

# Buckeye II Sampler

## Managing Risk Just Got Easier

Material properties and levels of material degradation are essential for determining the remaining life of equipment. The new Buckeye II Sampler™ helps you identify vulnerable equipment by taking small samples that provide the data you need for:

- HTHA damage assessment
- Creep assessment
- Fire Damage assessment
- Analysis of microstructure & chemistry
- Analysis of cracking
- And more!

The Equity Engineering Group, Inc. (E<sup>2</sup>G) can offer either a full service, turn-key project or simply a sample cutting service under direction of the equipment owner's inspector or engineer. Our experienced machining partners - Superior Plant Services in the U.S. and In-Situ Machining in Canada - are some of the best in the business.



*ID Sample from a 30 inch NPS C-1/2Mo Header*



### A More Refined Tool

- Accurate, adjustable depth of cut (between 0.1" and 0.5")
- A smooth profile that doesn't require re-work or grinding
- Single motion cutting action that eliminates cut mismatch and depth inaccuracies
- Work performed by experienced machinists minimizes cost and time
- Ability to remove samples from ID or OD on vessels and piping in both carbon and alloy steel down to 18" diameter.

*Smart Technology for Aging Infrastructure*

20600 Chagrin Blvd. • Suite 1200 • Shaker Heights, OH 44122  
216-283-9519 • [www.equityeng.com](http://www.equityeng.com)



\* Buckeye II Sampler is the trademark of The Equity Engineering Group, Inc.

# Buckeye II Sampling... Cutting-Edge Service & Support

E<sup>2</sup>G specializes in aging infrastructure service and support for the oil refining and petrochemical industries. Our materials and mechanical engineers have hands-on experience with owner-user companies, and chair many of the industry committees where new standards and technologies are developed.

Our full-service sampling service can include:

- API 579 FFS Assessment of the divot location to ensure the vessel will be fit for service after the samples are removed
- Written procedures for taking the sample
- Mock-up testing off-site to minimize chances of on-site delays
- On-site sampling using experienced machinists
- Metallurgical analysis of samples to detect level or type of damage
- Remaining life assessment or risk-of-failure assessment of the equipment based on the sample results (including Omega creep life prediction and MPC Moly-Hy project HTHA damage prediction)



*ID Sample from an 18 inch ID Exchanger Nozzle*

For more information...

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## Our Experienced Machining Partners



Superior Plant Services is a U.S. leader in specialized maintenance

and turn-around services providing field machining, bolting servicing, weld testing and line isolation. <http://www.superiorplantservices.com>

- Petrochemical Group

Charles Deranger

225-358-0300

- Power Group

Mike Gettys

828-453-0640



*OD Sample from a 30 inch NPS C-1/2Mo Header*



**Machining  
Solutions Ltd.**

In-Situ Machining Solutions, Ltd. is Western Canada's portable, on-site machining expert servicing Saskatchewan, Alberta and British Columbia, with convenient, on-site, portable machining services.

<http://www.insitumachining.com>

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