



Test Report EN 10 204 (2.2)

Warde Steel & Metals sarl
Charles Helou avenue Warde Building
P. O. Box : 165 886
BEIRUT- LEBANON

Number	Date	Your Order		Invoice	Standard	
96696	23-09-2016	00900 Warde/16WSM		160829	EN 1982 - CuSn12-C-GC CC483K (CB03)	
Description			Quantity		Batch	Analysis
Bushing CB03 021x009x3050			1 Un	8,50 Kg	69482	67696
Mechanical Proprieties						
HB		Rm		Rp 0,2%		A
(250 / 5 / 30)		(N/mm2)		(N/mm2)		(%)
107,0		341		190		10
Tensile testing according to European Standard EN 10 002-1						
Chemical Proprieties						
Cu	Sn	Zn	Pb	P	Ni	Fe
88,54	10,53	0,21	0,52	0,13	0,02	0,02
Al	Mn	Sb	Si	As	S	Impurities
< 0,01	< 0,01	0,01	< 0,01	0,01	< 0,01	1,00
						Limite
Analysis made with an emission spectrometer						

Susana Figueira
Quality Manager

Imp.IO.12.Q/02B-H



Test Report EN 10 204 (2.2)

Warde Steel & Metals sarl
Charles Helou avenue Warde Building
P. O. Box : 165 886
BEIRUT- LEBANON

Number	Date	Your Order		Invoice	Standard	
96697	23-09-2016	00900 Warde/16WSM		160829	EN 1982 - CuSn12-C-GC CC483K (CB03)	
Description			Quantity		Batch	Analysis
Bushing CB03 026x009x3050			1 Un	13,00 Kg	69055	65637
Mechanical Proprieties						
HB		Rm		Rp 0,2%		A
(250 / 5 / 30)		(N/mm2)		(N/mm2)		(%)
107,0		340		190		11
Tensile testing according to European Standard EN 10 002-1						
Chemical Proprieties						
Cu	Sn	Zn	Pb	P	Ni	Fe
88,58	10,67	0,06	0,46	0,14	0,01	0,03
Al	Mn	Sb	Si	As	S	Impurities
< 0,01	< 0,01	0,01	< 0,01	< 0,01	< 0,01	1,00
						Limite
Analysis made with an emission spectrometer						

Susana Figueira
Quality Manager

Imp.IO.12.Q/02B-H



Test Report EN 10 204 (2.2)

Warde Steel & Metals sarl
Charles Helou avenue Warde Building
P. O. Box : 165 886
BEIRUT- LEBANON

Number	Date	Your Order		Invoice	Standard	
96698	23-09-2016	00900 Warde/16WSM		160829	EN 1982 - CuSn12-C-GC CC483K (CB03)	
Description			Quantity		Batch	Analysis
Bushing CB03 031x019x3050			1 Un	13,50 Kg	69203	66397
Mechanical Proprieties						
HB		Rm		Rp 0,2%		A
(250 / 5 / 30)		(N/mm2)		(N/mm2)		(%)
107,0		345		193		9
Tensile testing according to European Standard EN 10 002-1						
Chemical Proprieties						
Cu	Sn	Zn	Pb	P	Ni	Fe
88,25	10,85	0,13	0,62	0,10	0,01	< 0,01
Al	Mn	Sb	Si	As	S	Impurities
< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	1,00
						Limite
Analysis made with an emission spectrometer						

Susana Figueira
Quality Manager

Imp.IO.12.Q/02B-H



Test Report EN 10 204 (2.2)

Warde Steel & Metals sarl
Charles Helou avenue Warde Building
P. O. Box : 165 886
BEIRUT- LEBANON

Number	Date	Your Order		Invoice	Standard	
96699	23-09-2016	00900 Warde/16WSM		160829	EN 1982 - CuSn12-C-GC CC483K (CB03)	
Description			Quantity		Batch	Analysis
Bushing CB03 033x019x3050			1 Un	16,00 Kg	68614	63730
Mechanical Proprieties						
HB		Rm		Rp 0,2%		A
(250 / 5 / 30)		(N/mm2)		(N/mm2)		(%)
107,0		333		185		14
Tensile testing according to European Standard EN 10 002-1						
Chemical Proprieties						
Cu	Sn	Zn	Pb	P	Ni	Fe
87,56	11,45	0,11	0,67	0,17	< 0,01	0,03
Al	Mn	Sb	Si	As	S	Impurities
< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	1,00
						Limite
Analysis made with an emission spectrometer						

