



FROM: [Assoc. for Iron & Steel Technology \(AIST\)](#)
186 Thorn Hill Road
Warrendale, PA 15086 USA

CONTACT: [Stacy Varmecky](#)
+1.724.814.3066

FOR IMMEDIATE RELEASE

AIST INTRODUCES ONLINE INTERACTIVE MODULE FOR STEELMAKING

PITTSBURGH, 20 November 2015 — [The Association for Iron & Steel Technology \(AIST\)](#) has collaborated with [Purdue University Calumet's Center for Innovation Through Visualization and Simulation \(CIVS\)](#) and the [Colorado School of Mines' Advanced Steel Processing and Products Research Center](#) to create a unique, online and interactive [Making, Shaping and Treating of Steel® Wheel](#). This one-of-a-kind module allows you to click on each phase of steelmaking to gain a deeper understanding of the process through videos and images. Each section provides detailed explanations of the functions, equipment and materials used.

The experience starts in the center of the wheel with the three fundamental ingredients (iron, carbon and calcium) used to produce elemental iron. The iron is mixed with recycled steel scrap in a steelmaking furnace to create liquid steel. The liquid steel is formulated to precise chemical compositions during secondary refining. The refined steel is then solidified via a number of casting processes into a variety of solid shapes, depending on the finished product application. The solidified shapes require further shaping and treating into finished goods that meet customer specifications.

“The original AIST Making, Shaping and Treating of Steel® Wheel shows the most common processes in concentric circles so the viewer can visualize the different production routes. The Online Steel Wheel has added descriptive text and three-dimensional imagery to each part of the Wheel, giving the viewer a richer experience in seeing how steel is made. We hope that this tool will provide insight and understanding to anyone wanting to learn more about steel manufacturing or to just see what happens inside a steel mill,” said Brian Bliss, general manager — technology services, AIST.

“Our students truly enjoyed working closely with the AIST staff on this project. They were excited to collaborate with industry experts and apply their knowledge to this very useful and important tool to further advance the steel industry,” said Chenn Zhou, director, CIVS.

[CIVS](#) is a multidisciplinary center that combines advanced simulation techniques with 3D visualization and virtual reality technologies. CIVS has been globally recognized by its integrated and application-driven approaches to solve real-world problems. Specializing in virtual design and virtual learning/training, CIVS has provided innovative solutions to various university research problems, industry issues, as well as education and community problems. Through close partnerships with more than 92 external organizations, CIVS's projects have provided substantial educational and economic impacts, resulting in savings of more than US\$38 million for these companies.

Recently, CIVS is working with the steel industry to establish a new Steel Manufacturing Simulation and Visualization Consortium ([SMSVC](#)) to improve the competitiveness of steel manufacturing across its value chain.

[AIST](#) is a non-profit technical association of 17,500 members from more than 70 countries, with the mission to advance the technical development, production, processing and application of iron and steel. The organization is recognized as a global leader in networking, education and sustainability programs for advancing iron and steel technology.

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