



### **English Summary:**

#### **Safety in additive manufacturing. Powder bed fusion/sintering**

INAIL DIT develops research activities to catch the opportunities and solve emerging issues especially rising from the integration of new and challenging technologies in workplaces. Additive machines (commonly named 3Dprinters) are one of the innovative technologies and assets of Industry 4.0 plan. Additive manufacturing started at hobbyist level, but in the last years, it spreads also at manufacturing sector for greater production flexibility and reduction of scraps. By now, there is not any standard about safety of additive machines and many different processes and materials are going to be used in manufacturing functional products, not only prototypes. Particularly automotive and aerospace industry is widely using powder bed fusion/sintering processes. Inail – Department of Innovation Technology with Additive Technologies Italian Association (AITA) realized this document "Safety in metal additive technology. Powder bed fusion/sintering machines." to help the employer safely managing these machines after buying them and related materials for manufacturing. The document begins with the identification of hazards for the specific process and arrives at suggesting protective measures.

<https://www.inail.it/cs/internet/comunicazione/pubblicazioni/catalogo-generale/pubbl-la-sicurezza-nelle-tecnologie-additive-metalli.html>