



AT&F Advanced Metals Partners with AdvanceBio Systems LLC to Manufacture a Bench Scale System for Cellulosic Ethanol Processing

CLEVELAND, OH — December 1, 2010 — AT&F Advanced Metals, LLC, a fully-owned subsidiary of Cleveland-based AT&F (American Tank & Fabricating Company), is completing production on the innovative and first of its kind Bench Scale Reactor System developed with AdvanceBio System LLC of Cincinnati. The system is an advancement in the efforts to make commercial production of ethanol and other biofuels from cellulosic biomass cost-competitive and environmentally sustainable, and supports the advanced biofuels goals of the Energy Independence and Security Act of 2007.

In the development of the reactor AdvanceBio turned to AT&F Advanced Metals' experience in using materials for corrosive environments in the manufacturing of complete processing systems. AT&F Advanced Metals has produced larger scale reactors for cellulosic ethanol processing based on AdvanceBio IP. "The bench scale reactor system is a great addition to the product mix. We now serve the biofuel industry from the research stage through commercial production. This brings together our expertise in the design and fabrication of processing systems using AT&F exotic metals with our commitment to supporting green initiatives," says Michael Ripich, President.

Designed for research facilities, this first bench scale system will be used at Penn State University's Shared Fermentation Facility, which is a user facility available for both academic and commercial use. The portable unit, with integral touch screen controls and connections for data acquisition as well as on-board steam generation, simplifies the pre-treatment of cellulosic biomass for ethanol and renewable chemicals. The bench scale system (output to 11 kg/hr) replicates the continuous process of larger scale processors, yielding better research results.

John Deily, AT&F Advanced Metals General Manager, states, "We look forward to working with AdvanceBio Systems to manufacture new innovative equipment to renovate current systems used by research facilities and industry."

The unit will be displayed for industry at the Power-Gen International, December 14 – 16, 2010, at the Orange County Convention Center in Orlando, Florida, in the AT&F booth, #1765. "We are excited to unveil this revolutionary technology to the cellulosic ethanol industry and showcase AT&F Advanced Metals quality precision manufacturing," says Deily.

AT&F Advanced Metals, LLC (www.advmetals.com) was launched in May of 2002 and has a staff of employees with over 20 years experience in manufacturing process equipment. A fully integrated engineering department performs thermal and mechanical designs for pressure vessels, heat exchangers, towers (wind-loading and seismic considerations) and piping systems. Its manufacturing facility has a full range of cutting, rolling, welding and machining capabilities in accordance with ASME and PED certifications.

AT&F (American Tank & Fabricating Company, www.atfco.com) purchased Advanced Metals in October of 2004 and has been a major influence in the growth of the operation to its current size of 50,000 sq. ft. The strengths and capabilities of Advanced Metals complement those of AT&F, which has been in business since 1940 servicing the nuclear, defense, power, construction, mining, shipbuilding, and renewable energy industries.