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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 June 2018*

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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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**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						
FL-4400	Prealloyed Steel	SP	X						
FL-4405	Prealloyed Steel	SP	X						
FL-4605	Prealloyed Steel	SP	X						
FL-4805	Prealloyed Steel	SP	X						
FL-4905	Prealloyed Steel	SP	X						
FL-5108	Prealloyed Steel	SP	X						
FL-5208	Prealloyed Steel	SP	X						

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Material Designation Code	Section Material System	Key	Ferrous					Nonferrous	
			Structural	SS	Controlled Expansion	Magnetics	Bearings	Structural	Bearings
FL-5305	Prealloyed Steel	SP	X						
	Sinter-Hardened Steel	SP	X						
FLC-4608	Sinter-Hardened Steel	SP	X						
FLC-4805	Sinter-Hardened Steel	SP	X						
FLC-4908	Sinter-Hardened Steel	SP	X						
FLC2-4808	Sinter-Hardened Steel	SP	X						
FLC2-5208	Sinter-Hardened Steel	SP	X						
FLDN2-4908	Diffusion-Alloyed Steel	SP	X						
FLDN4C2-4905	Diffusion-Alloyed Steel	SP	X						
FLN-4205	Hybrid Low-Alloy Steel	SP	X						
FLN2-3905	Hybrid Low-Alloy Steel	SP	X						
FLN2-4400	Hybrid Low-Alloy Steel	SP	X						
FLN2-4405	Hybrid Low-Alloy Steel	SP	X						
FLN2-4408	Sinter-Hardened Steel	SP	X						
FLN2C-4005	Hybrid Low-Alloy Steel	SP	X						
FLN4-4400	Hybrid Low-Alloy Steel	SP	X						
FLN4-4405	Hybrid Low-Alloy Steel	SP	X						
FLN4-4405(HTS)	Hybrid Low-Alloy Steel	SP	X						
FLN4-4408	Sinter-Hardened Steel	SP	X						
FLN4C-4005	Hybrid Low-Alloy Steel	SP	X						
FLN6-4405	Hybrid Low-Alloy Steel	SP	X						
FLN6-4408	Sinter-Hardened Steel	SP	X						
FLNC-4405	Hybrid Low-Alloy Steel	SP	X						
FLNC-4408	Sinter-Hardened Steel	SP	X						
FN-0200	Iron-Nickel and Nickel Steel	SP	X						
FN-0205	Iron-Nickel and Nickel Steel	SP	X						
FN-0208	Iron-Nickel and Nickel Steel	SP	X						
FN-0405	Iron-Nickel and Nickel Steel	SP	X						
FN-0408	Iron-Nickel and Nickel Steel	SP	X						
FN-5000	Soft-Magnetic Alloys	SP				X			
FS-0300	Soft-Magnetic Alloys	SP				X			
FX-1000	Copper-Infiltrated Iron and Steel	SP	X						
FX-1005	Copper-Infiltrated Iron and Steel	SP	X						
FX-1008	Copper-Infiltrated Iron and Steel	SP	X						
FX-2000	Copper-Infiltrated Iron and Steel	SP	X						
FX-2005	Copper-Infiltrated Iron and Steel	SP	X						
FX-2008	Copper-Infiltrated Iron and Steel	SP	X						
FY-4500	Soft-Magnetic Alloys	SP				X			
FY-8000	Soft-Magnetic Alloys	SP				X			
MIM-17-4 PH	Stainless Steels	MIM		X					
MIM-2200	Low-Alloy Steels	MIM	X						
	Soft-Magnetic Alloys	MIM				X			
MIM-2700	Low-Alloy Steels	MIM	X						
MIM-316L	Stainless Steels	MIM		X					
MIM-4140	Low-Alloy Steels	MIM	X						
MIM-420	Stainless Steels	MIM		X					
MIM-430L	Stainless Steels	MIM		X					
	Soft-Magnetic Alloys	MIM				X			
MIM-440	Stainless Steels	MIM	X						
MIM-4605	Low-Alloy Steels	MIM	X						
MIM-Cu	Copper	MIM						X	
MIM-F-15	Controlled-Expansion Alloys	MIM			X				
MIM-Fe-3% Si	Soft-Magnetic Alloys	MIM				X			
MIM-Fe-50% Co	Soft-Magnetic Alloys	MIM				X			
MIM-Fe-50% Ni	Soft-Magnetic Alloys	MIM				X			
PF-1020	Carbon Steel	PF	X						
PF-1040	Carbon Steel	PF	X						

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Material Designation Code	Section Material System	Key	Ferrous					Nonferrous	
			Structural	SS	Controlled Expansion	Magnetics	Bearings	Structural	Bearings
PF-1060	Carbon Steel	PF	X						
PF-10C40	Copper Steel	PF	X						
PF-10C50	Copper Steel	PF	X						
PF-1135C60	Copper Steel	PF	X						
PF-1140	Carbon Steel	PF	X						
PF-1160	Carbon Steel	PF	X						
PF-11C40	Copper Steel	PF	X						
PF-11C50	Copper Steel	PF	X						
PF-11C60	Copper Steel	PF	X						
PF-4220	Low-Alloy PF-42XX Steel	PF	X						
PF-4240	Low-Alloy PF-42XX Steel	PF	X						
PF-4260	Low-Alloy PF-42XX Steel	PF	X						
PF-4620	Low-Alloy PF-46XX Steel	PF	X						
PF-4640	Low-Alloy PF-46XX Steel	PF	X						
PF-4660	Low-Alloy PF-46XX Steel	PF	X						
PF-4680	Low-Alloy PF-46XX Steel	PF	X						
SS-303L	Stainless Steel - 300 Series Alloy	SP		X					
SS-303N1	Stainless Steel - 300 Series Alloy	SP		X					
SS-303N2	Stainless Steel - 300 Series Alloy	SP		X					
SS-304H	Stainless Steel - 300 Series Alloy	SP		X					
SS-304L	Stainless Steel - 300 Series Alloy	SP		X					
SS-304N1	Stainless Steel - 300 Series Alloy	SP		X					
SS-304N2	Stainless Steel - 300 Series Alloy	SP		X					
SS-316H	Stainless Steel - 300 Series Alloy	SP		X					
SS-316L	Stainless Steel - 300 Series Alloy	SP		X					
SS-316N1	Stainless Steel - 300 Series Alloy	SP		X					
SS-316N2	Stainless Steel - 300 Series Alloy	SP		X					
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					