

Investigation of a flooding claim



FAILURE OF A CPVC 90-DEGREE ELBOW

Investigation of a flooding claim



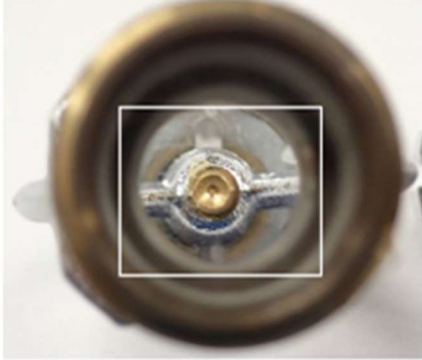
FAILURE ANALYSIS OF A STAINLESS STEEL BRAIDED WATER LINE

Investigation of a flooding claim

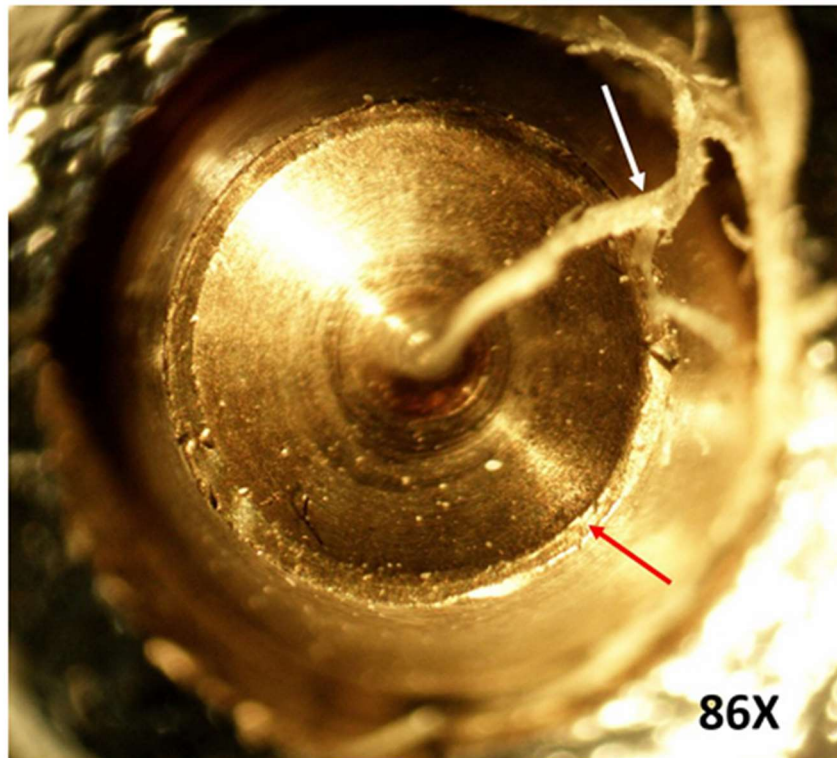
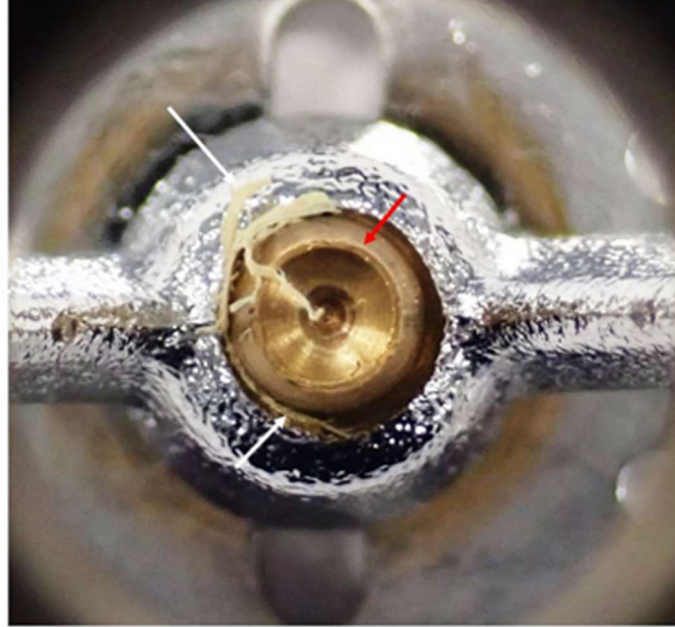


Failure of a brass valve

Investigation of a flooding claim



The brass load screw of Sprinkler Head 3, indicated by the red arrows, does not show any deformation nor cracking. The white arrows show fibers "trapped" in the threads of the load screw and the arms of the sprinkler.



