

Measurements for Surface Area of SAE Total Life T-Sample Weld

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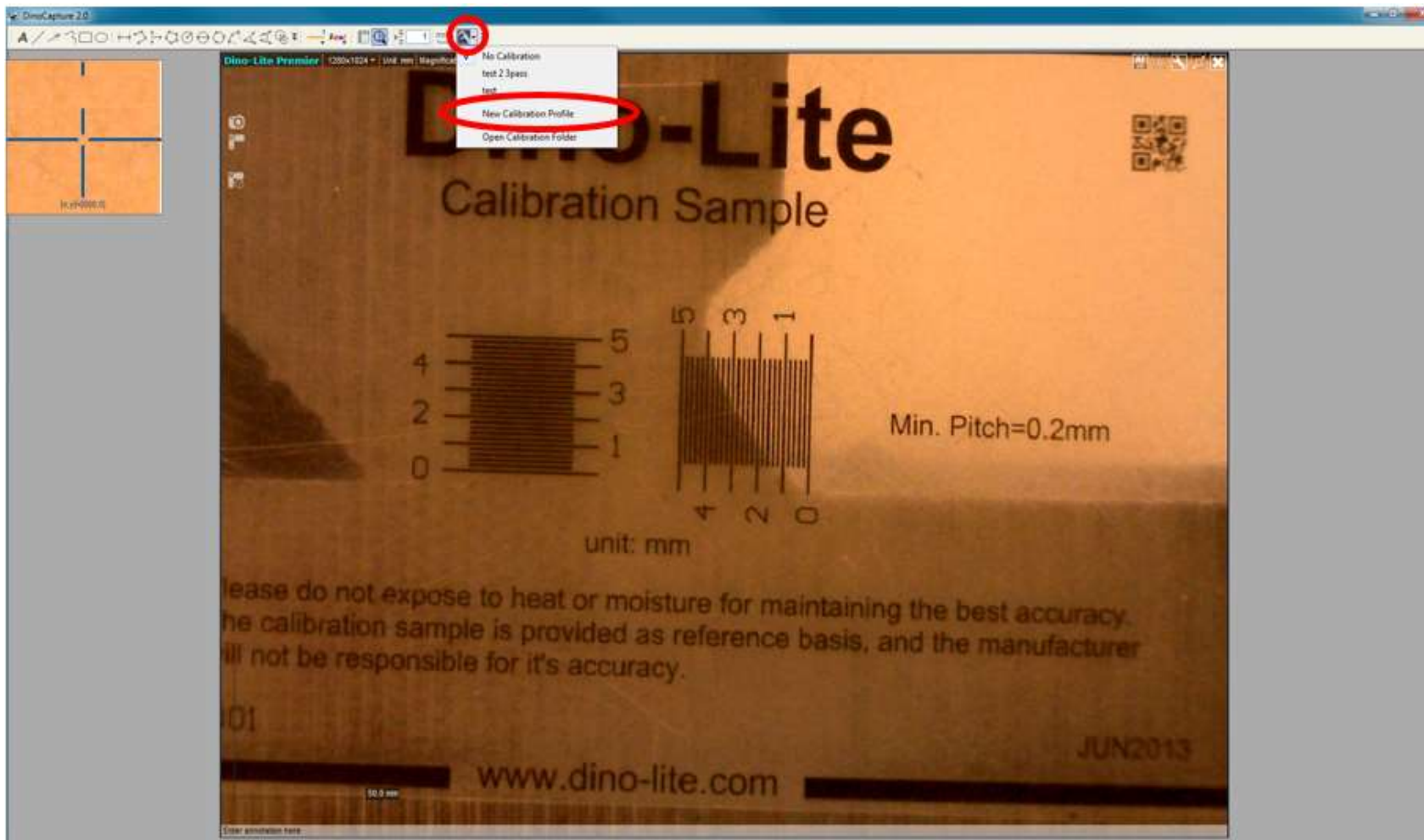
8/30/16

16 mm Prepared Fillet Weld in Progressive Weld Passes



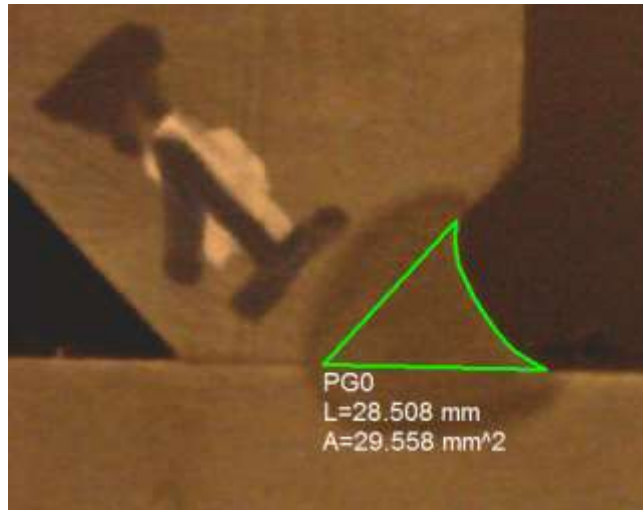
- Welds performed with same parameters as T-Sample parts
- Progressive passes
- Sectioned on band saw

