connectors (up to 3) that significantly helped you advance your solution and the major items they helped with (if applicable)  |

Link to your 120-second video

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Made Solar Prize Official

Rules



#### *Video Pitch: showcase your idea in 120 seconds*

*Post your publicly accessible video online (e.g., YouTube, Vimeo, etc.). Be creative and produce a video that conveys the required information in exciting and interesting ways but do not focus on time-consuming activities that only improve production values (i.e., technical elements such as décor, lighting, and cinematic techniques). The American-Made Network may be able to help you with creating your video.*

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| **Online Public Video—What is your innovation** |
| **Suggested content you provide*** The geothermal-relevant challenge you are tackling
* How you are incorporating AM into your solution and why it’s transformational
* Demonstration of your prototype’s features
* Who you are and why you have a competitive edge
* Creative content that conveys your submission in exciting and interesting ways.
 | **Required submission format*** Ensure that your video is posted publicly online (e.g., YouTube, Vimeo)
* The video should not exceed 120 seconds.
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| **The American-Made Network may be able to help you with creating your video.** |

#### *Four-Question Written Narrative*

*Answer each of the following four questions:*

1. ***Problem & Solution*** *– What is the problem and how are you solving it?*
2. ***Innovation*** *– What progress have you made to prove your solution will be successful?*
3. ***Team*** *– What qualities give you a competitive edge and how have you grown?*
4. ***Plan*** *– What is your plan to achieve your goals?*

*For convenience, these questions are provided in the headings of the tables on pages 3-6 along with suggested content (and corresponding judging statements) to help guide your responses. You decide where to focus your answers.*

*The individual answers to the four questions do not have a word limit, however, the aggregate response to these four questions must be between 2,500 and 5,000 words. You may also include up to 20 supporting images, figures, or graphs. Table, figure, and image descriptions, as well as footnotes, do not count against word limit.*

*The judges will score the questions based on the content you have provided.* ***Responses should not be entered into the existing table format for each question*** *(Question tables may be deleted prior to submission).*

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| **Question 1: Problem –** What is the problem and how are you solving it? |
| **Suggested content you provide*** Describe the problem, quantify its significance with metrics, and explain the specific relevance to geothermal applications.
* Describe your AM-focused innovation, its unique value proposition, and how it demonstrates a promising new industry manufacturing approach.
* Explain how AM can enhance existing fabrication approaches for your innovation.
* Show how you know this is a significant problem for the geothermal industry using evidence-based validation (e.g., interviews with users, case studies, literature).
 | **Each statement scored on a 1–6 scale** * The competitor identifies a critical geothermal-focused problem and innovation opportunity using AM through compelling analysis.
* There is clear linkage and relevance to geothermal applications.
* The competitor’s assessment shows a strong understanding of current manufacturing approaches for their proposed tool, component, or equipment.
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**Response to Question 1:**

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| **Question 2: *Innovation* –** *What progress have you made to prove your solution will be successful?* |
| **Suggested content you provide*** Describe your AM-focused innovation progress, including documentation of the concept’s successful prototype (see special instructions on page 18 of the [official rules](https://americanmadechallenges.org/geothermalmanufacturing/docs/Geothermal_Manufacturing_Prize_Official_Rules.pdf)).
* Describe your fabrication approach(es) and results from Make! activities, including your due diligence in determining one or more AM categories to use for prototyping, highlighting key engagements, relationships, and milestones.
* Describe who gave feedback on your prototype, why it is important, and changes you made a result of that feedback.
* Specify expected performance improvement goals and metrics relevant to your tool, component, or equipment based on your design activities for prototyping and testing (see special instructions on page 18 of the [official rules](https://americanmadechallenges.org/geothermalmanufacturing/docs/Geothermal_Manufacturing_Prize_Official_Rules.pdf)).
 | **Each statement scored on a 1–6 scale** * The competitor demonstrates a strong understanding through submitted documentation of how incorporating AM is providing a solution pathway for addressing the problem identified in Question 1.
* The fabrication approach(es) undertaken in Make! is (are) reasonably ambitious, and submitted documentation validates critical assumptions needed to advance the proposed solution toward advanced testing.
* The solution represents an innovative approach incorporating AM into a geothermal tool, component, or equipment, built on reasonable assumptions, valid technical foundations, and informed by key engagements with project collaborators, and lessons learned from other notable efforts in this space.
* The competitor is pursuing an innovative and impactful solution that will demonstrate promising new geothermal industry manufacturing approaches.
* Performance improvement goals and metrics are verifiable and aggressive but attainable.
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**Response to Question 2:**

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| **Question 3: *Team*** *–* What qualities give you a competitive edge and how have you grown?  |
| **Suggested content you provide*** Introduce your team, explain how it came together (including updates as applicable from Set! participation), and highlight the knowledge and skills that make the team uniquely capable of achieving success.
* Describe how your team has evolved during the competition, including any strategic hires or partnerships.
* Highlight your team’s experiences in this competition and more broadly in AM, and how you have applied these experiences to your specific innovation.
* Describe why your team is passionate about your proposed solution.
* Explain why winning the Make! Contest will substantively change the likely outcome for the proposed solution.