Failure analysis of a sprinkler head

Investigation of a flooding claim



**FAILED "ANGLE STOP VALVE PASVPP2",
3/8", FROM "JOHN GUEST[®]".**

Failure analysis of a plastic angle stop valve

Investigation of a structural metallic collapse claim



INVESTIGATION OF THE COLLAPSE OF THE METALLIC STRUCTURE OF A CONVEYOR LINE

Investigation of a structural metallic collapse claim



INVESTIGATION OF THE COLLAPSE OF A GRAIN BIN

Failure of industrial equipment



FAILURE OF A MILL RING GEAR IN A CEMENT PLANT

Failure of a suspension wire rope



Failure analysis of a mobile drilling rig



Failure analysis of a 1300-ton forging press



WRIST P/N SIDE



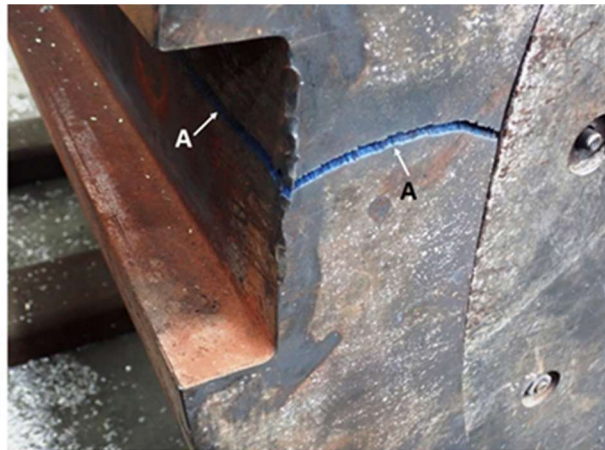
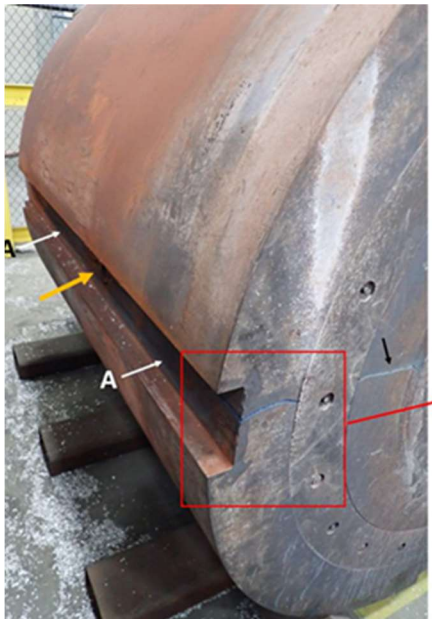
SMALL SIDE



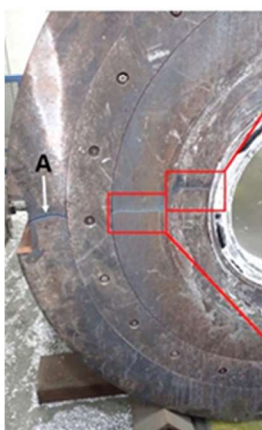
Brass
bearing
failed by
mechanical
and contact
fatigue

