



Standard  
Paint  
Specification

For

EM Gray

**NIDEC MOTOR CORPORATION**  
**Industrial Motors & Systems Division**  
**Mena, Arkansas**

# CONTENTS

- 1.0 Scope
- 2.0 Unpainted Surfaces
- 3.0 Surface Preparation
- 4.0 Cast Aluminum and Fiberglass Parts
- 5.0 Motor Assembly
- 6.0 General
- 7.0 Finish Top Coating
- 8.0 Final Finish Inspection
- 9.0 Material Identification

## 1.0 Scope

Industrial Motors & Systems Division of Nidec Motor Corporation in Mena, Arkansas (formerly U.S. Electrical Motors) has selected the Hi-Solids enamel paint from “Valspar Corp.” for its superior rust inhibitive qualities and durability. The paint also has excellent resistance to various chemicals. This specification covers surface preparation and application of protective coating on motors built in the Mena, Arkansas facility.

## 2.0 Unpainted Surfaces

The following surfaces will not require protective coating:

Anodized Aluminum	Grounding Pads
Brass	Machined Surfaces
Bronze	Motor Leads
Chromium Plated Metals	Porcelain Enamel Finishes
Copper	Rubber
Galvanized Steel	Stainless Steel
Glass	Vacuum Pressure Impregnated Parts

## 3.0 Surface Preparation (Cast Iron & Steel)

- A. The foundries are required to snag, remove all sand and slag from castings. This is to be immediately followed by primer paint to insure 100% coverage. Primer is to be “Valspar Corp.” gray oxide primer (NMC Part No. 999712) or equivalent. Film Thickness: 1 to 3 mils.
  
- B. Prime all castings, in plant, if they have not been primed by the foundry.
  
- C. All parts are to be cleaned prior to priming or finish painting as follows:
  1. If parts are dirty – wash and rinse in parts washer.
  2. If parts are oily or greasy – clean in a phosphate dip degrease system and rinse in parts washer.
  3. If parts are rusty – grit blast to commercial grade.
  4. Welded fabricated assemblies – power wire brush all welds and degrease in the phosphate dip degreaser system and rinse in parts washer.
  5. Thoroughly dry all parts prior to priming or finish painting. Primer must be applied immediately after cleaning and drying process.

#### 4.0 Cast Aluminum and Fiberglass Parts

Priming is not required on cast aluminum or fiberglass parts. Oxidation must be removed from aluminum parts with a solvent prior to finish painting. Fiberglass parts (canopy caps) are received with a white pigment in the fiberglass.

#### 5.0 Motor Assembly

After assembling the motor, there may be surfaces that require priming or touch-up prior to final painting. These surfaces are bracket-to-frame register fits, outlet box pads, etc. Spray cans of primer are provided to allow motor assemblers to prime paint unfinished surfaces with two coats of primer. Sufficient drying time must be allowed between primer coats. If surfaces are oily, wash with clean paint thinner using a clean rag to prevent contamination of other surfaces.

#### 6.0 General

- A. Finished coating shall not be applied to wet or damp surfaces.
- B. All coatings shall be applied in a conscientious manner and in accordance with the written application instructions of the coating manufacturer.
- C. Re-application time between coats shall be in accordance with the coating manufacturer's recommendation corresponding to the conditions of temperature and humidity.
- D. Hardware trim and other items not requiring coating may be removed as required for proper application of coatings. Such items shall be replaced after completion of work.
- E. The dry film thickness of each coat, and of the entire system, shall follow the coating manufacturer's recommendation and this specification. The number of coats specified shall be a minimum number of coats to achieve the specified film thickness.
- F. Coverage rates, as calculated by the coating manufacturer, shall be considered as the maximum allowable.
- G. All spraying equipment shall be maintained in good working order, with daily inspection, and shall be in conformity with the coating manufacturer's most recent application specification.

#### 7.0 Finish Top Coating

All motor products must be clean and free of any dirt, oil or grease on the primed surface prior to finish painting. Except where otherwise specified, thinners shall not be used. Motors will be painted with one coat unless otherwise noted. Film thickness: 2 to 4 mils.

## 8.0 Final Finish Inspection

Visual inspection of completed work shall be performed on the finished motor by the Quality Assurance Department. The final surface finish is to be in accordance with industry standards for comparable equipment. Any surfaces found in violation of this specification will be rejected and will require rework. Acceptance or rejection of final finish paint is the sole responsibility of the Quality Assurance Department.

## 9.0 Material Identification

### A. Standard Primer

NMC P/N 999712  
GRAY OXIDE PRIMER  
VALSPAR CORP.  
#5410-E-10009  
ALKYD-HI SOLIDS, FAST DRY

Alternate Primer Vendor:  
SHERWIN-WILLIAMS  
GRAY ALKYD B50AZ6  
KEM KROMIK  
UNIVERSAL METAL PRIMER

### B. Standard Finish Paint

NMC P/N 138538  
EM GRAY 3.5 VOC H/S ENAMEL  
VALSPAR CORP.  
AAA1024 DURASPAR 430  
ALKYD-HI SOLIDS, FAST DRY  
COLOR: BLUE-GRAY, PANTONE PMS 433C

I:\ManufProcProc\Paint\PaintSpecs.doc  
DR#587 – 12765/MENA  
Rev. 01/17/12 - DH

**NIDEC MOTOR CORPORATION**  
8050 W. Florissant Avenue | St Louis, MO 63136  
[www.nidec-motor.com](http://www.nidec-motor.com) | [www.usmotors.com](http://www.usmotors.com)