Dino-Lite Camera and Software



1st Pass Weld (Root Pass)

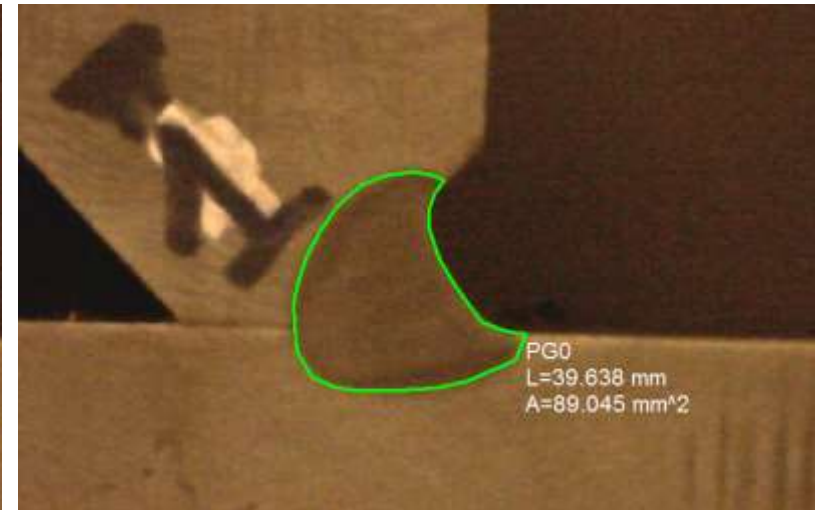
Weld Filler Only



Penetration Line Boundary

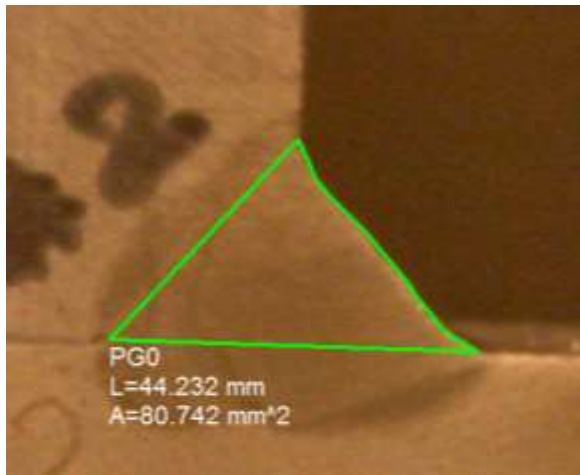


Heat Affected Zone

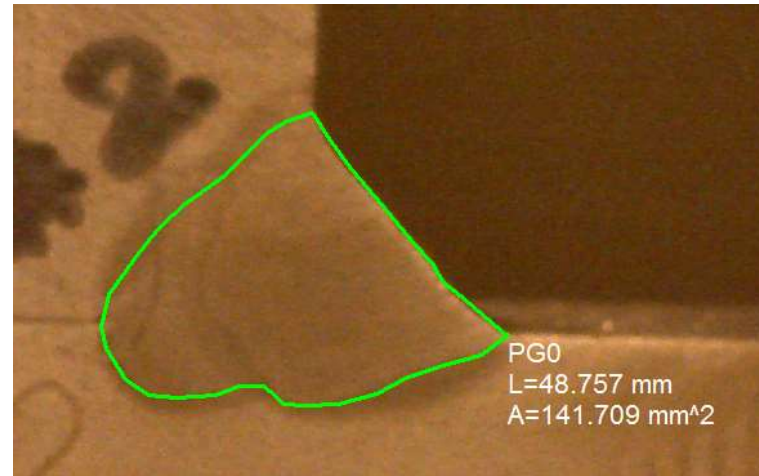


2nd Pass Weld

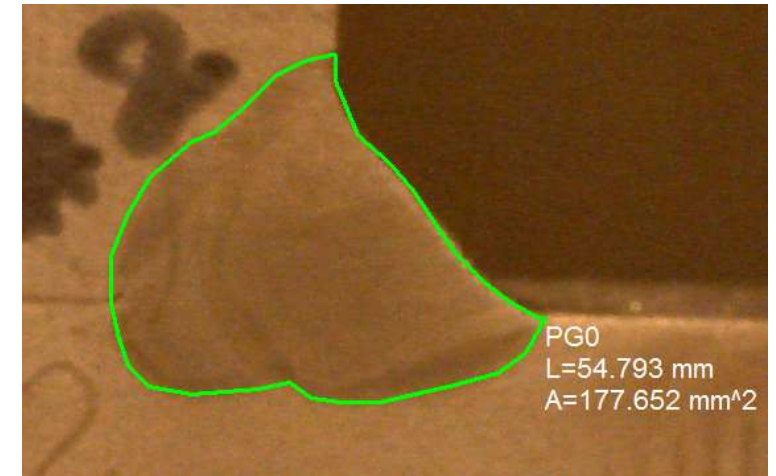
Weld Filler Only



Penetration Line Boundary

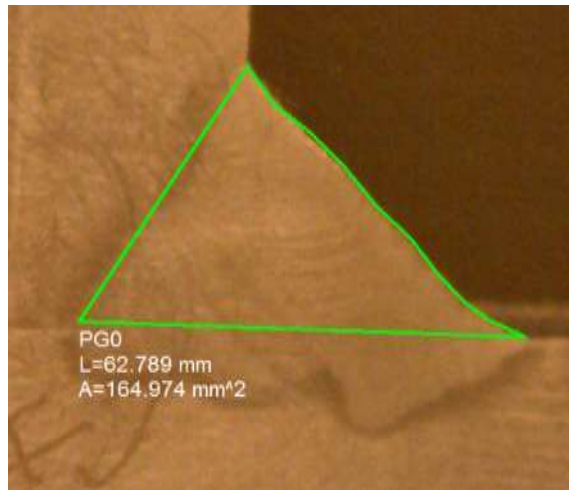


Heat Affected Zone