WRIST P/N SIDE

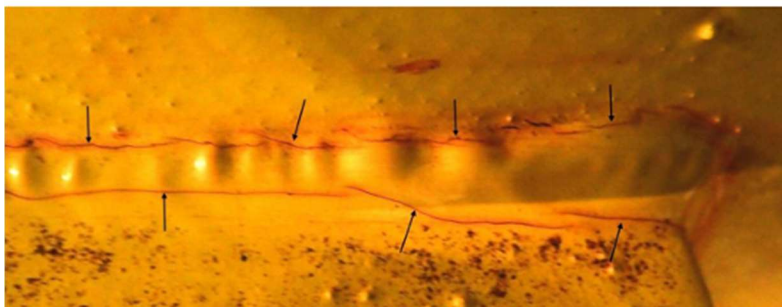
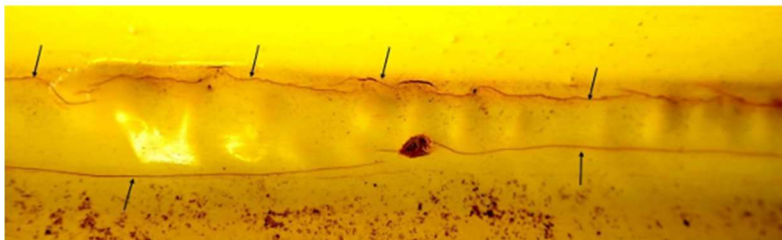
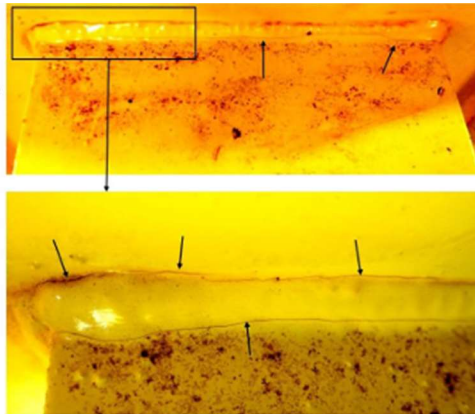
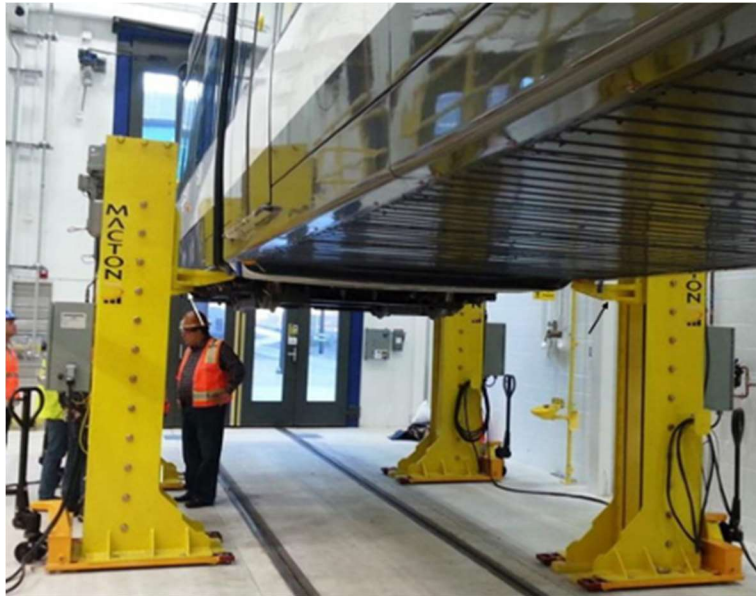
Failure analysis of a Press Container



The fracture A is larger and deeper than the fractures B and C which indicates that the cracking/fracture A was the first one generated by fatigue.



Failure analysis of an electrical floor jack



Investigation of damage to merchandise stored in a warehouse
(Investigation of a corrosion failure claim)



Investigation of damage to merchandise stored in a warehouse
(Investigation of a corrosion failure claim)