Susana Figueira
Quality Manager

Imp.IO.12.Q/02B-H



Test Report EN 10 204 (2.2)

Warde Steel & Metals sarl
Charles Helou avenue Warde Building
P. O. Box : 165 886
BEIRUT- LEBANON

Number	Date	Your Order		Invoice	Standard	
96700	23-09-2016	00900 Warde/16WSM		160829	EN 1982 - CuSn12-C-GC CC483K (CB03)	
Description			Quantity		Batch	Analysis
Bushing CB03 036x024x3050			1 Un	16,50 Kg	69471	67653
Mechanical Proprieties						
HB		Rm		Rp 0,2%		A
(250 / 5 / 30)		(N/mm2)		(N/mm2)		(%)
124,0		343		192		10
Tensile testing according to European Standard EN 10 002-1						
Chemical Proprieties						
Cu	Sn	Zn	Pb	P	Ni	Fe
88,23	10,69	0,25	0,50	0,23	0,02	0,03
Al	Mn	Sb	Si	As	S	Impurities
< 0,01	< 0,01	0,01	< 0,01	0,01	< 0,01	1,00
						Limite
Analysis made with an emission spectrometer						

Susana Figueira
Quality Manager

Imp.IO.12.Q/02B-H



Test Report EN 10 204 (2.2)

Warde Steel & Metals sarl
Charles Helou avenue Warde Building
P. O. Box : 165 886
BEIRUT- LEBANON

Number	Date	Your Order		Invoice	Standard	
96701	23-09-2016	00900 Warde/16WSM		160829	EN 1982 - CuSn12-C-GC CC483K (CB03)	
Description			Quantity		Batch	Analysis
Bushing CB03 037x029x3050			1 Un	12,50 Kg	69487	67415
Mechanical Proprieties						
HB		Rm		Rp 0,2%		A
(250 / 5 / 30)		(N/mm2)		(N/mm2)		(%)
121,0		333		185		14
Tensile testing according to European Standard EN 10 002-1						
Chemical Proprieties						
Cu	Sn	Zn	Pb	P	Ni	Fe
88,51	10,53	0,08	0,61	0,19	0,02	0,04
Al	Mn	Sb	Si	As	S	Impurities
< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	1,00
						Limite
Analysis made with an emission spectrometer						

Susana Figueira
Quality Manager

Imp.IO.12.Q/02B-H



Test Report EN 10 204 (2.2)

Warde Steel & Metals sarl
Charles Helou avenue Warde Building
P. O. Box : 165 886
BEIRUT- LEBANON

Number	Date	Your Order		Invoice	Standard	
96702	23-09-2016	00900 Warde/16WSM		160829	EN 1982 - CuSn12-C-GC CC483K (CB03)	
Description			Quantity		Batch	Analysis
Bushing CB03 043x034x3050			1 Un	17,00 Kg	69294	66872
Mechanical Proprieties						
HB (250 / 5 / 30)		Rm (N/mm2)		Rp 0,2% (N/mm2)		A (%)
107,0		333		185		14
Tensile testing according to European Standard EN 10 002-1						
Chemical Proprieties						
Cu	Sn	Zn	Pb	P	Ni	Fe
88,46	10,64	0,01	0,70	0,13	0,02	< 0,01
Al	Mn	Sb	Si	As	S	Impurities
< 0,01	< 0,01	0,01	< 0,01	< 0,01	< 0,01	1,00
						Limite
Analysis made with an emission spectrometer						

Susana Figueira
Quality Manager

Imp.IO.12.Q/02B-H



Test Report EN 10 204 (2.2)

Warde Steel & Metals sarl
Charles Helou avenue Warde Building
P. O. Box : 165 886
BEIRUT- LEBANON

Number	Date	Your Order		Invoice	Standard	
96703	23-09-2016	00900 Warde/16WSM		160829	EN 1982 - CuSn12-C-GC CC483K (CB03)	
Description			Quantity		Batch	Analysis
Bushing CB03 046x034x3050			1 Un	22,00 Kg	68970	65310
Mechanical Proprieties						
HB		Rm		Rp 0,2%		A
(250 / 5 / 30)		(N/mm2)		(N/mm2)		(%)
102,0		344		192		9
Tensile testing according to European Standard EN 10 002-1						
Chemical Proprieties						
Cu	Sn	Zn	Pb	P	Ni	Fe
88,15	10,85	0,17	0,59	0,16	0,01	< 0,01
Al	Mn	Sb	Si	As	S	Impurities
< 0,01	< 0,01	0,02	< 0,01	0,01	< 0,01	1,00
						Limite
Analysis made with an emission spectrometer						

