

NAVISTAR, INC.		
Material, Parts, and Process Specifications (MPAPS)		NUMBER: MPAPS A-6 Part III
		Former Designation: CEMS A-6 Part III
TITLE: Low Carbon Steel, Flat Rolled and Structural Shapes - Part III. ORGANIC COATED SHEET AND STRIP		CURRENT REV No.: 1610
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Part III. ORGANIC COATED SHEET AND STRIP

1.0 APPLICATION

This specification applies to organic coated steel sheet and strip products, and describes a system for specifying these products on engineering drawings. Organic coatings are designated by grade for each type of coating.

2.0 SCOPE

Part III of this specification covers Navistar's classification system, dry film performance requirements and top-coat- primer compatibility performance requirements for corrosion resistant primer, weldable primer, wash coat and combine topcoat and primer coating applied by continuous coil coating processes to steel sheet and strip products

2.1 Restricted Chemical Substances

Effective January 1, 2007, all product supplied to the requirements of this specification must comply with the requirements of the MPAPS B-50 specification.

3.0 REFERENCE DOCUMENTS

Unless otherwise specified, the latest issue of all referenced standards shall apply. The following Specifications, Standards, and Regulations are referenced in this specification.

Quality System Standard ISO 9001 or TS-16949	ASTM D610
CFR Title 29, Part 1910	ASTM B117
NAVISTAR Supplier Packing and Shipping Standard D-13	ASTM D3359
NAVISTAR Engineering Design Std. A-16	ASTM D3363
NAVISTAR MPAPS B-50	ASTM D3003
NAVISTAR MPAPS GT- Paint	SAE J810
NAVISTAR MPAPS A-6, Part I	SAE J2334
NAVISTAR MPAPS A-6, Part II	ASTM D522
NAVISTAR MPAPS G-9009	ASTM D523
NAVISTAR MPAPS P-9516	

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4.0 REQUIREMENTS

4.1 Classification

Organic coatings are classified by Grade. Organic coatings will be identified according to Grades as shown in Table I for all Navistar products.

TABLE I

Grade	Coating Application
1PPW	Prime Painted – WELDABLE – one side
2PPW	Prime Painted – WELDABLE – two sides
1PPX	Prime Painted – one side
2PPX	Prime Painted – two sides
1P&TC	Primed (one side) and Top Coated
2P&TC	Primed (two-sides) and Top Coated

4.2 Base Metal

Properties of the base sheet steel furnished shall conform to limits established for the Grade, Type, and quality of the sheet or strip specified on the Engineering drawing and/or purchase order, as described in MPAPS A-6, Part I.

4.3 Base Metal – Metallic Coated (MC)

If the pre-painted sheet is also required to have a metallic coating (e.g., galvanized), the coated sheet will be required to meet the applicable requirements of MPAPS A-6, Part II.

4.4 Organic Coating Class And Requirements

4.4.1 Grade Designation

4.4.1.1 Grade 1PPW

This is a pre-painted sheet steel product with a *weldable primer* coated onto the exposed surface of the sheet. A wash coat or backer coat is applied to the unexposed side of the sheet to provide minimal corrosion protection in storage and handling and lubrication during roll forming.

4.4.1.2 Grade 2PPW

This is a pre-painted sheet steel product with a *weldable primer* coated onto both sides of the sheet.

4.4.1.3 Grade 1PPX

This is a pre-painted sheet steel product with a *corrosion resistant primer* coated onto the exposed surface of the sheet. A *wash coat* is applied to the unexposed side of the sheet

4.4.1.4 Grade 2PPX

This is a pre-painted sheet steel product with a *corrosion resistant primer* coated onto both the exposed and the unexposed surfaces of the sheet. This product offers optimal corrosion resistance in severe service.

4.4.1.5 Grade 1P&TC

This is a pre-painted sheet steel product with *corrosion resistant primer* and a topcoat coated onto the exposed surface of the sheet. A wash coat or backer coat is applied to the unexposed side of the sheet to provide minimal corrosion protection in storage and handling and lubrication during roll forming.

4.4.1.6 Grade 2P&TC

This is a pre-painted sheet steel product with *corrosion resistant primer* applied to both sides of the sheet and a topcoat coated onto the exposed surface of the sheet.

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4.4.2 Dry Film Performance Requirement – Corrosion Resistant Primer

Corrosion Resistant primer must be an organic coating applied in liquid form by roll coating of coiled steel sheet or strip meeting dry film performance requirements Indicated in Table 1 and must be compatible with Navistar topcoats as verified by requirements and test methods in Table 2.

4.4.3 Dry Film Performance Requirement – Weldable Primer

The weldable primer must be an organic coating meeting dry film performance requirements as indicated in Table 1 and must be compatible with Navistar topcoats as verified by requirements and test methods in Table 2.

4.4.3.1 Weldability

Parts fabricated with the weldable primer coated sheet steel will meet all quality and performance requirements described in MPAPS P-9516 for spot welded assemblies. The weldable primer must be compatible with all plant welding processes in use at the receiving manufacturing plant.

4.4.3.2 Spot Prime Requirement

Spot welds on the weldable primer coated sheet steel should be spot primed in order to enhance corrosion resistance, if the full prime is not going to be applied.

4.4.4 Dry Film Performance Requirement – Wash Coat

The wash coat consists of a thin organic coating applied to the side of the coil intended not to be exposed to exterior environments to provide minimal corrosion protection in storage and handling and lubrication during roll forming. Wash coats must meet the dry film performance requirements indicated in Table 1.

4.4.5 Dry Film Performance Requirement – Primer and Topcoat

The corrosion resistant primer and topcoat consist of two separate organic coatings. The combined coatings will be mutually compatible as verified to requirements and by methods indicated in Table 2. The combined primer and top coat will meet the dry film performance requirements indicated in Table 1 and all other Top Coat Performance requirements not listed in Table 1 and Finish Quality Requirements per the requirements and methods indicated for Class 1B in MPAPS G-9009 (Tables 1B and 3).

4.4.5.1 Exposed Surface Protection- A strippable-waxed coating or plastic film to prevent damage to the finished surface during normal handling and storage procedures and during subsequent forming and fabricating or painting operations will be applied to protect the exposed surface. The protective coating/film must be readily removable, and removal of the film must have no detrimental effect upon the appearance of the exposed surface.