

Failure Investigations

Charles Taylor technical



Dust explosion damage - grain handling facility in Argentina

Failure Investigations

Failures result in large losses for insurers and companies. A thorough and focussed investigation is vital to arrive at conclusions on the cause and make decisions on what to do next.

Charles Taylor technical (CTt) is regularly involved in the investigation of many types of failures. Worldwide activities are supported by the CTC office network. Assignments are regularly undertaken directly for external clients. CTt uses a combination of its in-house experts and carefully selected independent consultants managed to ensure that reports are timely, rigorous and relevant.

Losses investigated include:

- Fires/Explosions
- Flood/Storm Damage
- Subsidence and Landslip
- Collapses
- Machinery Breakdown
- Earthquake Damage
- Latent Defects
- Accidental Damage
- Construction/Erection failures



Failed transformer - Germany

Case Histories



Southend Pier fire

Fire caused severe damage to the historic pier structure and resulted in the need to assess the severity of the structural damage and providing advice on the likely time and cost of work to restore the pier to its pre-fire damage condition. The pier was constructed in several stages and had been subject to previous damage and remedial works. Restoration was a time consuming process requiring considerable care to ensure that the repaired structure was constructed using the same techniques and materials as were used originally.

Ship-unloader Collapse

CTt was called in to investigate the collapse of an 800 ton ship-unloader in Italy. During erection the ship-unloader toppled forwards resulting in damage to the structural framework requiring it to be totally dismantled and rebuilt.

Although the permanent design of the unloader was perfectly satisfactory insufficient thought had been given to stability during erection leading to the sudden collapse when its bogeys became unstable.



Microchip plant flood

During exceptionally heavy rainfall in UK a microchip plant's basement facility subsystems were flooded. Whilst the chip manufacturing areas remained almost entirely dry the sudden loss of power mid-production as a result of an emergency shutdown produced damage costing millions and halted production for several months.

Input from an external semiconductor production expert proved vital in determining the precise extent of damage and the most timely and cost-effective remedial strategy

The technical team within Charles Taylor provides risk focussed technical expertise. Services include Technical investigations of failures, Risk Research, Risk Surveys, Loss Estimation and Benchmarking.

A worldwide capability is available drawing on the resources of the CTC Group.

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