



# ***Sintered Advantage Products LLC***

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*Proudly Presents to you*

## ***MPIF STANDARD 35***

*By Metal Powder Industries Federation*

**[www.sinteredadvantageproducts.com](http://www.sinteredadvantageproducts.com)**

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# INDEX – MPIF STANDARD 35 PUBLICATIONS

## Comprehensive Alphabetical Listing & Guide to Material Systems & Designation Codes Used in the Family of MPIF Standard 35 Publications *Index Listing as of November 2023*

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The MPIF Standard 35 family of publications comprises four separate publications dealing with materials for conventional PM structural parts, PM self-lubricating bearings, powder forged (PF) steel and metal injection molded (MIM) parts. The same materials may appear in more than one publication or section of the standard depending upon their common use, e.g. some structural materials may also be used in bearing applications and vice versa and stainless steel materials may be manufactured by more than one PM process, such as conventional PM or MIM, dependent upon part design and use.

The following index provides the user with a reference tool and a KEY to more easily locate the specific Standard 35 publication for the information on the standardized material needed for a specific application.

In this comprehensive index, all MPIF standardized material designation codes are listed alphabetically, followed by the name of the specific material system section of the standard where the chemical composition and/or mechanical property data can be found. Additional information is provided as to usage within the ferrous and nonferrous material systems.

*To stay in compliance, users of MPIF standards are cautioned to refer to the latest edition of any standard. This index will be revised periodically upon publication of any new standard edition or when new, individual standards are approved and posted on the MPIF website.*

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### **MPIF Standard 35 Publications**

The latest editions of MPIF materials standards are available for purchase by accessing the Publications portal on the MPIF website. If you are an MPIF or APMI member and would like to purchase standards or other publications with your member discount, please log in to the member portal on the MPIF website under the search bar before proceeding. You will need your member ID number and Password.

*To ensure compliance, users of MPIF standards are cautioned to refer to the latest edition of any standard.*

MPIF Standard 35 specifications that are available for immediate purchase include:

- **Materials Standards for PM Structural Parts** - for structural components made by the powder metallurgy (PM) process.
- **Materials Standards for PM Self-Lubricating Bearings** - for bearings and bushings made by the PM process.
- **Materials Standards for PF Steel Parts** - for steel components made by the powder forging PM process.
- **Materials Standards for Metal Injection Molded Parts** - for components made by the metal injection molding (MIM) process.



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Website: [mpif.org](http://mpif.org)

**MPIF Standard 35 Publication**
**KEY**

**MIM**      Materials Standards for Metal Injection Molded Parts  
**PF**        Materials Standards for PF Steel Parts  
**SLB**      Materials Standards for PM Self-Lubricating Bearings  
**SP**        Materials Standards for PM Structural Parts

