Knowledge to drive your business forward
Insight Core is a flexible, Internet-based industrial welding information management solution that can help your operation be more competitive and profitable by delivering accurate, decision-ready information about welding processes — so you can take steps to reduce costs, boost output, increase product quality and improve your bottom line.

**Increase productivity**
- Which operators are productive?
- Which operators need additional training?
- When is your business least productive?

**Manage costs**
- What are your true welding costs?
- Where are your best opportunities to reduce costs?
- Are your cost-reduction efforts working?

**Improve weld quality**
- Which operators are welding outside of acceptable limits?
- Are your business’s quality risks increasing or decreasing?
- Are defects escaping detection?

**Insight Core benefits:**

**Weld operators**
- Provides feedback on performance
- Identifies training needs
- Enables operators to make improvements

**Welding engineers**
- Identifies out-of-spec welds
- Improves weld process setup and control
- Monitors power source configuration and performance information

**Managers**
- Improves analysis of weld operator productivity and weld quality issues
- Helps improve the overall performance of an industrial welding operation

**Owners**
- Delivers accurate, decision-ready information in real time
- Offers an investment that can return significant dividends
Problems of manual data collection

- Slow and prone to errors
- Consumes managers’ time that could be better spent elsewhere
- Misses opportunities to improve weld quality or productivity
- Information delivered is historical — not real-time
- Information needs to be calculated, analyzed and interpreted to make a decision

Insight Core.

The data-collection solution.

- Compatible with 14-pin compliant Miller® power sources (see chart on back page)
- Factory installed on Continuum™, Dynasty® 280 DX and Axcess®/Auto-Axcess™ power sources
- Wi-Fi capable for faster, easier installations and shop-floor flexibility
- Uses standard Web browsers: no software or applications to install or maintain
- Innovative USB setup support for quick installation, easy data transfer and fast firmware updates
- Secure data viewable on any Web-enabled device utilizing user authentication
- Low lifetime cost of ownership: no mandatory subscription fees and no-cost data storage options

Insight Core delivers accurate, up-to-date weld reports on any Web-enabled device.
The welding information system that gives you more

Insight Core dashboards provide a snapshot of your welding operation’s productivity, quality and progress toward goals. When more-detailed information is required, Insight Core can deliver it in easy-to-read reports tailored to meet specific needs.

**Main Dashboard — Daily Status Overview**

- Your first destination for a full overview of essential reports about your welding operation
- Asset tree allows you to organize your fleet in a manner that makes sense for you — by building, department or machine

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**Asset tree**

**Status indicators**

**Productivity comparisons of arc-on time**

**Performance relative to goals such as arc-on time and weld deposition**

**Number of welds inside and outside of quality limits**

**Links to dashboard screens revealing more-detailed information about productivity, quality, goals and recent events**
Productivity Dashboard
- Graphically displays arc-on times and weld deposition
- Displays are available by hour, day, week, month or a user-defined range
- Allows quick and easy comparisons and analysis of productivity

Quality Dashboard
- User-definable upper and lower thresholds for weld amps and volts
- Date and time stamp recorded for every weld, including average amps, volts and Weld Trace details
- Distinguishes between those welds falling inside and outside of established limits

Goals Dashboard
- Allows easy evaluation of progress toward goals for arc-on time, weld deposition, weld quality and more
- Shows statistics for individual power sources, work groups, shifts or your entire weld fleet
Knowledge Is Power.
Get Both with Insight Core.

Increase productivity

Evaluate key indicators of operator productivity:
• Measure arc-on time and compare to preset goals
• Measure number of arc starts
• Measure weld deposition (Axcess®, Auto-Axcess™ and Continuum™ power sources and MPa wire feeders only)

Manage costs

Monitor and analyze welding costs:
• Understand weld cell productivity variations
• Understand the impact of continuous improvement efforts
• Understand weld deposition to determine potential over-welding (Axcess, Auto-Axcess and Continuum power sources and MPa wire feeders only)

Improve weld quality

Measure important indicators of weld quality:
• Identify welds outside of preset amperage and voltage thresholds
• Identify operators who may need additional training
• Weld Trace™ provided for every weld


How Insight Core works:
1. Wi-Fi and wired Ethernet connectivity are built into Insight Core for flexible integration with your company’s information network.
2. As each power source is used, data is generated and automatically transmitted.
3. Data is sent to the cloud, where it’s processed, organized, securely stored and made available to view.
4. Reports are delivered on the browser of any Web-enabled device.
Every welding operation has unique needs for information about its processes — which is why Miller offers multiple welding information management systems with a wide range of capabilities. Insight Core is focused on monitoring outputs connected with the welding process. Insight Centerpoint brings advanced process control information into the actual weld cell to help manage the welding and fabrication process.

### Which system is right for you?
Some manufacturers benefit from a combination of both Insight Core and Insight Centerpoint, pairing each system with the welders and processes it best supports. See below for a comparison of selected key features that can benefit your business.

