

Preparations for major fabrication of separator vessels, land-based oil field, Central Asia (2005)

Situation: I had been retained by a company of welding engineers to act as their health and safety adviser on a job they were doing in Central Asia. They were subcontracted to a major American Engineering and Procurement Company (EPC) to complete the site fabrication of large (40m x 10m) separator vessels at a new land-based oilfield in the central Asian desert. The EPC was building an enormous oil production facility for a major multinational oil company.

Frankly, I didn't understand my role in this job. It seemed like I was going to be paid far too much for doing very little. I thought it was going to be very straightforward.

The work required controlled conditions for carrying out careful welding of the separator vessels, which were at least 10cm thick. Prior to our arrival, the EPC was supposed to have set up the vessels with the surfaces to be welded butted up against each other, surrounded by >15m high scaffolding for access, and with the scaffolding covered by flame-resistant tarpaulins, to protect the welding operations from the wind and wind-blown sand.

When we arrived, I went with the welding engineer's manager to look at the job. It all looked good, except the 'flame-resistant tarpaulins' turned out to be *brown cotton sheets*. The welding manager was a smoker, so we tore off a piece of the cotton sheet and held it above his cigarette lighter. The cotton burned instantly and fiercely.

The welding process was to include arc-air gouging, so hot slag would have been flying around. As it stood, people on the scaffolding tower were quite likely to be killed when the cotton sheets went up in flames.

This seemed quite a simple mistake, so we went to see the EPC's supervisor, an American engineer who was probably about 35 years old (i.e. old enough to have some decent experience, you would expect). We explained the situation, but he quickly lost his temper and told me, quite memorably, that "You are nothing but a bunch of ****ing work-shy Europeans." (This was something I had never been called before.....)

Next, we went to see his boss. He passed us on to the site HSE manager – and at last we received a sympathetic hearing.

The real problem was that (i) they didn't have any flame-resistant tarpaulins, and (ii) in this central Asian country it could take several weeks to get new equipment through Customs. Hence, the EPC was going to have to pay for a large team of 20 or so welders to hang around for a few weeks. Reluctantly, they agreed there was no option but to do this.

Moral: This was an example of attempted bullying because of programme time and cost pressures. Most professional engineers sooner or later have to be prepared to make a stand against this.