| **Material Standards & Specifications** | |
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| **Specialty Products Company** | |

| **MSS** | **2.004** | **Powder Coating** |
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| Approved by: | **JRF** | |
| Revision: | **D** | Numbered the General Specifications items and added/inserted items 2 (blasting) and 3 (flaw flagging) |
| Date: | **04/23/14** | |

**Scope:**
This specification is intended to cover powder coating of individual parts and assemblies. This specification replaces IP-308.

**General Specifications:**
1. Powder Coating is primarily added to the parts to prevent corrosion but also has appearance functionality important to the marketability of the parts.
2. Surface preparation prior to powder coating is to be thorough sand/media-blasting sufficient to remove mill scale and any other residual surface contaminants that would hinder powder adhesion.
3. Weld spatter and other obvious and unacceptable surface imperfections that do not clean up with blasting are to be flagged by the coater BEFORE the parts are finished. SPC will determine and arrange who/where the rework should be done before the powdercoat is applied.
4. The coating is to be consistent in color with no gaps in coverage.
5. There is to be no inclusions or debris of any kind in the finish.
6. No runs or sags permitted.
7. Part dimensions, surface finishes and thread forms to apply after coating.
8. The coating must be capable of passing an adhesion test per ASTM D3359, Class 3B.

**Type 1:**
- This specification is to be utilized for products with optional color requirements keyed to a part number.
- Powder coat using Cardinal brand or approved equivalent to 6 ± 1 mil total thickness.
- Powder coat color will be specified on purchase order:
  a) Red T009 RD01       Designated by an "R" at the end of the part number
  b) Black P004 BK02      Designated by a "BK" at the end of the part number
  c) Silver T357 GR105 and Clear coat T209-CL01, Designated by a "SL" at the end of the part number

**Type 2:**
- Powder coat using Cardinal brand or approved equivalent to 6 ± 1 mil total thickness.
- Powder coat color will be specified on purchase order:
- Red T009 RD01

**Type 3:**
- Powder coat using Cardinal brand or approved equivalent to 6 ± 1 mil total thickness.
- Powder coat color will be specified on purchase order:
- Black P004 BK02

**Type 4:**
- Powder coat using Cardinal brand or approved equivalent to 6 ± 1 mil total thickness.

- Powder coat color will be specified on purchase order:
- Silver T357 GR105 and Clear coat T209-CL01

**Type 5:**
- This coating is to be used over aluminum for a high gloss clear finish.
- Polish parts to bright luster prior to coating.
- Powder coat using Cardinal brand or approved equivalent to 6 ± 1 mil total thickness.
- Clear coat T009-CL05