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Sommario/riassunto	Operational Technology (OT) refers to hardware and software used to monitor, control, and manage industrial processes, infrastructure, and assets across sectors like manufacturing, energy, transportation, and utilities. It includes systems such as Industrial Control Systems (ICS), SCADA, PLCs, and DCS. ICS Security is the protection of industrial automation and control systems that manage critical operations like power generation, water treatment, and oil and gas production. Its goal is to safeguard confidentiality, integrity, and availability while mitigating risks from cyber threats, disruptions, and unauthorized access. With this book, our goal is to help readers understand how to secure complex industrial environments by providing a clear introduction to ICS and OT security. We will begin by explaining what ICS and OT are, how they differ from traditional IT, and why those differences matter. From there, the discussion will focus on the increasing importance of ICS/OT security—particularly in the context of

IT and OT convergence, where systems and data are becoming more interconnected. You will also gain an understanding of the key components that make up Industrial Control Systems and how they work together to monitor and control industrial operations. These components—including SCADA, PLC, HMI, and DCS—are essential for ensuring operational efficiency, safety, and security in industries like manufacturing, energy, and critical infrastructure. What you Will Learn · The major differences between IT and OT security · Key components of Industrial Control Systems · The major challenges in ICS/OT security · Why ICS/OT security is very important in the digitalization era <· The most common and widely used ICS/OT standards, tools, and frameworks.