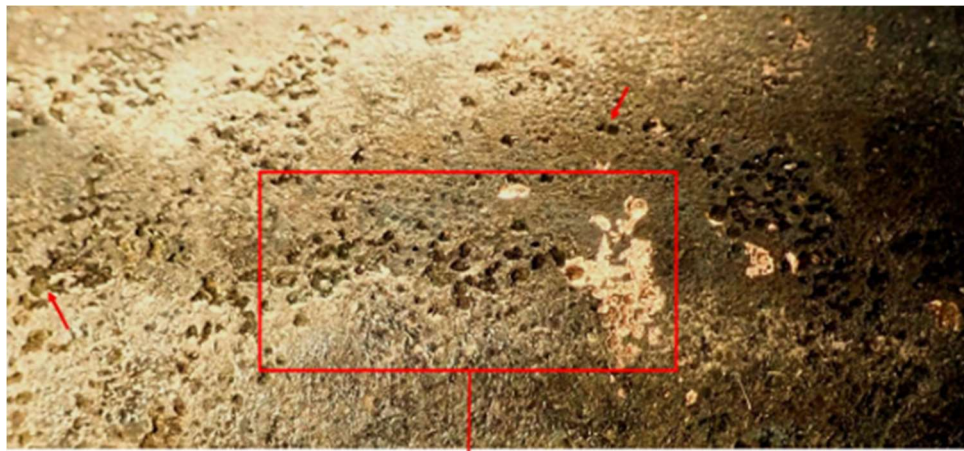


FAILURE ANALYSIS OF ALUMINUM CANS

Failure analysis of tuna cans



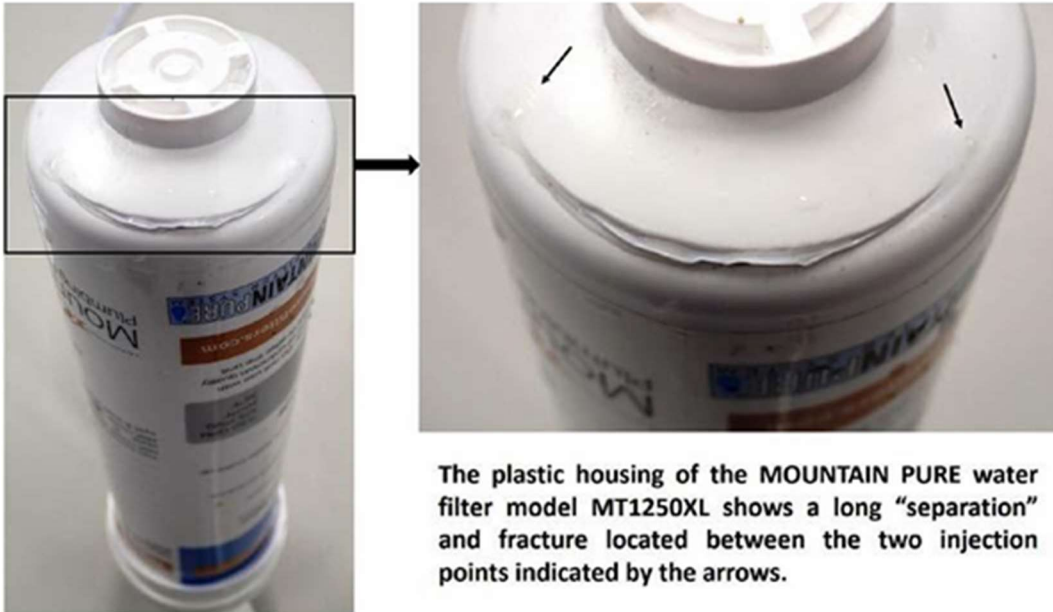
Investigation of the failure of copper pipes



Failure analysis of anodized aluminum panels installed in several buildings



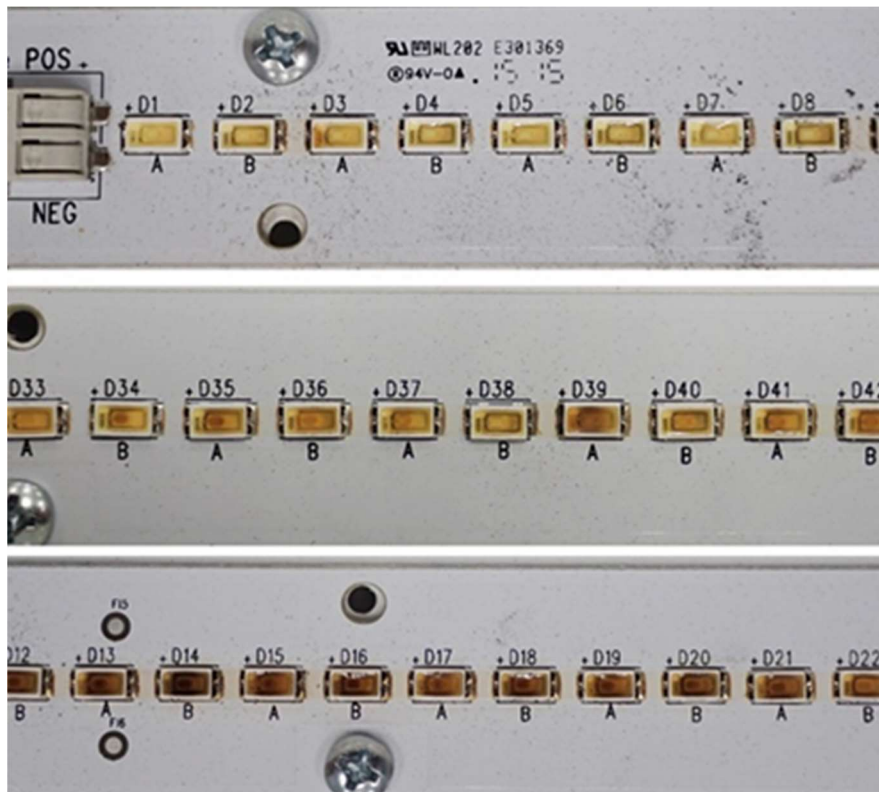
Failure analysis of the plastic housing of a water filter