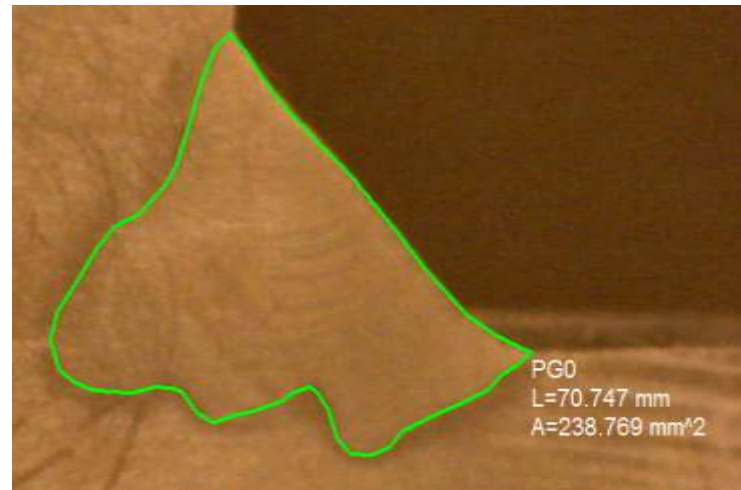


3rd Pass Weld

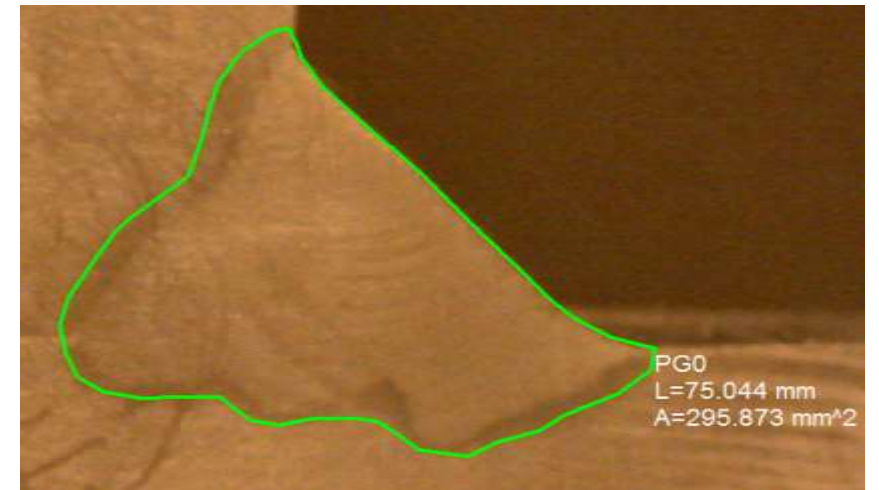
Weld Filler Only



Penetration Line Boundary



Heat Affected Zone



Conclusions/Questions

- Potentially cross-examine using different process
 - Use higher-end system for more accuracy
 - Can lend parts out to willing parties
- Use information to confirm/update weld analysis
 - Provide Information to Dr. Goldak