



Glass-Fused Steel Examination

ESi Project No: 76340G

Report Prepared For

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Summary

Two 6" x 6" samples of glass-fused steel plates were submitted for cross section examination. Specifically, ESi was requested to metallographically prepare cross sections of a plate edge and a bolt hole edge, examine with optical and scanning electron microscopy, and photo-document the results.

Cross sections of the glass-fused steel plate samples were metallographically prepared and examined at magnifications up to 1,000X with an optical light microscope and a scanning electron microscope (SEM). Images of the glass-fused steel samples are presented in Figures 1-5. Electronic copies of the images are available upon request.

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Figures



Figure 1 Image showing the colored side of the 6" x 6" glass-fused steel samples in the as-received condition.

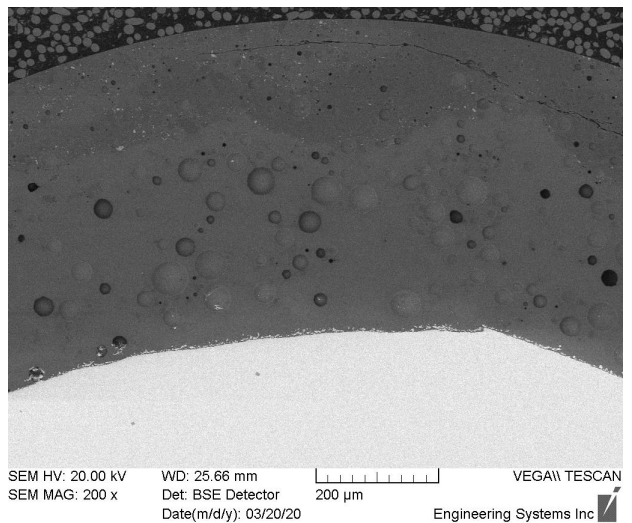
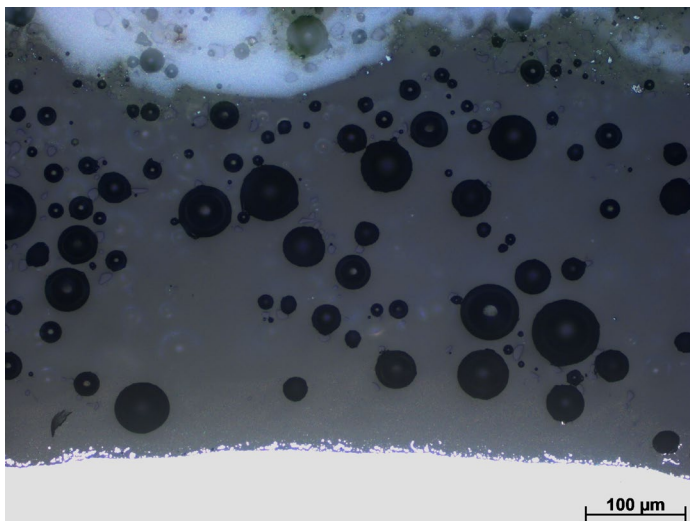
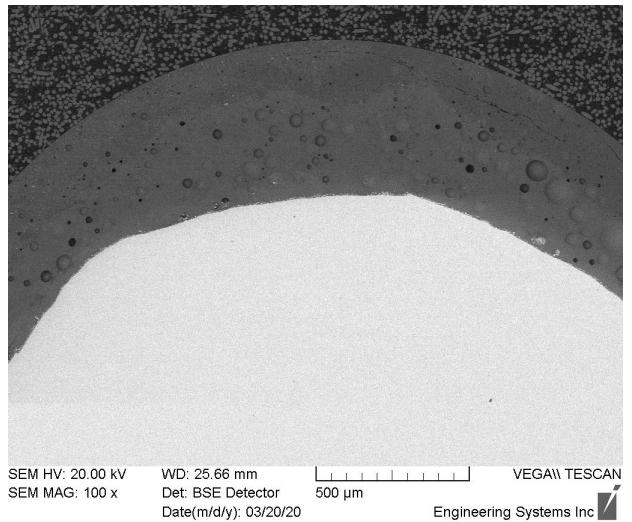
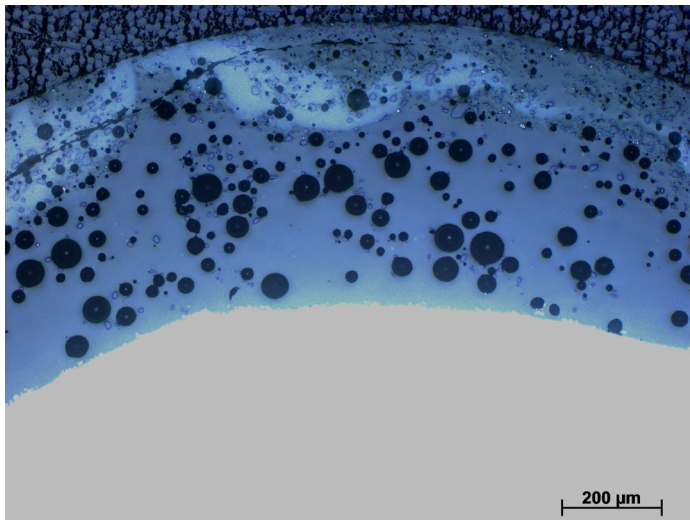
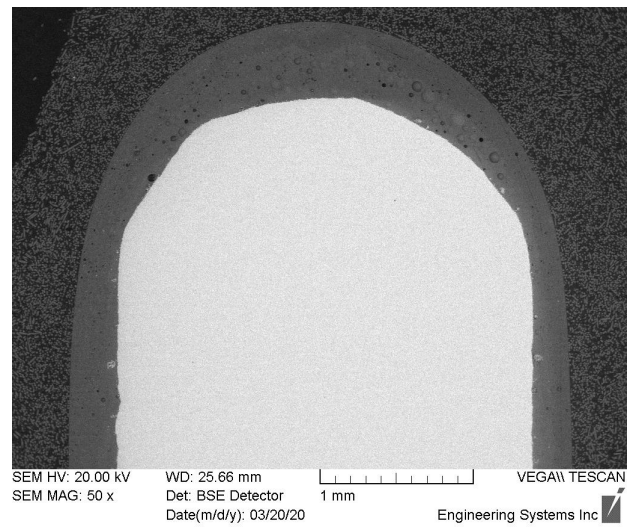
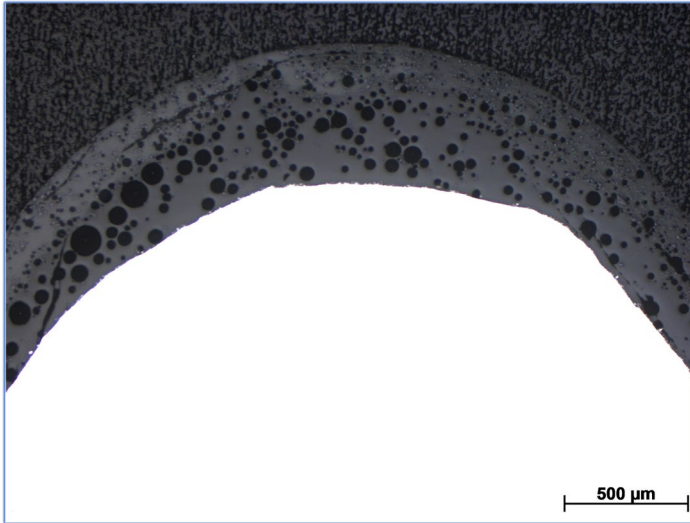


Figure 2 Light microscope (left) and SEM (right) images of a bolt hole edge.