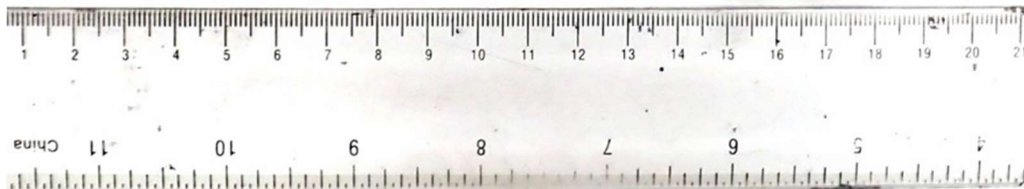
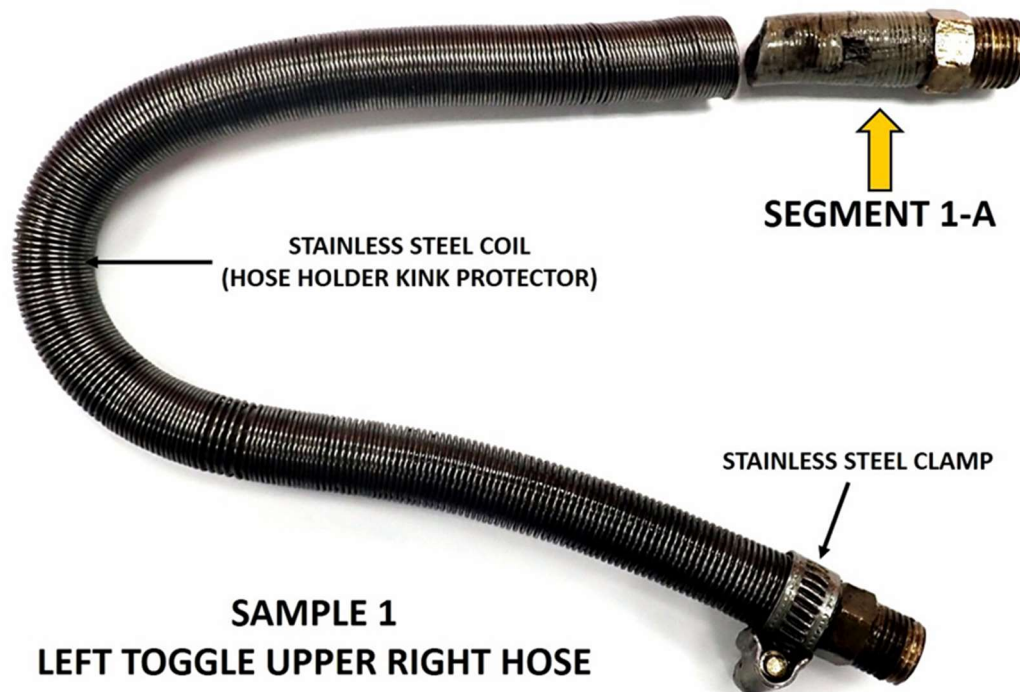
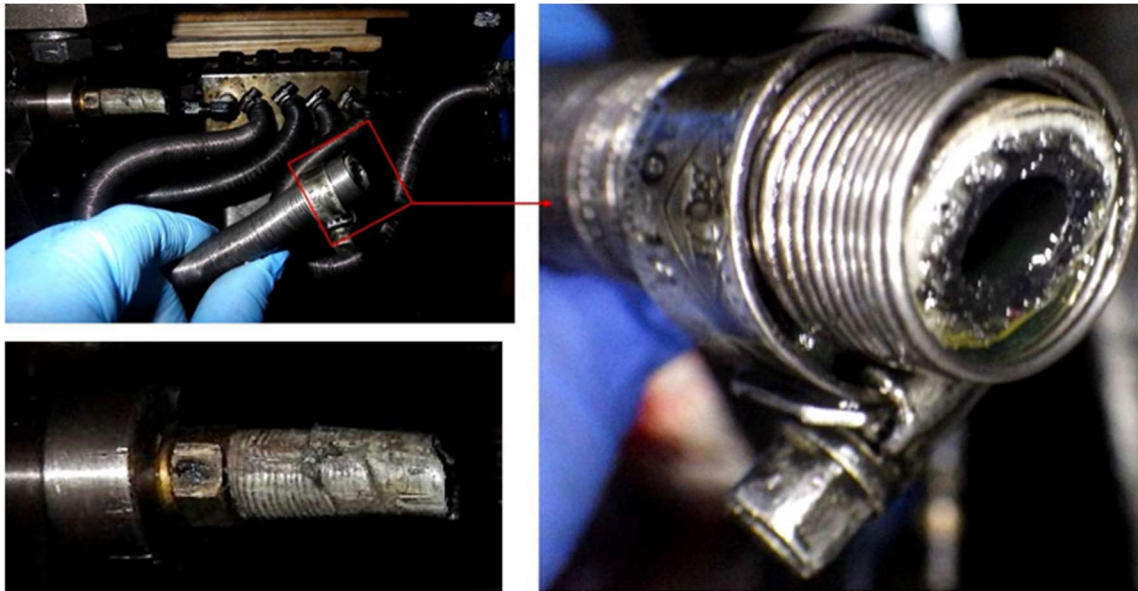
Failure analysis of LED lamps



