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 Stainless steel surface treatment technology
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DRY PASSIVATION TECHNOLOGY FOR STAINLESS STEEL

TECHNICAL DATA SHEET.

Introduction

PASSIVATION OR PASSIVITY REPRESENTS A STATE OF METALS OR ALLOYS IN WHICH THEIR RATE OF CORROSION IS SLOWED BY THE PRESENCE OF A NATURAL PASSIVE FILM, COMPARED TO WHAT IT WOULD BE IN THE ABSENCE OF THIS FILM. IN THE CASE OF STAINLESS STEEL THIS PASSIVE FILM APPEARS SPONTANEOUSLY BY OXIDATION, BECAUSE THE OXIDE FORMED ON THE SURFACE IS INSOLUBLE AND CONSTITUTES AN OBSTACLE WHICH SLOWS DOWN THE SUBSEQUENT PROCESSES. IN AN AQUEOUS MEDIUM, THE FORMATION OF THIS FILM IS RELATED TO A RANGE OF ELECTROCHEMICAL POTENTIAL AS WELL AS TO A PH RANGE IN WHICH THE OXIDE IS STABLE. AS A RESULT, THE PASSIVE FILM IS FORMED IN THE AIR BEFORE THE PART IS PUT INTO SERVICE

IN SOME CASES, THE USE OF WATER IS A BIG CHALLENGE (FOR EXAMPLE, NEAR ELECTRICAL CIRCUITS, SCHOOLS, HOSPITALS, DRINKING WATER STATION, ETC.). FOR THIS TYPE OF SITUATION, WE HAVE CREATED SINGLE USE PADS, SOAKED IN PRODUCTS SPECIALLY DESIGNED TO ELIMINATE FAT FLIM, DECONTAMINATE THE SURFACE OF THE PRESENCE OF FREE IRON, CREATE CHROMED OXIDE FILM, NEUTRALIZE TRAYS ACID AND THEN RELEASE THE SURFACE OF ALL POSSIBLE CONTAMINATION USING EASY-EVAPORATE CLEANING AGENTS. THIS LAST STEP ENSURES AN UNBEATABLE QUALITY OF SURFACE PASSIVITY.

CODES AND DESCRIPTION

Code	Nom	Description	PADS SIZE
KP-T21	KPNOX T21	DEGREASING PADS	6X 4 INCH
KP-T22	KPNOX T 22	PASSIVATION AND DECONTAMINATION PADS	6X 4 INCH
KP-T23	KPNOX T23	ACID NEUTRALIZATION PADS	6X 4 INCH
KP-T24	KPNOX T24	VALIDATION AND INSPECTION PADS AND SOLUTION	9 X 16 INCH

PADS KP-T21-T24 are designed to passivate the surface of stainless steel in cases where the use of rinse water is difficult to implement.

PRECAUTIONS: Wear rubber boots, waterproof POLYURETHANE COATED gloves, plastic lab coat and goggles. Avoid all contact with skin and eyes. Keep away from all sources of ignition. Handle in a well-ventilated area.

THERMAL ZONES (WELDING) SHOULD BE ELIMINATED BY CHEMICAL OR MECHANICAL GRINDING BEFORE STARTING THIS METHOD.
TO AVOID DRIPPING, WRING OUT THE PAD INTO THE BAG.

FIRST AID: If you feel unwell, move to a well-ventilated place. If the person is no longer breathing, give artificial respiration and consult a doctor. In case of contact with eyes, rinse with plenty of water and seek medical advice. See SDS.

STORAGE AND HANDLING: Store in a cool, well-ventilated place. Keep away from heat, sparks and flame. Keep away from caustic or alkaline solutions of reducing agents. Keep containers tightly closed.

DIRECTION

1. **Degreasing (KP-T21):** Lightly rub the surface to be degreased using KP-T21 pad, making circular movements for at least 3 min (or until the fat and dirt disappear). Use one pad per 1 m².
2. Allow the Surface to dry naturally or dry with paper towel. Estimated time 15 minutes at 20 ° C.
3. **Passivation (KP-T22):** Lightly rub the surface to be passivated using T-22 buffer, making circular movements for at least 5 min or until the rust disappears. Use stainless steel brush if necessary. Use one pad per 1 m².
4. Allow the surface to dry naturally or dry with paper towel. Estimated time 10 minutes at 20 ° C.
5. **Neutralization (KP-T23):** Lightly rub the surface to be degreased using KP-T23 pad, making circular movements for at least 3 min. Use one pad per 1 m².
6. Allow the surface to dry naturally or dry with paper towel. Estimated time 10-15 minutes at 20 ° C.
7. **FINALIZATION AND Inspection (KP-T-24):** SCRUB THE ENTIRE SURFACE WITH KPNOX T24 PADS UNTIL A WHITE RAG COMES AWAY CLEAN; THIS MEANS THE SURFACE IS FREE OF CONTAMINANTS. PS: THERMAL ZONES SHOULD BE ELIMINATED BY CHEMICAL OR MECHANICAL STRIPPING BEFORE FOLLOWING THIS METHOD IT SHOULD BE NOTED THAT THIS METHOD GUARANTEES A PERFECT PASSIVATION OF THE SURFACE OF STAINLESS STEEL.

THIS METHOD ENSURES A PERFECT PASSIVATION OF THE SURFACE OF STAINLESS STEEL.

FOR ANY QUESTIONS, CALL THE TECHNIQUE TEAM OF GROUPE KEMPLUS INC AT +1-514-333-0754