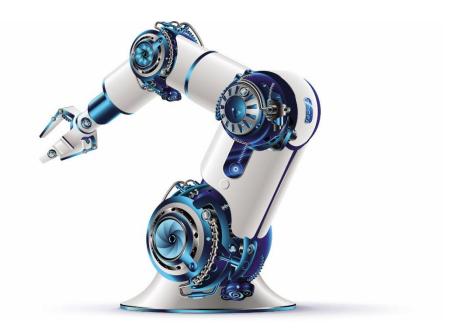
CEPTER OUR TEAM YOUR SOLUTION



Robot predictive maintenance (2019)

Description

- The target of preventive maintenance is to avoid failures due to wear / consumption of the parts of the robotic system.
- The mechanical equipment will mainly carry out controls / changes of lubricants and wear check of "contact parts", gearboxes, etc.
- In the electrical equipment the controls will be carried out in the electrical and electronic connections, general operation revision of the system and revision software.
- The activities will be carried out by qualified personnel with the necessary experience to suggest parts to replace and indicate some possible changes to their standard maintenance.
- The average estimated time to carry out the activities is 8 hours for each ROBOT system.*1
- Normally we use a team of 2 engineers to perform the activities.

* 1: Times may change depending on the type of the robot (with or without external axes or positioners).



Mechanical Maintenance

- Robot preparation for maintenance.
- Control of calibration data and calibration position.
- Visual inspection on all axes to detect lubricant leaks.
- Visual inspection of belt wear (if present).
- Oil change in the gearboxes as given in the table provided by the robot manufacturer.
- Visual inspection of air leaks and pressure adjustment.
- Safety flange inspection (if present).
- Inspection and maintenance of robot EOAT (grippers, guns, etc..).
- Additional equipment inspection (tip dress, torch clean, etc..).
- Final verification and functionality test.
- HOME position.
- General cleaning.
- Maintenance report with the related comments and suggestions.



Control unit Maintenance

- Safety backup of user programs on digital devices.
- Check the operation of the fans and cooling system.
- Check the correct operation of safety systems.
- Check the operation of emergency stop buttons in the cabinet and in the teach pendant.
- Control of battery charges.
- Check the electrical connections.
- Check teach pendant functionality.
- Check power sources IN / OUT and drives.
- General cleaning.
- Maintenance report with the related comments and suggestions.



Note

- A copy of the backups will be delivered by GDF.
- In charge to the costumer: all activities to ensure the performance of our activities.
- Color: no paint touch-up is included.
- GDF guarantees that at the conclusion of their activities the systems will be returned in the same condition previous the intervention.



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