There is not any sign of corrosion (absence of white corrosion products on the galvanized mild steel screws as well as absence of rust in the screws and the mild steel housing) which indicates that the black deposits and the environment where the LED lamp was operating are not corrosive.



Failure analysis of a lubrication hose



Investigation of the failure of the hull of a pleasure boat



PORT SIDE

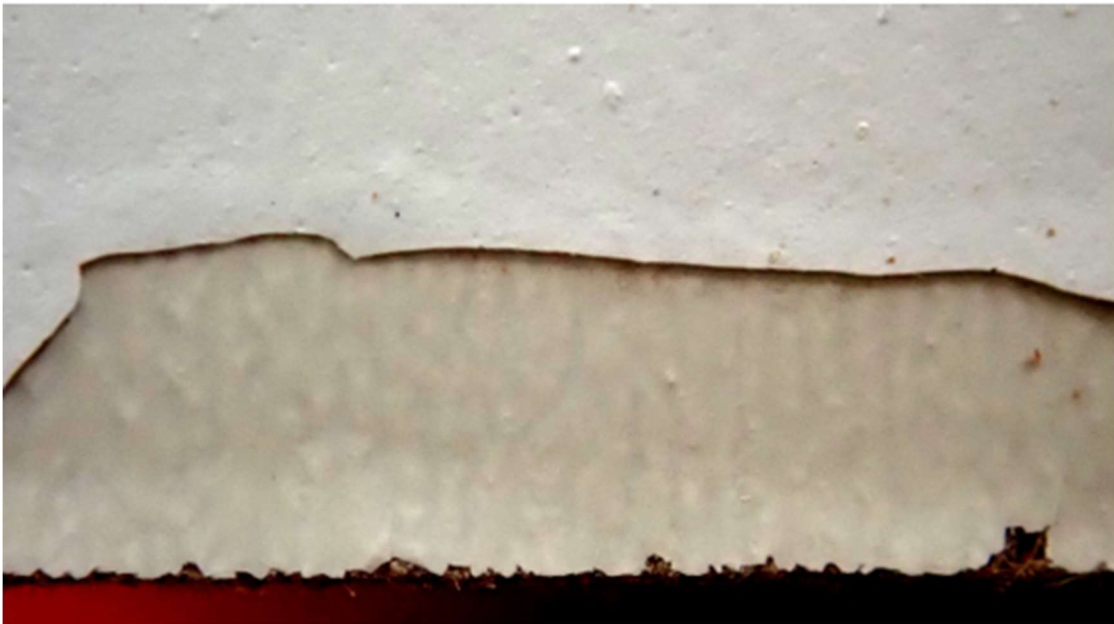


FAILURE ANALYSIS OF THE GEALCOAT HULL OF A PLEASURE BOAT