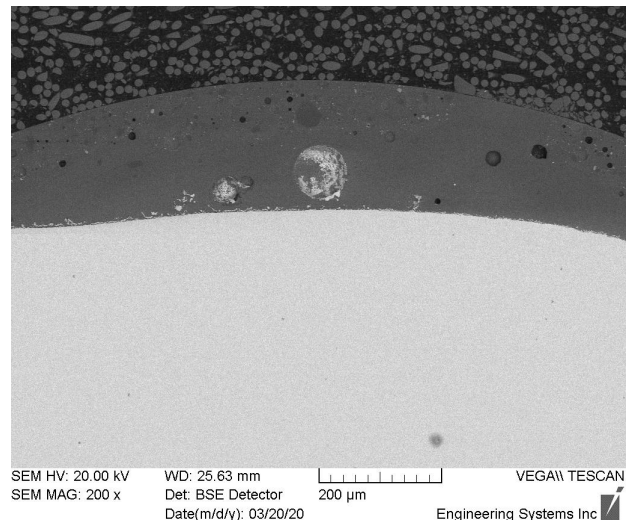
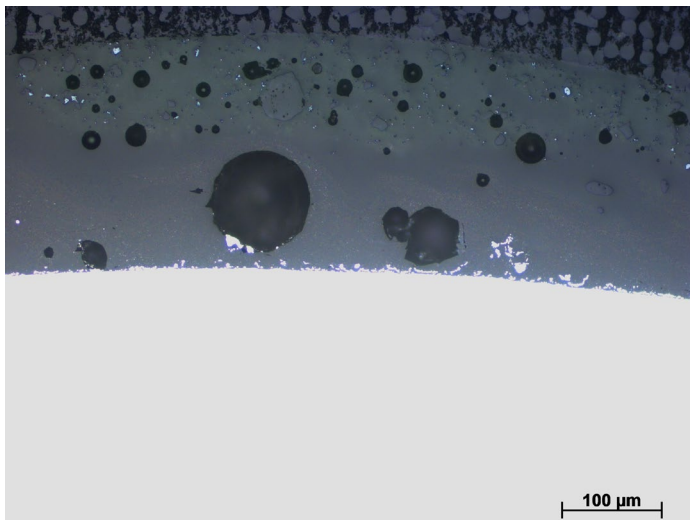
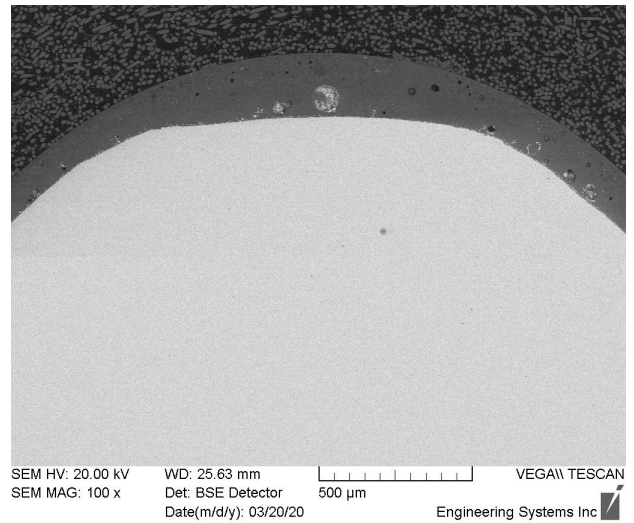