Susana Figueira
Quality Manager

Imp.IO.12.Q/02B-H



Test Report EN 10 204 (2.2)

Warde Steel & Metals sarl
Charles Helou avenue Warde Building
P. O. Box : 165 886
BEIRUT- LEBANON

Number	Date	Your Order		Invoice	Standard	
96704	23-09-2016	00900 Warde/16WSM		160829	EN 1982 - CuSn12-C-GC CC483K (CB03)	
Description			Quantity		Batch	Analysis
Bushing CB03 051x029x3050			2 Un	76,60 Kg	69396	67354
Mechanical Proprieties						
HB		Rm		Rp 0,2%		A
(250 / 5 / 30)		(N/mm2)		(N/mm2)		(%)
115,0		342		191		10
Tensile testing according to European Standard EN 10 002-1						
Chemical Proprieties						
Cu	Sn	Zn	Pb	P	Ni	Fe
87,83	11,12	0,12	0,70	0,13	0,02	0,04
Al	Mn	Sb	Si	As	S	Impurities
< 0,01	< 0,01	0,01	< 0,01	< 0,01	< 0,01	1,00
						Limite
Analysis made with an emission spectrometer						

Susana Figueira
Quality Manager

Imp.IO.12.Q/02B-H



Test Report EN 10 204 (2.2)

Warde Steel & Metals sarl
Charles Helou avenue Warde Building
P. O. Box : 165 886
BEIRUT- LEBANON

Number	Date	Your Order		Invoice	Standard	
96705	23-09-2016	00900 Warde/16WSM		160829	EN 1982 - CuSn12-C-GC CC483K (CB03)	
Description			Quantity		Batch	Analysis
Bushing CB03 051x039x3050			1 Un	25,50 Kg	69413	67395
Mechanical Proprieties						
HB		Rm		Rp 0,2%		A
(250 / 5 / 30)		(N/mm2)		(N/mm2)		(%)
107,0		349		196		8
Tensile testing according to European Standard EN 10 002-1						
Chemical Proprieties						
Cu	Sn	Zn	Pb	P	Ni	Fe
88,45	10,57	0,07	0,60	0,18	0,07	0,03
Al	Mn	Sb	Si	As	S	Impurities
< 0,01	< 0,01	0,01	< 0,01	< 0,01	< 0,01	1,00
						Limite
Analysis made with an emission spectrometer						

Susana Figueira
Quality Manager

Imp.IO.12.Q/02B-H



Test Report EN 10 204 (2.2)

Warde Steel & Metals sarl
Charles Helou avenue Warde Building
P. O. Box : 165 886
BEIRUT- LEBANON

Number	Date	Your Order		Invoice	Standard	
96706	23-09-2016	00900 Warde/16WSM		160829	EN 1982 - CuSn12-C-GC CC483K (CB03)	
Description			Quantity		Batch	Analysis
Bushing CB03 056x024x3050			1 Un	55,50 Kg	68684	64017
Mechanical Proprieties						
HB		Rm		Rp 0,2%		A
(250 / 5 / 30)		(N/mm2)		(N/mm2)		(%)
99,5		336		187		11
Tensile testing according to European Standard EN 10 002-1						
Chemical Proprieties						
Cu	Sn	Zn	Pb	P	Ni	Fe
88,18	10,88	0,15	0,61	0,13	< 0,01	0,02
Al	Mn	Sb	Si	As	S	Impurities
< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	1,00
						Limite
Analysis made with an emission spectrometer						

Susana Figueira
Quality Manager

Imp.IO.12.Q/02B-H



Test Report EN 10 204 (2.2)

Warde Steel & Metals sarl
Charles Helou avenue Warde Building
P. O. Box : 165 886
BEIRUT- LEBANON

Number	Date	Your Order		Invoice	Standard	
96707	23-09-2016	00900 Warde/16WSM		160829	EN 1982 - CuSn12-C-GC CC483K (CB03)	
Description			Quantity		Batch	Analysis
Bushing CB03 056x029x3050			1 Un	50,50 Kg	69078	65764
Mechanical Proprieties						
HB		Rm		Rp 0,2%		A
(250 / 5 / 30)		(N/mm2)		(N/mm2)		(%)
102,0		340		190		10
Tensile testing according to European Standard EN 10 002-1						
Chemical Proprieties						
Cu	Sn	Zn	Pb	P	Ni	Fe
88,20	10,69	0,18	0,66	0,18	0,02	0,04
Al	Mn	Sb	Si	As	S	Impurities
< 0,01	< 0,01	0,01	< 0,01	< 0,01	< 0,01	1,00
						Limite
Analysis made with an emission spectrometer						

