School District of the City of Saginaw

Request for Bids

Virtual Reality Welding Simulator Bid

The School District of the City of Saginaw is currently requesting sealed bids for a **Virtual Reality Welding Simulator System** that meets or exceeds the specifications outlined below. This simulator will be utilized at **Saginaw United High School** to enhance welding instruction, certification readiness, and student safety in a controlled, technology-based learning environment.

Contact Information

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Bid Submission Details

All bids must be sealed and clearly labeled: RE: Virtual Reality Welding Simulator Bid

Deliver to:

School District of the City of Saginaw 550 Millard Street Saginaw, MI 48607

Bids Due: Thursday, November 20, 2025, by 3:00 PM (EST)

A public bid opening will take place immediately following the deadline. Late bids will not be accepted.

Electronic bids will be accepted if accompanied by the required **Iran Business Relationship Disclosure** and **Familial Relationship Disclosure** forms with legible notarization.

The School District reserves the right to reject any or all bids, to waive irregularities, or to accept the bid deemed in the best interest of the district.

Minimum Specifications

Bidders must provide a virtual reality welding simulator meeting or exceeding the following minimum specifications.

Product brand names are used for reference only; equivalent or superior models will be accepted.

1. Virtual Reality Welding Simulator System

- Tabletop or compact-format virtual welding training simulator with integrated hardware and software.
- Must simulate multiple welding processes, including:

- Shielded Metal Arc Welding (SMAW)
- o Gas Metal Arc Welding (GMAW)
- Flux-Cored Arc Welding (FCAW)
- o Gas Tungsten Arc Welding (GTAW)
- Must feature realistic welding puddle visuals, sound, sparks, slag, and cooling for authentic training feedback.
- Include real-time parameter tracking for:
 - o Work angle, travel angle, travel speed, and arc length
 - Contact tip-to-work distance
 - Weld position and aim accuracy
- Include bend test simulation and virtual scoring of weld quality.
- Capable of supporting multi-language operation (minimum 10 languages).
- System must allow instructor observation, replay of student performance, and detailed data reporting.

2. Display and Hardware

- Integrated high-definition display, minimum **22-inch touchscreen**.
- High-resolution VR headset (minimum 2160x2160 per eye).
- Adjustable welding stand, arm, and table fixture to support multiple positions (flat, horizontal, vertical, and overhead).
- Must include at least **seven simulated welding coupons** representing various joints (butt, lap, T-joint, pipe, etc.).
- Portable and designed for single-person setup; total system weight under **30 lbs** preferred.
- CE and ISO certified for safety and quality standards.

3. Curriculum and Training Materials

- Comprehensive instructional curriculum, including:
 - Virtual lessons for multiple welding processes
 - Project-based student workbook and instructor guide
 - Welding Procedure Specification (WPS) reference book
- Include standards-based alignment with AWS, NCCER, or equivalent industry credentials.
- Must include USB or digital format curriculum for instructor use.

4. Software and Analytical Features

- Software capable of live action student evaluation and replay mode.
- Records and scores student performance against industry-standard tolerances.
- Includes diagnostic reporting for parameter errors and weld discontinuities.
- Includes WeldometerTM or equivalent data logging system to track consumable usage and cost savings.
- Remote maintenance and software upgrade capability required.

5. Optional Components (List Separately)

- Virtual **oxy-fuel cutting module** upgrade (hardware and software).
- Travel/storage cases for portability and recruitment events.
- Optional **onsite setup, installation, and 1-day training** for district staff.

6. Power and System Requirements

- Electrical: 115–230V, single-phase, 50/60 Hz.
- Operating temperature range: 0–45°C; humidity 10–80%.

- Computer specifications must include:
 - o Intel Core i7 or equivalent processor
 - o Minimum 4GB RAM and dedicated graphics (e.g., NVIDIA GTX 1050Ti or higher)
 - o Windows 10 or newer operating system
 - o HDMI and USB ports for peripherals

7. Warranty and Support

- Minimum 1-year full system warranty with access to software updates.
- Optional extended warranty coverage available.
- Technical support available via phone and remote connection.

Bid Requirements

- 1. Sealed bid with itemized pricing and optional add-ons listed separately.
- 2. Statement of compliance with all listed specifications.
- 3. Detailed warranty and support documentation.
- 4. Disclosure forms (Iran and Familial).
- 5. Delivery and installation timeline (preferred delivery before March 15, 2026).

Evaluation Criteria

Bids will be evaluated based on:

- Compliance with listed specifications
- Cost effectiveness (including optional items)
- Warranty and technical support provisions
- Vendor experience with educational simulation systems