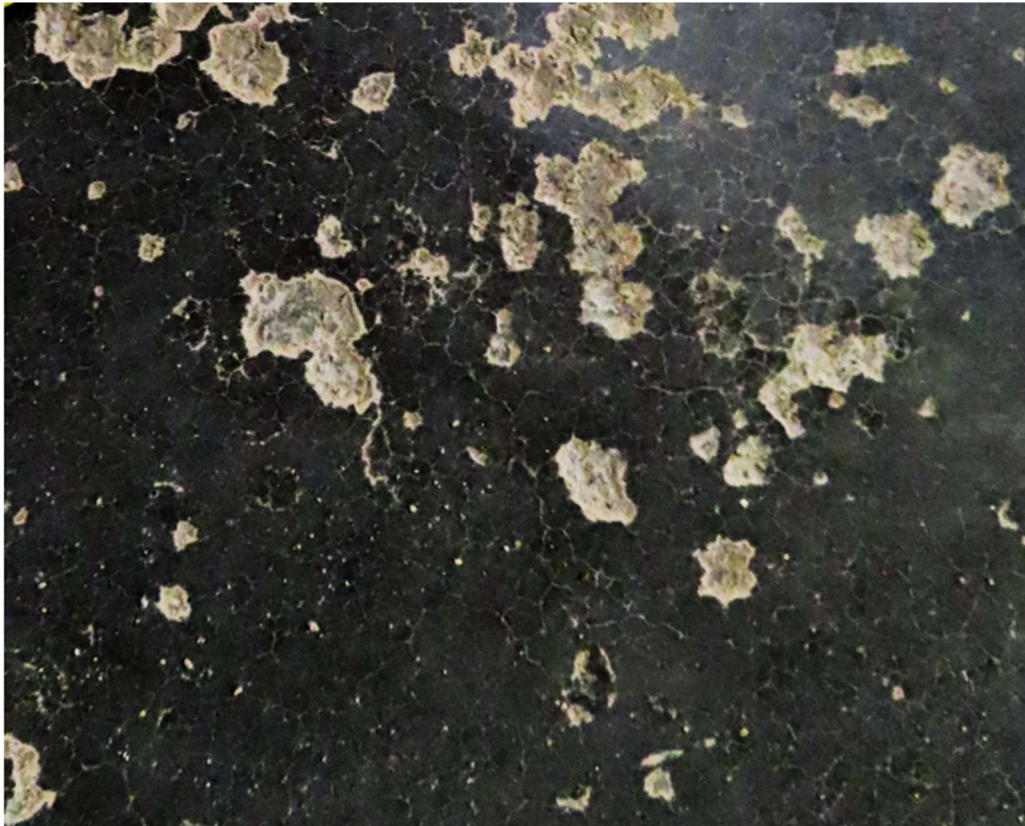
Investigation of the staining of a TPO roof



Failure analysis of a latex paint applied to hollow core doors



Failure analysis of a concrete floor slab



Failure (staining) of a stone brick wall

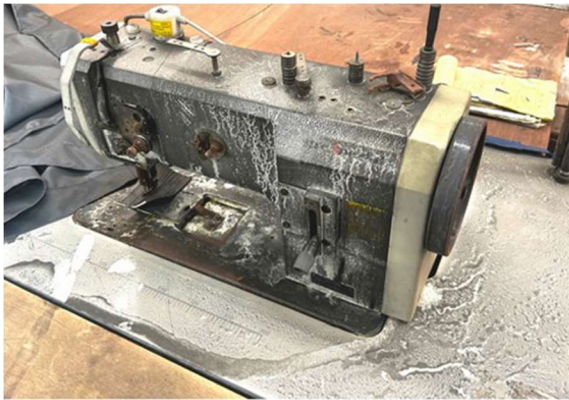


INVESTIGATION OF THE STAINING IN NATURAL STONE BRICKS

Investigation of damage caused by the escape of a corrosive gas
Investigation of corrosion failure
Large loss case