Susana Figueira
Quality Manager

Imp.IO.12.Q/02B-H



Test Report EN 10 204 (2.2)

Warde Steel & Metals sarl
Charles Helou avenue Warde Building
P. O. Box : 165 886
BEIRUT- LEBANON

Number	Date	Your Order		Invoice	Standard	
96708	23-09-2016	00900 Warde/16WSM		160829	EN 1982 - CuSn12-C-GC CC483K (CB03)	
Description			Quantity		Batch	Analysis
Bushing CB03 056x034x3050			2 Un	88,00 Kg	69244	66652
Mechanical Proprieties						
HB		Rm		Rp 0,2%		A
(250 / 5 / 30)		(N/mm2)		(N/mm2)		(%)
110,0		340		190		12
Tensile testing according to European Standard EN 10 002-1						
Chemical Proprieties						
Cu	Sn	Zn	Pb	P	Ni	Fe
87,72	11,19	0,23	0,62	0,17	0,01	0,02
Al	Mn	Sb	Si	As	S	Impurities
< 0,01	< 0,01	0,01	< 0,01	< 0,01	0,02	1,00
						Limite
Analysis made with an emission spectrometer						

Susana Figueira
Quality Manager

Imp.IO.12.Q/02B-H



Test Report EN 10 204 (2.2)

Warde Steel & Metals sarl
Charles Helou avenue Warde Building
P. O. Box : 165 886
BEIRUT- LEBANON

Number	Date	Your Order		Invoice	Standard	
96709	23-09-2016	00900 Warde/16WSM		160829	EN 1982 - CuSn12-C-GC CC483K (CB03)	
Description			Quantity		Batch	Analysis
Bushing CB03 061x034x3050			1 Un	55,50 Kg	69377	67220
Mechanical Proprieties						
HB		Rm		Rp 0,2%		A
(250 / 5 / 30)		(N/mm2)		(N/mm2)		(%)
92,8		339		189		8
Tensile testing according to European Standard EN 10 002-1						
Chemical Proprieties						
Cu	Sn	Zn	Pb	P	Ni	Fe
88,48	10,60	0,11	0,52	0,19	0,02	0,05
Al	Mn	Sb	Si	As	S	Impurities
< 0,01	< 0,01	0,02	< 0,01	< 0,01	< 0,01	1,00
						Limite
Analysis made with an emission spectrometer						

Susana Figueira
Quality Manager

Imp.IO.12.Q/02B-H



Test Report EN 10 204 (2.2)

Warde Steel & Metals sarl
Charles Helou avenue Warde Building
P. O. Box : 165 886
BEIRUT- LEBANON

Number	Date	Your Order		Invoice	Standard	
96710	23-09-2016	00900 Warde/16WSM		160829	EN 1982 - CuSn12-C-GC CC483K (CB03)	
Description			Quantity		Batch	Analysis
Bushing CB03 061x039x3050			2 Un	98,00 Kg	69605	68344
Mechanical Proprieties						
HB		Rm		Rp 0,2%		A
(250 / 5 / 30)		(N/mm2)		(N/mm2)		(%)
107,0		345		193		9
Tensile testing according to European Standard EN 10 002-1						
Chemical Proprieties						
Cu	Sn	Zn	Pb	P	Ni	Fe
88,25	11,06	0,03	0,37	0,18	0,04	0,02
Al	Mn	Sb	Si	As	S	Impurities
< 0,01	< 0,01	0,02	< 0,01	0,01	< 0,01	1,00
						Limite
Analysis made with an emission spectrometer						

Susana Figueira
Quality Manager

Imp.IO.12.Q/02B-H



Test Report EN 10 204 (2.2)

Warde Steel & Metals sarl
Charles Helou avenue Warde Building
P. O. Box : 165 886
BEIRUT- LEBANON

