

CRYSTI

CRYogenic cleaning of metals assessment of the method for Scientifical, Technical and Industrial heritage

OBJECTIVES

The CRYSTI project aims to study if the CO2 blasting, a well known industrial cleaning method, can be applied in the conservation domain to the cleaning of metal surfaces.

PROGRAM

In a conservation-restoration process, the surface cleaning is one of the most complex and sensitive tasks.

Considering the disadvantages of conventional cleaning methods for large scale scientific and technical objects, it is necessary to develop innovative approaches to search for new cleaning methods.

The project aims : to define the optimal cleaning parameters (flux and type of CO2, blasting pressure, nozzle type, etc.) with the existent equipment for a few case studies (raw metal, surface corrosion; surfaces with grease resulting from different interventions or maintenance operations); to study short and long-term effects of the cleaning at the material surfaces with the chosen parameters; to validate the cleaning method indicating the limitations of the current equipment and identifying the possible technical improvements in order to develop an adapted equipment with an industrial partner to the application.

USEFUL LINKS - <u>Final report</u>





FUNDING

HES-SO, Réseau de Compétences Design et Arts visuels.

PROJECT LEADER

Alexis Domjan alexis.domjan@he-arc.ch

PARTNERS

Institut des microtechniques appliquées, HE-Arc Ingénierie (IMA); Fondation du matériel historique de l'armée suisse (HAM).

DURATION

18 months 2013-2015