<table>
<thead>
<tr>
<th>Installation</th>
<th>Insight Core</th>
<th>Insight Centerpoint</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integrates with Axcess and Auto-Axcess power sources</td>
<td>●</td>
<td></td>
</tr>
<tr>
<td>Integrates with Axcess E and Auto-Axcess E power sources</td>
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<td>●</td>
</tr>
<tr>
<td>Integrates with Continuum and Dynasty® 280 DX</td>
<td>●</td>
<td></td>
</tr>
<tr>
<td>Integrates with 14-pin compliant Miller® power sources</td>
<td>●</td>
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<tr>
<td>Web-browser based: No software required</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Key Performance Indicators (KPIs)</th>
<th>Insight Core</th>
<th>Insight Centerpoint</th>
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</thead>
<tbody>
<tr>
<td>Weld detail: Amps, volts, weld duration</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Productivity: Arc-on time, weld deposition*</td>
<td>●</td>
<td>●</td>
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<tr>
<td>Quality: Evaluates every weld compared to predefined threshold limits</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Goals: Set definable targets to improve arc-on time, weld deposition* and arc starts</td>
<td>●</td>
<td>●</td>
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<tr>
<td>All information reported by date/time, work cell, shift and power source</td>
<td>●</td>
<td>●</td>
</tr>
</tbody>
</table>

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<thead>
<tr>
<th>Business Intelligence Tools/Reports</th>
<th>Insight Core</th>
<th>Insight Centerpoint</th>
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</thead>
<tbody>
<tr>
<td>Real-time notifications of key events</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Comparison reports available for any combination of power sources and weld cells</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>All reports capable of exporting to Microsoft Excel-compatible format</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Advanced reports to analyze welds, parts, productivity and more</td>
<td>●</td>
<td></td>
</tr>
<tr>
<td>Capable of reporting OEE (overall equipment effectiveness)</td>
<td>●</td>
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<tr>
<td>Cost calculator: Total cost for wire, gas, electricity, and labor per weld and part</td>
<td>●</td>
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<tr>
<td>Multilingual user interface and reporting</td>
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</tbody>
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<tr>
<th>Advanced Real-Time Process Control</th>
<th>Insight Core</th>
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</thead>
<tbody>
<tr>
<td>Part Tracking™: Visually and sequentially guides operator through weld process; monitors each weld for current, voltage, wire-feed speed, duration and gas flow (optional)</td>
<td>●</td>
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</tr>
<tr>
<td>Workflow: Flexible system that governs the entire welding and fabrication process by providing visual non-welding work instructions in addition to the benefits of Part Tracking</td>
<td>●</td>
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<tr>
<td>Codes and Standards: Captures required information relating actual welding parameters to the specific operator, contract, joint and weld pass to ensure productivity and quality requirements are met</td>
<td>●</td>
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</tr>
<tr>
<td>Monitors pulse width/frequency, short circuit frequency, peak/background current/voltage</td>
<td>●</td>
<td></td>
</tr>
<tr>
<td>Energy/heat input calculation for total welded/assembled parts</td>
<td>●</td>
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</tr>
<tr>
<td>Real-time operator alerts of activities such as over-/under-welding, missing/incomplete welds and sequencing errors; provides sequential weld guidance for the operator</td>
<td>●</td>
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</tbody>
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<thead>
<tr>
<th>Data Storage</th>
<th>Insight Core</th>
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<tbody>
<tr>
<td>Internet-based data storage</td>
<td>●</td>
<td></td>
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<tr>
<td>On-site data storage</td>
<td>●</td>
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</tbody>
</table>

*Weld deposition data available with Axcess, Auto-Axcess and Continuum power sources and MPa wire feeders only.
### Insight Core™ Capabilities

| MIG | Deltaweld™ 302/452/652  
|     | Deltaweld™ CE 402/602/852  
|     | Invision™ MPa 350/352/450  
|     | Invision™ 354MP/456MP/456P  
|     | AlumaPower™ MPa 350/450  
| Multi-process | Dimension™ 302/452/650/652/1000  
|     | Dimension™ ‘NT’ 450/500/460 ArcReach™  
|     | Dimension™ CE 562/812  
|     | XMT™ CC/CV 304/350/425/450/456  
|     | XMT™ MPa 350/450  
| Stick | Goldstar™ 302/452/652  
|     | Goldstar™ CE 402/602/852  
| Submerged Arc | SubArc DC 650/800/1000/1250 Digital†  
|     | SubArc AC/DC Digital 1000/1250  
|     | Subarc DC 650/800/1000/1250  
|     | Subarc AC/DC 1000/1250  
|     | Summit Arc™ 1000/1250  
| Advanced Process | Axcess/Auto-Axcess™ 300/450/675  
|     | Continuum™ 350/500  
| TIG | Dynasty™ 280 DX with Insight  

Additional features when using MPa Feeder:
- • • • •
- • • • •
- • • • •
- N/A N/A N/A

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**Insight Core™ Knowledge to drive your business forward**

Insight Core welding information management systems are designed, engineered, built and tested to provide solid value to industrial welding manufacturers. That value comes from the consistent delivery of actionable information that can be used to boost productivity and drive their businesses forward.

**14-pin Insight Core Module Requirements**

- **14-pin Module:** connects to Wi-Fi and wired Ethernet networks.

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**Insight Core™ Capabilities**

- **Power Source Error Indication:**
  - Argon Source Status
  - Voltage
  - Amperage
  - Arc On Time
  - Arc On %
  - Quality/Indexed Stop
  - Quality Switch

**Standard Features on ALL Insight Core Product**

- **Weld Source**
  - Input Voltage
  - Input Frequency
  - Weld Source Status

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**Insight Core™ Additional Features when using MPa Feeder**

See your local authorized Miller distributor or [MillerWelds.com/insight](http://MillerWelds.com/insight) for more information on Insight welding information management systems.