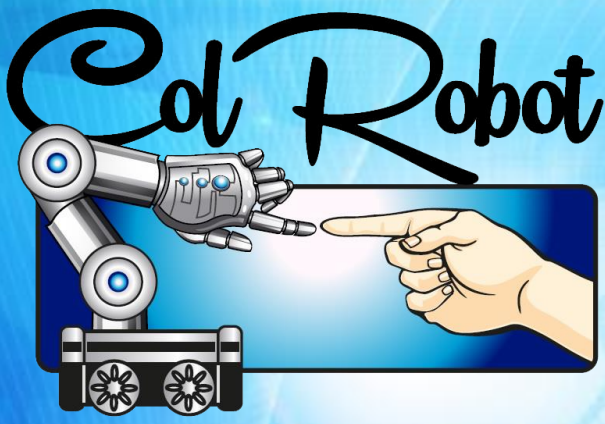

D5.3 “COLROBOT Demonstration for the Automotive Industry”

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 688807

Project Acronym:	ColRobot
Project full title:	Collaborative Robotics for Assembly and Kitting in Smart Manufacturing
Project No:	688807
Call:	H2020-ICT-2015
Coordinator:	ENSAM
Project start date:	February 1, 2016
Project duration:	36 months

Abstract	This document is the front page for the ColRobot project deliverable 5.3, that is the ColRobot prototype for the Automotive Industry..

Document control sheet

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Disclaimer

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1. Introduction

The present document is the front page of the demonstration of the ColRobot project for the Automotive Industry. Although the original description of work predicted the demonstration on the Renault Shopfloor. However, the consortium analyzed all the aspects regarding the advantages/disadvantages of that option against the test in the INESC-TEC facilities where the demonstration was originally developed and decided to go for the latest. The main considered aspects were:

(1) since the most important technical questions of the demonstrator were related with the operation inside the van, the technical challenge was exactly the same and therefore, it would be just a matter of moving and the robot to another place.

(2) On the other hand, the natural constraints of an operational automotive plant in terms of access to the facilities (journalists, competitors) would limit the visibility of the event.

2. Demonstration

2.1. Demonstration trials description.

The demonstration was mostly constituted for 3 major trials:

- The first one describes the normal operation of the robot, and consisted on the mobile platform moving in, and the robot performing the normal screwing.
- The second trial was mostly focused on error handling, and therefore the trial consisted on the evaluation of the robot reaction to problems during the operations, missing screws on the feeder, already placed screws on the hole among others.
- Finally, the last demonstrator demonstrated the human robot interaction, with the presence of the human operator inside the van to show the safe operation of the robot in close spatial relation with the operator.

2.2. Pictures from the demonstration event.

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3. Video

A small video of the event can be found here:
https://drive.inesctec.pt/s/QYwwCqkKZeNg5eL/download?path=%2F&files=colrobot%20video%20demo.mp4

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