1. Record Nr. UNINA9910915670603321 Autore Young Edward M. <1948-> Titolo Building engines for war: air-cooled radial aircraft engine production in Britain and America in World War II / / Edward M. Young Warrendale, Pennsylvania:,: SAE International,, [2023] Pubbl/distr/stampa ©2024 **ISBN** 1-4686-0666-2 1-4686-0665-4 Edizione [1st ed.] Descrizione fisica 1 online resource (1 PDF (xvi, 331 pages)) : illustrations ; ; cm Soggetti Airplanes, Military - History - 20th century Airplanes - Motors - History - 20th century World War, 1939-1945 - Technology Mass production - History - 20th century TECHNOLOGY & ENGINEERING / Aeronautics & Astronautics TECHNOLOGY & ENGINEERING / Military Science Aerospace and aviation technology **Astronautics** Military engineering Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references (pages 295-326) and index. Nota di contenuto Chapter 1: Building aircraft engines: 1929-1939 -- Chapter 2: Building nine-cylinder engines: The Bristol Mercury and Pegasus -- Chapter 3: Building nine-cylinder engines: The Wright R-1820 Cyclone 9 --Chapter 4: Building 14-cylinder engines: The Bristol Hercules --Chapter 5: Building 14-cylinder engines: The Pratt & Whitney R-1830 Twin-Wasp and the Wright R-2600 Cyclone 14 -- Chapter 6: Building 18-cylinder engines: The Pratt & Whitney R-2800 Double Wasp, Wright R-3350 Duplex Cyclone 18, and Bristol Centaurus -- Chapter 7: Comparing American and British aircraft engine production --Bibliography -- Index -- About the author. Sommario/riassunto Dive into the heart of wartime innovation and manufacturing through this groundbreaking book, unveiling a riveting narrative of

technological mastery and organizational ingenuity. This meticulously researched work challenges conventional views of wartime production. offering a fresh perspective on the incredible efforts that drove the Allies to victory. Young's insightful analyses illuminate the strategic collaboration between the aerospace and automotive industries, showcasing their collective adaptation that created the engines powering victory. Spanning continents, Young examines the transformation of aircraft engine manufacturing during World War II. Unearthing the operations of key players such as the Bristol Aeroplane Company, Pratt & Whitney, and Wright Aeronautical, he sheds light on the monumental shift from traditional batch production to revolutionary quantity production. Readers will witness the birth of new factories, the development of advanced machine tools, and the innovation required to produce engines of unparalleled complexity and precision. Through Young's fresh perspective, the book unveils the intricate interplay of crisis techno-politics, engineering resilience, and the pivotal role of innovation in shaping the tides of history. This book is not just a study of the past; it is a critical foundation for understanding the dynamics of wartime production that continue to influence our world today. "Edward Young's reconstruction and analysis of the Allies' massive World War II aircraft engine programs is priceless, unique, thorough and critical - all at once."