

Case Study – Swing

Product Failure Analysis can prevent accidents from reoccurring.

ESI conducted an analysis on a public playground swing set for a personal injury claim. The swing chain had separated while in use.

ESI evaluated the swing to determine the cause of failure. Was it due to neglected upkeep of the swing, a manufacturer's defect or improper use of the swing?

ESI's engineers went to the site of the incident and conducted a study on the components of the fasteners. It was determined that with constant use, the metal-on-metal grinding between the S-hook surface and the eye bolt surface had caused thinning of the eye bolt and the S-hook. The thinning of the S-hook may have caused a gap in the S-hook. These two factors collaborated in the demise of the swing and resulting injury. This failure occurred over a long period of time. Regular inspection of the equipment and replacement of any damaged components will prevent future incidents.



Engineering Specialists Inc. can answer your questions on Product Failure. Call **877-559-4010** for more information or email us at office@esinationwide.com.