



FABRISONIC

Solid State Additive Manufacturer of Metals

1250 Arthur E Adams Dr, Columbus Oh 43221

May 16, 2020

Brno University of Technology
Faculty of Mechanical Engineering
Address: Technicka 2896/2, 616 69 Brno, Czech Republic
Id. No.: 00216305
Tax Id. No.: CZ 00216305
Represented by: doc. Ing. Jaroslav Katolický, Ph.D., Dean
Contact person: _____

FABRISONIC LLC Proposal 1301 REV 4– Dissimilar material joining

Dear Dr Katolicky,

Enclosed is FABRISONIC LLC's proposal for the above-referenced project. This proposal is open for acceptance for a period of 30 days.

In addition, a copy of FABRISONIC LLC's Services Agreement is enclosed. To authorize FABRISONIC LLC to commence work, please have this document completed by an authorized representative of your company and return it by email, fax, or mail.

If you have questions regarding the proposal, you may contact me by phone (- -) or by email ().

Sincerely,

President, Fabrisonic LLC
Enclosure

Date: May 16, 2020

Submitted to: BRNO UNIVERSITY OF TECHNOLOGY

Title: Dissimilar material joining

Introduction:

Objectives: The objective of this work is to establish if UAM can weld dissimilar material combinations of interest to the institute of Aerospace Engineering. The customer will perform mechanical characterization including tensile testing.

Approach:

Customer Supplied Material – Customer will provide AISI 301 (~1630 MPa) steel with dimensions: *0.255 mm x 210 mm x 1500 mm* at the beginning of the program.

Fabrisonic Supplied Materials

- Fabrisonic will provide 1100 foils for interlayers
- Fabrisonic will provide 2024 Al plates in the T351 condition. It is expected that Fabrisonic will procure plates of around 6mm thick, and mill them down to the required thickness.

TASK 1 – Welding Feasibility

Fabrisonic will develop weld parameters for welding .

At the end of this task, Fabrisonic will provide a short power point to the customer discussing feasibility of Task 2.

TASK 2 – Part Production

Once welding parameters are developed, Fabrisonic will print plates to print per provided drawings.

Qty
2
2
2

Deliverables:

- Summary report detailing process and results
- Parts as laid out in each task

Equipment and Materials: FABRISONIC LLC will store Customer-supplied or FABRISONIC LLC - acquired equipment and materials for 30 days after conclusion of the project. If Customer intends to obtain possession of such equipment or materials, Customer must provide to FABRISONIC LLC written notice of such intent prior to the expiration of the 30-day period. In such case, Customer will be responsible for the cost of removing and transporting the items. Unless FABRISONIC LLC receives such prior written notice, FABRISONIC LLC may dispose of the equipment or materials.

Program Budget and Duration:

Task	Price
1 – Feasibility	\$1,000 USD
2 – Part Production	\$8,600 USD

The work is planned for a 18-week period after receipt of the attached Services Agreement and Task 1 upfront payment. This quotation is firm fixed price for the work scope outlined in the proposal and, once accepted, will not be changed without the concurrence of both parties. It is understood that, if the Client requests an expanded work scope, FABRISONIC LLC will quote the cost and timing to complete the additional work.

A copy of FABRISONIC LLC's Services Agreement is enclosed. To authorize work, please have this document completed by an authorized representative of your company and return it by email, fax, or mail to my attention.

PROFESSIONAL SERVICES AGREEMENT

1. **Obligation:** FABRISONIC LLC has agreed to perform research services by applying engineering principles in a professional manner. The work will be conducted in accordance with FABRISONIC LLC Proposal (the "Proposal") which is incorporated by reference. No other guarantees, express or implied, apply to the performance of services under this agreement. The customer's remedy for performance that does not conform to the Proposal is that FABRISONIC LLC will correct the work at FABRISONIC LLC's expense.
2. **Price:** The price quoted in the Proposal is firm fixed price. It is understood that if the Client requests an expanded work scope, FABRISONIC LLC will quote the cost and timing to complete the additional work. Invoices will be submitted monthly and are due and payable Net 30 days. Invoices not paid within 30 days will be subject to late payment penalty equal to 1.5% of the unpaid balance for each month that the invoice remains unpaid.

