

Adonyi Welding Consultants

276 Hillshore Circle N., Longview, TX 75605

Phone: 903-235-5891 or 903-233-3918, FAX: 903-233-3901

E-mail: YoniAdonyi@letu.edu Website: www.adonyi.com/yoni

Date: June 26, 2006

To: Mr. xxxx (**Heavy Equipment Manufacturer**)**Subject: REPORT and proposal, Course on FCAW of C-Mn steels only**

Please find below my initial thoughts on the subject, based on a plant tour

1. **Initial findings....**
2. **Proposed action items....**
3. **Proposed training course highlights**

These are general elements of an **8-hour** intensive training for engineers in design, purchasing, sales, plus QA personnel and welding supervisors.

- I. Introductions, agenda, 15 minutes
- II. Steel weldability/metallurgy fundamentals: HAZ and fusion zone cracking, 1 hour
- III. Flux Cored Arc process overview: power sources, consumables, technique 30 minutes
- IV. Weld discontinuities: significance and avoidance, 30 minutes
- V. Case studies, failure analysis, 1 hour
- VI. Lunch, 1 hour
- VII. Practicum: weld visual testing, standards, Mag Particle and Liquid Penetrant demos, high magnification microscopy of failures, 2 hours
- VIII. Q&A and focused discussions around product design, manufacturing, and performance from a welding standpoint, 2 hours