Number	Date	Your Order		Invoice	Standard	
96711	23-09-2016	00900 Warde/16WSM		160829	EN 1982 - CuSn12-C-GC CC483K (CB03)	
Description			Quantity		Batch	Analysis
Bushing CB03 061x049x3050			3 Un	90,00 Kg	68695	64108
Mechanical Proprieties						
HB		Rm		Rp 0,2%		A
(250 / 5 / 30)		(N/mm2)		(N/mm2)		(%)
107,0		338		188		12
Tensile testing according to European Standard EN 10 002-1						
Chemical Proprieties						
Cu	Sn	Zn	Pb	P	Ni	Fe
88,31	10,76	0,14	0,64	0,12	< 0,01	0,01
Al	Mn	Sb	Si	As	S	Impurities
< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	1,00
						Limite
Analysis made with an emission spectrometer						

Susana Figueira
Quality Manager

Imp.IO.12.Q/02B-H



Test Report EN 10 204 (2.2)

Warde Steel & Metals sarl
Charles Helou avenue Warde Building
P. O. Box : 165 886
BEIRUT- LEBANON

Number	Date	Your Order		Invoice	Standard	
96712	23-09-2016	00900 Warde/16WSM		160829	EN 1982 - CuSn12-C-GC CC483K (CB03)	
Description			Quantity		Batch	Analysis
Bushing CB03 066x024x3050			1 Un	83,00 Kg	69467	67640
Mechanical Proprieties						
HB		Rm		Rp 0,2%		A
(250 / 5 / 30)		(N/mm2)		(N/mm2)		(%)
112,0		338		188		10
Tensile testing according to European Standard EN 10 002-1						
Chemical Proprieties						
Cu	Sn	Zn	Pb	P	Ni	Fe
88,26	10,90	0,17	0,48	0,11	0,02	0,03
Al	Mn	Sb	Si	As	S	Impurities
< 0,01	< 0,01	0,01	< 0,01	< 0,01	< 0,01	1,00
						Limite
Analysis made with an emission spectrometer						

Susana Figueira
Quality Manager

Imp.IO.12.Q/02B-H



Test Report EN 10 204 (2.2)

Warde Steel & Metals sarl
Charles Helou avenue Warde Building
P. O. Box : 165 886
BEIRUT- LEBANON

Number	Date	Your Order		Invoice	Standard	
96713	23-09-2016	00900 Warde/16WSM		160829	EN 1982 - CuSn12-C-GC CC483K (CB03)	
Description			Quantity		Batch	Analysis
Bushing CB03 066x039x3050			1 Un	63,00 Kg	69727	69030
Mechanical Proprieties						
HB		Rm		Rp 0,2%		A
(250 / 5 / 30)		(N/mm2)		(N/mm2)		(%)
112,0		341		190		9
Tensile testing according to European Standard EN 10 002-1						
Chemical Proprieties						
Cu	Sn	Zn	Pb	P	Ni	Fe
87,78	11,28	0,12	0,62	0,12	0,03	0,01
Al	Mn	Sb	Si	As	S	Impurities
< 0,01	< 0,01	0,01	< 0,01	0,01	< 0,01	1,00
						Limite
Analysis made with an emission spectrometer						

Susana Figueira
Quality Manager

Imp.IO.12.Q/02B-H



Test Report EN 10 204 (2.2)

Warde Steel & Metals sarl
Charles Helou avenue Warde Building
P. O. Box : 165 886
BEIRUT- LEBANON

Number	Date	Your Order		Invoice	Standard	
96714	23-09-2016	00900 Warde/16WSM		160829	EN 1982 - CuSn12-C-GC CC483K (CB03)	
Description			Quantity		Batch	Analysis
Bushing CB03 071x029x3050			1 Un	94,00 Kg	69512	67866
Mechanical Proprieties						
HB		Rm		Rp 0,2%		A
(250 / 5 / 30)		(N/mm2)		(N/mm2)		(%)
107,0		340		189		10
Tensile testing according to European Standard EN 10 002-1						
Chemical Proprieties						
Cu	Sn	Zn	Pb	P	Ni	Fe
88,01	11,02	0,05	0,63	0,15	0,04	0,06
Al	Mn	Sb	Si	As	S	Impurities
< 0,01	< 0,01	0,01	< 0,01	< 0,01	< 0,01	1,00
						Limite
Analysis made with an emission spectrometer						

Susana Figueira
Quality Manager

Imp.IO.12.Q/02B-H



Test Report EN 10 204 (2.2)

Warde Steel & Metals sarl
Charles Helou avenue Warde Building
P. O. Box : 165 886
BEIRUT- LEBANON

