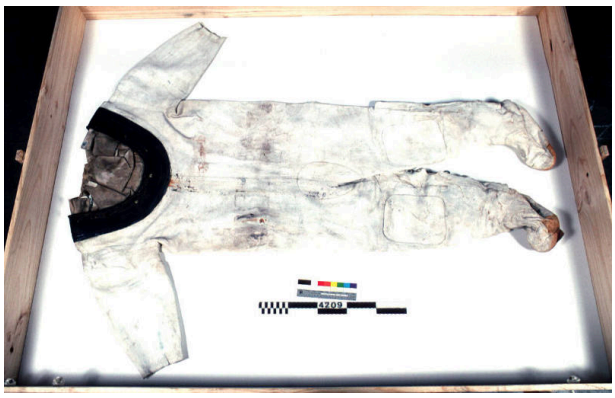
Basic Detail Report



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Title

Standard diving dress suit

Date

1950s

Medium

Canvas, leather, rubber

Dimensions

Overall: 1765 x 732 x 55 mm, 8.3 kg

Name

Diving suit

History

The European-Australian pearling industry began in the 1850s and by the early 20th century, Australia was supplying 75 per cent of the world's pearl shell, from north Western Australia, the Northern Territory, and the Torres Strait. Pearl shell was a valuable material before the days of plastic, and sold for £150 per ton in Sydney in the 1860s. The versatile and decorative material was used to make buttons, buckles, jewellery and cutlery, and was used as inlay in watches, ornaments and instruments. Before the cultivation of pearls, naturally occurring pearls were rarely found and were considered a bonus. For thousands of years, local coastal Aboriginal populations traded natural pearls with neighbouring islanders, and pearl shell - collected by combing the beach while the tide was out - with inland Aboriginal groups. With the foundation and rapid expansion of pearling stations in the 19th century, European pearlers unable or unwilling to undertake the difficult and dangerous task of diving employed cheap Japanese, Pacific and Torres Strait Islander, Philipino, Malay and Indigenous Australian labour. Originally shallow pearl shell beds were worked on by free-diving from small open boats. The desire to access shell beds located in deeper water saw the use of hard-hat diving suits and equipment which was developed in the 1830s by Augustus Siebe and became widespread on Australian pearl luggers in the 1880s. This hard-hat equipment consisted of a waterproof suit and airtight helmet, connected by a hose to an air pump on the pearl lugger's deck. The diver wore layers of woollen garments under the suit, along with mittens and boots weighing up to 7kg each. The heavy copper helmet with a glass face was screwed onto the corselet which was supported by the padded collar of the dress. Up to 50kg of weight was strapped onto the diver's back and chest. Attached to the diver's belt was a knife, scabbard and rope which was used to send signals to the crew before the application of radio communication equipment. Air was pumped to the diver manually by men turning two large wheels. The equipment and system was problematic, as divers could not regulate their air flow and were only permitted small quantities of air. The development of the high pressure compressor in the 1900s and the Ohgushi Peerless Respirator in 1918, allowed divers to manually adjust their air flow

with a valve. In the early days of deep water pearl diving, it was difficult to equalise the pressure inside and outside the suit, and the little-known decompression sickness known as the 'bends' claimed the lives of hundreds of divers. The introduction of the wet-suit, mask, fins and self contained underwater breathing apparatus (SCUBA) gave divers greater manoeuvrability and better air supply, and saw a decline in pearl diving fatalities. The transition to this new equipment was slow, but as diver's productivity increased the use of hard-hat equipment by Australian pearl divers ceased in the mid 1970s.