Bmo Univ of Tech will pay \$1,000 with initial PO
Bmo Univ of Tech will pay \$8,600 after acceptance of Task 1
Fabrisonic will pay for transportation to Bmo Univ of Tech

3. **Delays:** FABRISONIC LLC is not liable for delay due to causes beyond FABRISONIC LLC's reasonable control.
4. **Contract for Services:** This is a contract for services and not a contract for the sale of goods. Any goods or products provided by FABRISONIC LLC in the course of its work are incidental to FABRISONIC LLC's performance of services. The Uniform Commercial Code does not apply to this agreement or to such goods or products.
5. **Testimony:** If FABRISONIC LLC is required to participate as a fact or expert witness during any litigation, mediation, or legal action regarding the Proposal, then the customer is liable to FABRISONIC LLC for all legal and administrative costs incurred as a result.
6. **Intellectual Property:** FABRISONIC LLC reserves all rights in its pre-existing intellectual property used in the performance of this agreement. Intellectual property developed during the performance of this agreement (the "Foreground IP") becomes the property of FABRISONIC LLC upon its creation. FABRISONIC LLC has pre-existing intellectual property in Ultrasonic Additive Manufacturing that will be foundational to this feasibility study. Upon conclusion of this project, customer may seek commercial implementation of the technology that would require access to FABRISONIC LLC's pre-existing intellectual property. If that decision is made, and the customer therefore purchases a machine from FABRISONIC LLC, such machine will be sold with all necessary licenses to intellectual property required to use and enjoy the machine.
7. **Default:** Neither party will be deemed to be in default of this agreement unless the other party has given written notice specifying a genuine default and the party receiving such notice has failed to correct the default within 30 days of receiving such notice.
8. **Arbitration:** Claims arising in connection with this agreement or any breach thereof will be resolved by arbitration in accordance with the appropriate rules of the American Arbitration Association. The arbitration will be conducted in Columbus, Ohio.
9. **Prevailing Party Expenses:** The prevailing party in any arbitration between the parties will be awarded its cost and expenses incurred therein, including its reasonable attorney fees, as determined by the arbitrator.

Fabrisonic LLC

10. **Termination:** The customer may terminate this agreement by written notice for any reason. In such case FABRISONIC LLC will stop work on the date and to the extent specified in such notice. The customer is liable to FABRISONIC LLC for payment for the work performed through the day that the notice was effective, plus the cost of any unavoidable termination expenses.

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11. **Equipment and Materials:** FABRISONIC LLC will store customer-supplied or FABRISONIC LLC-acquired equipment and materials for 30 days after conclusion of the project. If the customer intends to obtain possession of such equipment or materials, then the customer must provide to FABRISONIC LLC written notice of such intent prior to the expiration of the 30-day period. In such case, the customer will be responsible for the cost of removing and transporting the items. Unless FABRISONIC LLC receives such prior written notice, FABRISONIC LLC may dispose of the equipment or materials.
12. **Applicable Law:** Any dispute regarding this agreement is governed by the laws of the State of Ohio, without resort to any provision that would make Ohio law inapplicable.
13. **Entire Agreement:** This agreement and the Proposal are the entire contract between the parties and supersede any other prior or contemporaneous agreements, oral or written, with respect to its subject matter. Any proposed terms differing from the agreement terms are hereby rejected by FABRISONIC LLC. Any amendment must be in a writing specifically referencing this agreement and signed by a duly authorized representative of each of the parties.

Each of the parties has executed this agreement by its authorized representative as of the dates written below.

Fabrisonic LLC

BRNO UNIVERSITY OF TECHNOLOGY

By: _____

By: _____

Name: _____

Name: _____

Title: _____

Title: _____

Date: _____

Date: _____

Project Price: \$ _____ 9,600 _____

Customer's Billing Address: _____

Customer's Reference Number **(Optional)**: _____

Other: