



PROGRAMMA SVOLTO a.s. 2023-2024

Prof.ssa DI CATALDO SILVIA - Classe: 5A MEC - Disciplina: INGLESE

TESTI DI ADOZIONE: **MACHPOWER**, Edisco editore e **Materiali forniti dal docente (*)**

MODULO 1 SHAPING AND JOINING MATERIALS	Metalworking (pg 128); Casting and Forging (pg 130); Rolling, Extruding, Drawing (pg 132); Sheet and Powder Forming (pg 134); Machine tools (pg 136); Turning and Milling (pg 138); Drilling and Grinding (pg 140)
MODULO 2 HISTORY OF MATERIALS AND MACHINES	Origins of Metalworking (pg 14); The First Industrial Revolution (pg 16); The Second Industrial Revolution (pg 18); The British Economic Decline (pg 20); The Steam Engine (pg 21);
(*) MODULO 3 THE AMERICAN INDUSTRIAL REVOLUTION AND HENRY FORD (1)	<u>Eli Whitney</u> and The American System of Interchangeable Parts <u>Steel Process</u> : Henry Bessemer Converter <u>New Uses For Steel</u> in Construction, Infrastructure and Transportation <u>Edwin L. Drake</u> : Drilling For Oil. The Birth of Oil Industry in the Us <u>Rush of Inventions</u> : The Centennial Exposition of Philadelphia
(*) MODULO 4 THE AMERICAN INDUSTRIAL REVOLUTION AND HENRY FORD (2)	<u>Thomas Alva Edison</u> : the Electric Light Bulb; the Menlo Park Centre; the Manhattan Power Station; <u>Electricity Spreads</u> : the AC/DC Battle; <u>Nikola Tesla and George Westinghouse</u> : the Niagara Falls Hydroelectric Power Plant; the Columbian Exposition of Chicago; <u>The Airplane</u> : The Wright Brothers and their "Flyer" <u>Who Invented The Automobile?</u> : the origin of Motorcars with Internal Combustion Engine from Nikolaus Otto to Karl Benz (cenni)
(*) MODULO 5 THE AMERICAN INDUSTRIAL REVOLUTION AND HENRY FORD (3)	<u>Mass Production</u> : Frederick Taylor's Scientific Management; Ford's Obsession for Time; Ford's Workforce; the Disassembly line: how the Meat Packing Industry of Chicago inspired car's Moving Assembly Line; <u>Ford's Biography</u> : Ford's first trails and errors, Ford's supply chain and vanadium steel in his MODEL T's assembly line; <u>Ford's Way</u> : Inflexibility in design; Ford's Machine Tools and engine block for his Moving Assembly Line.

EDUCAZIONE CIVICA: Frederick Taylor and Henry Ford. The birth of the moving assembly line and mass production.

I rappresentanti di classe:

Zacon Madalin.....

Bruka Emanuele.....

Il docente:.....