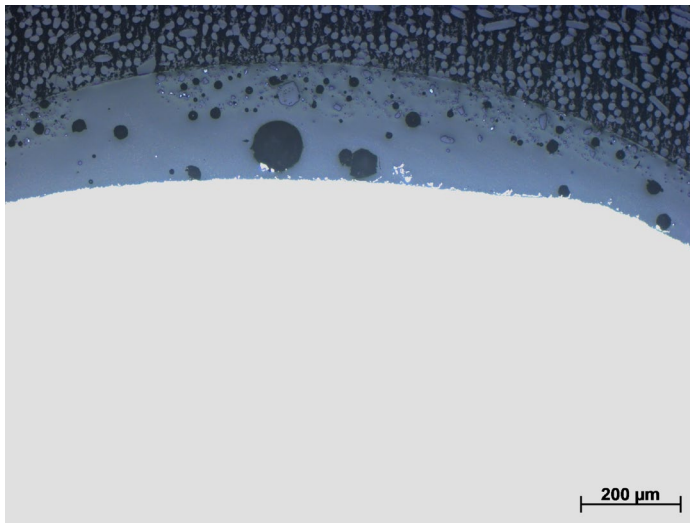
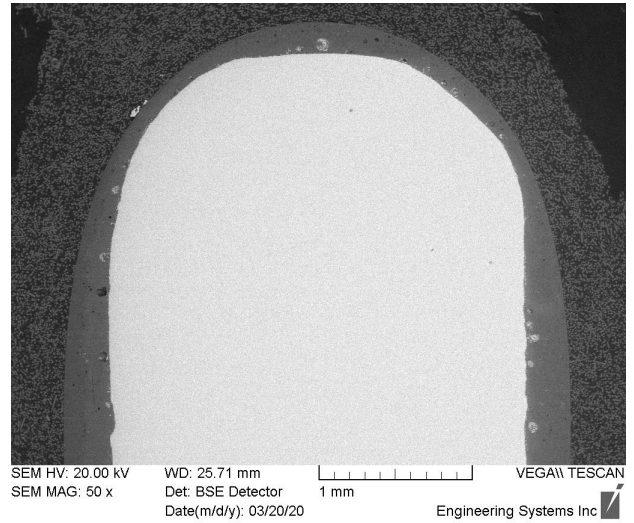
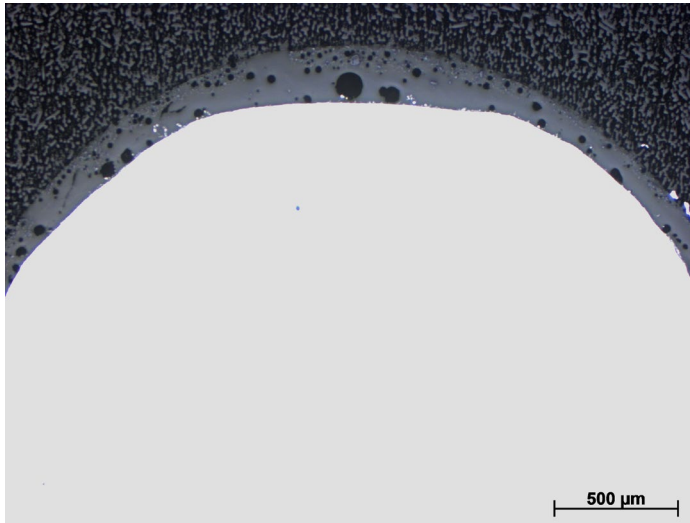