| Material Designation Code | Section Material System                | Key | Ferrous    |    |                      |           |          | Nonferrous |          |
|---------------------------|----------------------------------------|-----|------------|----|----------------------|-----------|----------|------------|----------|
|                           |                                        |     | Structural | SS | Controlled Expansion | Magnetics | Bearings | Structural | Bearings |
| AC-2014                   | Aluminum Alloys                        | SP  |            |    |                      |           |          | X          |          |
| C-0000                    | Copper and Copper Alloys               | SP  |            |    |                      |           |          | X          |          |
| CFTG-3806-K               | Diluted Bronze Bearings                | SLB |            |    |                      |           |          |            | X        |
| CNZ-1818                  | Copper and Copper Alloys               | SP  |            |    |                      |           |          | X          |          |
| CNZP-1816                 | Copper and Copper Alloys               | SP  |            |    |                      |           |          | X          |          |
| CT-1000                   | Copper and Copper Alloys               | SP  |            |    |                      |           |          | X          |          |
| CT-1000-K                 | Bronze Bearings                        | SLB |            |    |                      |           |          |            | X        |
| CTG-1001-K                | Bronze Bearings                        | SLB |            |    |                      |           |          |            | X        |
| CTG-1004-K                | Bronze Bearings                        | SLB |            |    |                      |           |          |            | X        |
| CZ-1000                   | Copper and Copper Alloys               | SP  |            |    |                      |           |          | X          |          |
| CZ-2000                   | Copper and Copper Alloys               | SP  |            |    |                      |           |          | X          |          |
| CZ-3000                   | Copper and Copper Alloys               | SP  |            |    |                      |           |          | X          |          |
| CZP-1002                  | Copper and Copper Alloys               | SP  |            |    |                      |           |          | X          |          |
| CZP-2002                  | Copper and Copper Alloys               | SP  |            |    |                      |           |          | X          |          |
| CZP-3002                  | Copper and Copper Alloys               | SP  |            |    |                      |           |          | X          |          |
| F-0000                    | Iron and Carbon Steel                  | SP  | X          |    |                      |           |          |            |          |
| F-0000-K                  | Iron and Iron-Carbon Bearings          | SLB |            |    |                      |           | X        |            |          |
| F-0005                    | Iron and Carbon Steel                  | SP  | X          |    |                      |           |          |            |          |
| F-0005-K                  | Iron and Iron-Carbon Bearings          | SLB |            |    |                      |           | X        |            |          |
| F-0008                    | Iron and Carbon Steel                  | SP  | X          |    |                      |           |          |            |          |
| F-0008-K                  | Iron and Iron-Carbon Bearings          | SLB |            |    |                      |           | X        |            |          |
| FC-0200                   | Iron-Copper and Copper Steel           | SP  | X          |    |                      |           |          |            |          |
| FC-0200-K                 | Iron-Copper Bearings                   | SLB |            |    |                      |           | X        |            |          |
| FC-0205                   | Iron-Copper and Copper Steel           | SP  | X          |    |                      |           |          |            |          |
| FC-0205-K                 | Iron-Copper-Carbon Bearings            | SLB |            |    |                      |           | X        |            |          |
| FC-0208                   | Iron-Copper and Copper Steel           | SP  | X          |    |                      |           |          |            |          |
| FC-0208-K                 | Iron-Copper-Carbon Bearings            | SLB |            |    |                      |           | X        |            |          |
| FC-0505                   | Iron-Copper and Copper Steel           | SP  | X          |    |                      |           |          |            |          |
| FC-0508                   | Iron-Copper and Copper Steel           | SP  | X          |    |                      |           |          |            |          |
| FC-0508-K                 | Iron-Copper-Carbon Bearings            | SLB |            |    |                      |           | X        |            |          |
| FC-0808                   | Iron-Copper and Copper Steel           | SP  | X          |    |                      |           |          |            |          |
| FC-1000                   | Iron-Copper and Copper Steel           | SP  | X          |    |                      |           |          |            |          |
| FC-1000-K                 | Iron-Copper Bearings                   | SLB |            |    |                      |           | X        |            |          |
| FC-2000-K                 | Iron-Copper Bearings                   | SLB |            |    |                      |           | X        |            |          |
| FC-2008-K                 | Iron-Copper-Carbon Bearings            | SLB |            |    |                      |           | X        |            |          |
| FCTG-3604-K               | Diluted Bronze Bearings                | SLB |            |    |                      |           | X        |            |          |
| FD-0105                   | Diffusion-Alloyed Steel                | SP  | X          |    |                      |           |          |            |          |
| FD-0200                   | Diffusion-Alloyed Steel                | SP  | X          |    |                      |           |          |            |          |
| FD-0205                   | Diffusion-Alloyed Steel                | SP  | X          |    |                      |           |          |            |          |
| FD-0208                   | Diffusion-Alloyed Steel                | SP  | X          |    |                      |           |          |            |          |
| FD-0400                   | Diffusion-Alloyed Steel                | SP  | X          |    |                      |           |          |            |          |
| FD-0405                   | Diffusion-Alloyed Steel                | SP  | X          |    |                      |           |          |            |          |
| FD-0408                   | Diffusion-Alloyed Steel                | SP  | X          |    |                      |           |          |            |          |
| FDCT-1802-K               | Diffusion-Alloyed Iron-Bronze Bearings | SLB |            |    |                      |           | X        |            |          |
| FF-0000                   | Soft-Magnetic Alloys                   | SP  |            |    |                      | X         |          |            |          |
| FG-0303-K                 | Iron-Graphite Bearings                 | SLB |            |    |                      |           | X        |            |          |
| FG-0308-K                 | Iron-Graphite Bearings                 | SLB |            |    |                      |           | X        |            |          |
| FL-3905                   | Prealloyed Steel                       | SP  | X          |    |                      |           |          |            |          |
| FL-4005                   | Prealloyed Steel                       | SP  | X          |    |                      |           |          |            |          |
| FL-4205                   | Prealloyed Steel                       | SP  | X          |    |                      |           |          |            |          |

| MPIF Standard 35 Publication |                                                      |
|------------------------------|------------------------------------------------------|
| <u>KEY</u>                   |                                                      |
| MIM                          | Materials Standards for Metal Injection Molded Parts |
| PF                           | Materials Standards for PF Steel Parts               |
| SLB                          | Materials Standards for PM Self-Lubricating Bearings |
| SP                           | Materials Standards for PM Structural Parts          |

## MIM

## Materials Standards for Metal Injection Molded Parts

### Materials Standards for PF Steel Parts

### Materials Standards for PM Self-Lubricating Bearings

## Materials Standards for PM Structural Parts

[illegible]

|            |                                                             |
|------------|-------------------------------------------------------------|
| <b>KEY</b> |                                                             |
| <b>MIM</b> | <b>Materials Standards for Metal Injection Molded Parts</b> |
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| Material<br>Designation Code | Section<br>Material System         | Key | Ferrous    |    |                         |           |          | Nonferrous |          |
|------------------------------|------------------------------------|-----|------------|----|-------------------------|-----------|----------|------------|----------|
|                              |                                    |     | Structural | SS | Controlled<br>Expansion | Magnetics | Bearings | Structural | Bearings |
| SS-409L                      | Stainless Steel - 400 Series Alloy | SP  |            | X  |                         |           |          |            |          |
| SS-409LE                     | Stainless Steel - 400 Series Alloy | SP  |            | X  |                         |           |          |            |          |
| SS-409LNi                    | Stainless Steel - 400 Series Alloy | SP  |            | X  |                         |           |          |            |          |
| SS-410                       | Stainless Steel - 400 Series Alloy | SP  |            | X  |                         |           |          |            |          |
| SS-410L                      | Stainless Steel - 400 Series Alloy | SP  |            | X  |                         |           |          |            |          |
| SS-430L                      | Stainless Steel - 400 Series Alloy | SP  |            | X  |                         |           |          |            |          |
| SS-430N2                     | Stainless Steel - 400 Series Alloy | SP  |            | X  |                         |           |          |            |          |
| SS-434L                      | Stainless Steel - 400 Series Alloy | SP  |            | X  |                         |           |          |            |          |
| SS-434LCb                    | Stainless Steel - 400 Series Alloy | SP  |            | X  |                         |           |          |            |          |
| SS-434N2                     | Stainless Steel - 400 Series Alloy | SP  |            | X  |                         |           |          |            |          |

# ***Sintered Advantage Products LLC***

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## ***Questions? Need a Quote?***

*We're happy to help with product questions,  
material selection, custom requirements, or pricing.*

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