

Figure 6.1 Mechanical seal faces after use: (a) normal appearance, some circumferential scoring; (b) parallel radial cracks; (c) radial cracks with blisters; (d) surface crazing; (b) – (d) are due to overheating, particularly characteristic of ceramic seal faces

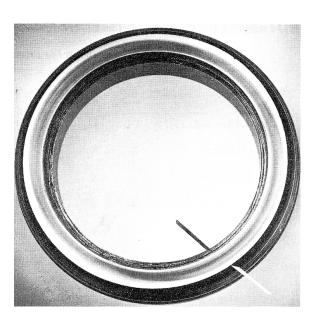


Figure 6.2 Tungsten carbide mechanical seal face showing symmetrical surface polishing characteristic of mild hydraulic or thermal distortion.

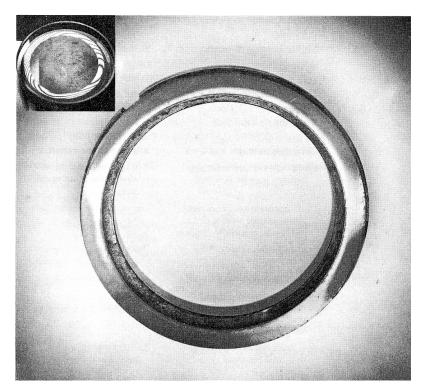


Figure 6.3 Tungsten carbide mechanical seal face showing localised polishing due to lack of flatness; this seal leaked badly. The inset illustrates a typical non-flat seal face viewed in sodium light using an optical flat to give contour lines at 11 micro-inch increments of height