Investigation of damage caused by combustion (fire) gases
Investigation of corrosion failure
Large loss case



Investigation of damage caused by soot generated during a fire

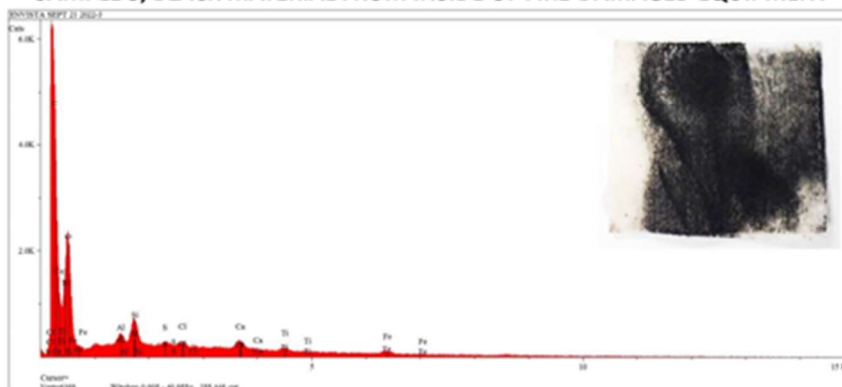
Investigation of corrosion failure

Large loss case



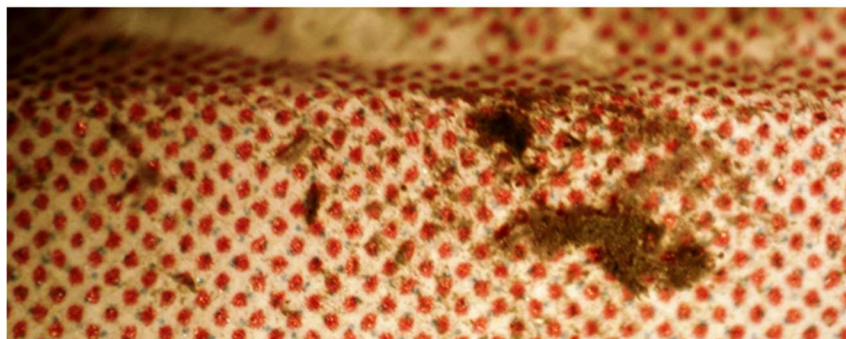
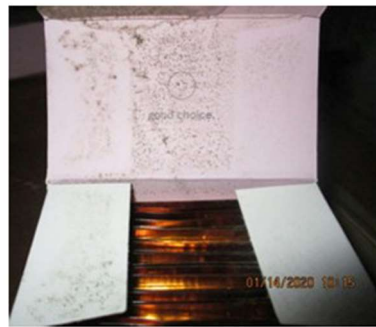
Carboard boxes containing furnaces. Photographs taken after a fire. The boxes show soot.

SAMPLE 3, BLACK MATERIAL FROM INSIDE OF FIRE-DAMAGED EQUIPMENT



ELEMENT	INTENSITY (c/s)	CONCENTRATION (wt%)	ERROR 2-sig	MDL 3-sig
Carbon, C Ka	1,922.31	58.758	0.565	0.273
Oxygen, O Ka	416.58	34.816	0.773	0.557
Aluminum, Al Ka	94.63	0.960	0.072	0.091
Silicon, Si Ka	239.71	2.165	0.077	0.081
Sulfur, S Ka	37.98	0.329	0.055	0.077
Chlorine, Cl Ka	39.14	0.360	0.060	0.084
Calcium, Ca Ka	89.42	0.970	0.071	0.089
Titanium, Ti Ka	41.35	0.605	0.080	0.107
Iron, Fe Ka	41.36	1.038	0.118	0.151
TOTAL: 100.000				

Investigation of a cargo claim
Investigation of the mold contamination of boxes with
eye masks of a shipment received from overseas



Investigation of a cargo claim

Failure analysis of a shipment of plastic bottles



Investigation of damage observed in vehicles at a car dealership

