 WILKO PAINT, INC	Paint System			
	Process Instruction C2	Ref: ISO12944-5	Rev. 1	Pg. 1 of 3

Paint System Rating C2
Color TBD

PURPOSE / LOCATION

TYPICAL APPLICATIONS	INTERIOR	EXTERIOR
C2	Unheated building with low pollution, where condensation might occur	Atmosphere with low level of pollution, light industrial

Table 1 – (ISO 12944-5/ ASTM 117B)

Test procedures for paint systems applied to ferrous and non-ferrous materials

Corrosivity Category as defined in ISO 12944-2	Durability ranges	ISO 2812-1 ¹ (chemical resistance) Hrs.	ISO 2812-2 (water immersion) Hrs.	ISO 6270 (water condensation) Hrs.	ISO 7253 (neutral salt spray) Hrs.	Standards Typical
C2	Low Medium High	- - -	- - -	48 48 120	- - -	200

SURFACE PREPARATION, PRETREATMENT

PRETREATMENT:

Removal of oil, soil, lubrication greases, metal oxides, welding scales etc. is essential prior to any coating process. It can be done by a variety of chemical and mechanical methods. The selection of the method depends on the size and the material of the part to be coated, the type of soil to be removed and the performance requirement of the finished product. The most effective preparation methods include;

♦ Shot Blasting	♦ Chemical Cleaning Process	♦ Mechanical abrasion
♦ Grit Blasting	♦ Impact Needle Guns	♦ Flame Cleaning

Chemical pre-treatments involve the use of phosphates or chromates in submersion or spray application. These often occur in multiple stages and consist of [degreasing](#), etching, de-smutting, various rinses and the final [Phosphating](#) or [chromatins](#) of the substrate. The pre-treatment process both cleans and improves bonding to the metal.

Another method of preparing the surface prior to coating is known as abrasive blasting or [Sandblasting](#) and shot blasting. Blast media and blasting abrasives are used to provide surface texturing and preparation, etching, finishing, and degreasing for products. The most important properties to consider are chemical composition and density;



WILKO PAINT, INC

Paint System

Process Instruction
C2

Ref:
ISO12944-5

Rev. 1

Pg. 2 of 3

particle shape and size; and impact resistance. See appropriate SSPC / NACE standard to insure material has been treat to meet the primer/paint suppliers Technical Data Sheet or TDS requirement to assure system is prepared properly.

Silicon carbide grit blast media is brittle, sharp, and suitable for grinding metals and low-tensile strength, non-metallic materials. Plastic media blast equipment uses plastic abrasives that are sensitive to substrates such as aluminum, but still suitable for de-coating and surface finishing. Sand blast media uses high-purity crystals that have low-metal content. Glass bead blast media contains glass beads of various sizes.

Cast steel shot or steel grit is used to clean and prepare the surface before coating. Shot blasting is a method of preparation and is highly efficient on steel parts.

Prime all exposed areas of metal with the appropriate primer. Allow to dry complete prior to wrapping or stacking. Prime or treat aluminum, steel or cast iron should be checked by supplier for any damaged coating prior to shipment to Baldor.

NOTE: All Primer coating shall be tested by end user looking at the marriage between the primed substrate to various top coats to assure proper Adhesion, Creepage, Abrasion & Blister ratings per appropriate ASTM or ISO standards to validate performance. Once approved, changes can only occur by submitting sample material per the end user process requiring new samples submission.


SYSTEM C2 RATING

PRODUCT DESCRIPTION:

- A. An Industrial Nitrocellulose based fast dry coating with excellent adhesion to properly prepared Ferrous and Nonferrous materials.
- B. Minimum DFT for top coat is 1-2 mils over substrate
- C. Other surfaces included are E-Coat, Autophoretic, Powder Coat, and a wide variety of primer materials.

SYSTEM	PRIMER	PERFORMANCE CHARACTERISTICS
Industrial Grade GP – General Purpose Topcoat options: Lacquer Enamel, Alkyd Enamels, Silicone Alkyd Enamels	Water born Primer, Vinyl Primer or Alkyd Primer	Bonds to mating surface allowing material to achieve ISO12944-C2 rating with addition of top coat. (Salt Fog rating @ 200 hour)

NOTE: all pretreat coating material and top coating materials shall be applied in accordance with the manufactures application instructions (TDS /PDS)

 WILKO PAINT, INC	Paint System			
	Process Instruction C2	Ref: ISO12944-5	Rev. 1	Pg. 3 of 3

REPAIR PROCEDURE

REPAIR:
Damaged areas must be repaired using appropriate primer, sanding effected area and feather-edged. Always use a tack cloth to remove sanding dust and other contaminants before application of repair coat.

INSPECTION

INSPECTION:
The Company’s Quality Team shall have designated inspectors to review the coating processes.

The user of this controlled document is responsible for verifying the current version of applicable TDS/PDS prior to use.