  | **Each statement scored on a 1–6 scale** * The team’s track record demonstrates notable entrepreneurial qualities such as adaptability, creativity, decisiveness, and resourcefulness.
* The team’s drive, knowledge, and complementary skill sets provide a strong competitive edge toward realizing this solution soon.
* Winning the Make! Contest will significantly increase the team’s chances of creating a viable AM-focused prototype.
* A considerable amount of high-quality effort was put into prototyping the proposed solution.
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**Response to Question 3:**

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| **Question 4: *Plan*** – What is your plan to achieve your goals?  |
| **Suggested content you provide*** Describe where you stand in your AM-focused solution’s prototype development.
* Update goals for the Geo! Contest, including the Demo Day event (based on the schedule listed in [Section I.5](https://americanmadechallenges.org/geothermalmanufacturing/docs/Geothermal_Manufacturing_Prize_Official_Rules.pdf)).
* Describe your team’s readiness to meet your goals; what resources provided by the contest will help meet your goals?
* Provide a high-level budget and project management plan to meet your goals through conclusion of the Make! Contest, including how you will leverage program resources or other entities (include references to letters of support/commitment, if applicable).
 | **Each statement scored on a 1–6 scale** * The stated goals are ambitious, reduce risks, and show a commitment to an accelerated development.
* The competitors are successfully meeting prior goals and demonstrating continued critical design progress toward advanced testing of their innovation.
* Stated Geo! Contest goals, including the Demo Day goals, are ambitious, risk-reducing, and show a commitment to an accelerated solution development.
* Meeting the stated goals will demonstrate critical progress toward testing and validating the functionality of this proposed design.
* The proposed plan is appropriate and logical to achieve the stated goals.
* The proposed plan effectively uses resources available in-house or through this program to advance the innovation.
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**Response to Question 4:**

#### supplementary Information

Special instructions for questions 2 and 4

* Although prototyping documentation will be application-specific, documentation should clearly demonstrate the successful fabrication of the competitor’s design and should validate and/or strongly support the core proposed system functionality and performance benefits of the prototype. This documentation should include either fabrication and/or manufacturing analysis steps taken that supported successful prototype fabrication, as well as documentation that validates assumptions required to undertake advanced testing.
	+ Example fabrication documentation includes fabrication drawings, STL production files, CAD model renderings, engineering calculations, finite element analysis along with a description of the calculation basis, description of the fabrication process used, and functional demonstrations.
	+ Example documentation to validate preparation f or advanced testing includes results of thermal or mechanical tests (e.g., strength, hardness, fatigue, creep, thermal expansion), reports of functional and load testing of the component, and quality inspection test results such as X-Ray computed tomography to evaluate material structure.
	+ Other approaches can also be used if they credibly quantify potential impacts.
* Performance criteria can discuss planned improvements for tool, component, or equipment functionality; reductions in cost and manufacturing lead times; other improvements in the manufacturing process by using am; and other improvements as compared to current state of the art. All criteria cited should reflect input from international standards (e.g., iso), peer reviewed literature, or other verifiable benchmarking methods.
* Use only specific, measurable, achievable, relevant, and timely (SMART) outcome-based goals—not activity-based—so that a neutral third party could validate them.
	+ For example: Demonstrate a definitive achievement of progress (e.g., achieve X% efficiency or X letters of interest signed); do not describe how you spent your time (e.g., provide a report, talk to customers, or perform experiments).
* In defining your SMART goals, include quantified, risk-reducing, meaningful, practical, and testable interim milestones.
* SMART goals submitted for each phase’s application package should not be static. All competitors should plan to assess and update goals based on their own efforts and through relevant stakeholder feedback (e.g., possible investors, customers, and experts in the solution space).
* The American-Made Network may be able to help you to formulate your SMART goals.

#### four question narrative word count: \_\_\_\_\_\_\_ total words

#### Voucher work slide PowerPoint slide(s)

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| Describe how you will use your voucher funds in the Geo! Contest, including the entities you plan to engage with and what they will do with the voucher funds. Provide one slide per entity you plan to engage. A letter of support from each entity should be submitted identifying their interest in participating as a voucher service provider organization. |

#### sUBMISSION SUMMARY SLIDE A PowerPoint slide, will be made public

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| Make your own public-facing one-slide submission summary that contains technically specific details but can be understood by most people. There is no template, so feel free to present the information as you see f it. Please make any text readable in a standard printout and conference room projection. LETTERS OF COMMITMENT OR SUPPORT Optional

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| Attach one-page letters (of support, intent, or commitment) from other relevant entities (e.g., potential users of the proposed innovation) to provide context. Letters of support from partners or others that are critical to the success of your proposed solution will likely increase your score. General letters of support from parties that are not critical to the execution of your solution will likely not factor into y our score. Please limit letters of support to one page each. |

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