Figure 3 Light microscope (left) and SEM (right) images of a plate edge.

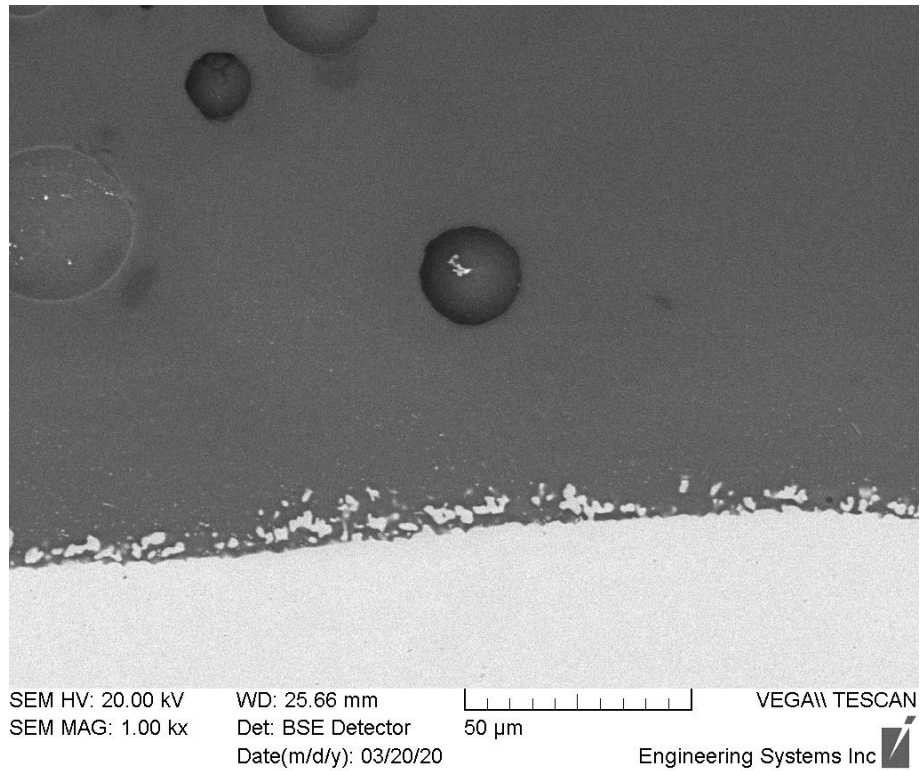


Figure 4 SEM micrograph showing the glass-to-steel interface at a bolt hole edge.

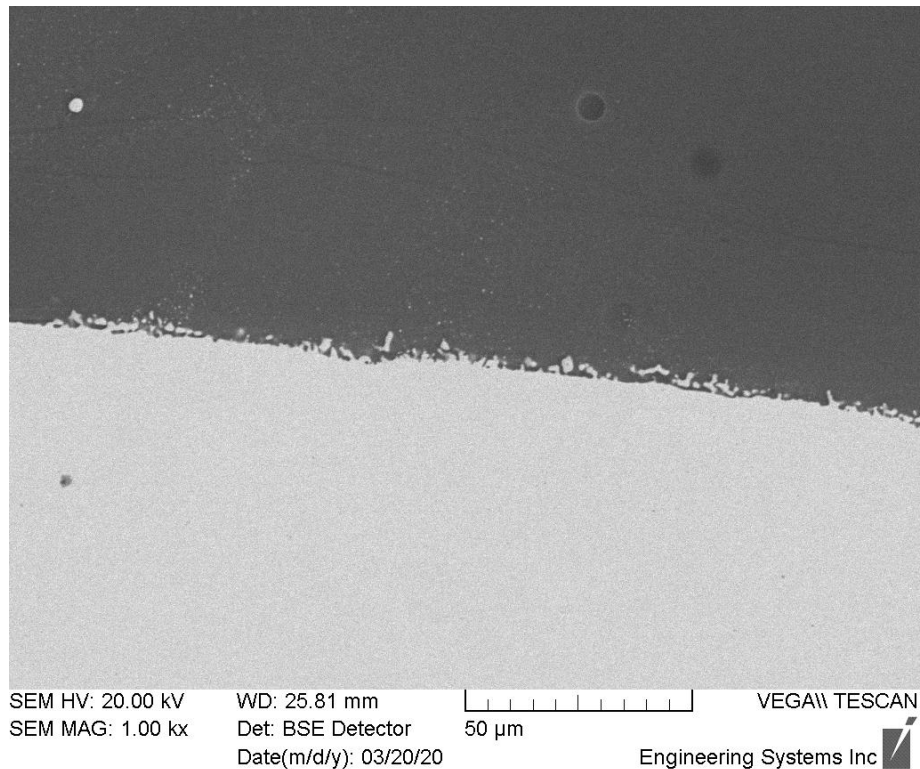


Figure 5 SEM micrograph showing the glass-to-steel interface at a plate edge.