Number	Date	Your Order		Invoice	Standard	
96715	23-09-2016	00900 Warde/16WSM		160829	EN 1982 - CuSn12-C-GC CC483K (CB03)	
Description			Quantity		Batch	Analysis
Bushing CB03 071x049x3050			1 Un	59,00 Kg	69140	66066
Mechanical Proprieties						
HB		Rm		Rp 0,2%		A
(250 / 5 / 30)		(N/mm2)		(N/mm2)		(%)
112,0		344		192		10
Tensile testing according to European Standard EN 10 002-1						
Chemical Proprieties						
Cu	Sn	Zn	Pb	P	Ni	Fe
87,89	11,17	0,10	0,48	0,23	0,05	0,03
Al	Mn	Sb	Si	As	S	Impurities
< 0,01	< 0,01	0,02	< 0,01	< 0,01	< 0,01	1,00
						Limite
Analysis made with an emission spectrometer						

Susana Figueira
Quality Manager

Imp.IO.12.Q/02B-H



Test Report EN 10 204 (2.2)

Warde Steel & Metals sarl
Charles Helou avenue Warde Building
P. O. Box : 165 886
BEIRUT- LEBANON

Number	Date	Your Order		Invoice	Standard	
96716	23-09-2016	00900 Warde/16WSM		160829	EN 1982 - CuSn12-C-GC CC483K (CB03)	
Description			Quantity		Batch	Analysis
Bushing CB03 071x054x3050			1 Un	47,50 Kg	69009	65427
Mechanical Proprieties						
HB		Rm		Rp 0,2%		A
(250 / 5 / 30)		(N/mm2)		(N/mm2)		(%)
104,0		322		168		8
Tensile testing according to European Standard EN 10 002-1						
Chemical Proprieties						
Cu	Sn	Zn	Pb	P	Ni	Fe
87,90	10,83	0,35	0,69	0,15	0,05	< 0,01
Al	Mn	Sb	Si	As	S	Impurities
< 0,01	< 0,01	0,01	< 0,01	0,01	< 0,01	1,00
						Limite
Analysis made with an emission spectrometer						

Susana Figueira
Quality Manager

Imp.IO.12.Q/02B-H



Test Report EN 10 204 (2.2)

Warde Steel & Metals sarl
Charles Helou avenue Warde Building
P. O. Box : 165 886
BEIRUT- LEBANON

Number	Date	Your Order		Invoice	Standard	
96717	23-09-2016	00900 Warde/16WSM		160829	EN 1982 - CuSn12-C-GC CC483K (CB03)	
Description			Quantity		Batch	Analysis
Bushing CB03 072x058x3050			1 Un	41,00 Kg	69044	65603
Mechanical Proprieties						
HB		Rm		Rp 0,2%		A
(250 / 5 / 30)		(N/mm2)		(N/mm2)		(%)
102,0		333		185		14
Tensile testing according to European Standard EN 10 002-1						
Chemical Proprieties						
Cu	Sn	Zn	Pb	P	Ni	Fe
87,95	11,10	0,13	0,61	0,14	0,03	< 0,01
Al	Mn	Sb	Si	As	S	Impurities
< 0,01	< 0,01	0,02	< 0,01	< 0,01	< 0,01	1,00
						Limite
Analysis made with an emission spectrometer						

Susana Figueira
Quality Manager

Imp.IO.12.Q/02B-H



Test Report EN 10 204 (2.2)

Warde Steel & Metals sarl
Charles Helou avenue Warde Building
P. O. Box : 165 886
BEIRUT- LEBANON

Number	Date	Your Order		Invoice	Standard	
96718	23-09-2016	00900 Warde/16WSM		160829	EN 1982 - CuSn12-C-GC CC483K (CB03)	
Description			Quantity		Batch	Analysis
Bushing CB03 076x039x3050			1 Un	94,00 Kg	69405	67375
Mechanical Proprieties						
HB		Rm		Rp 0,2%		A
(250 / 5 / 30)		(N/mm2)		(N/mm2)		(%)
121,0		342		190		10
Tensile testing according to European Standard EN 10 002-1						
Chemical Proprieties						
Cu	Sn	Zn	Pb	P	Ni	Fe
88,28	11,00	< 0,01	0,60	0,09	< 0,01	< 0,01
Al	Mn	Sb	Si	As	S	Impurities
< 0,01	< 0,01	0,01	< 0,01	< 0,01	< 0,01	1,00
						Limite
Analysis made with an emission spectrometer						

Susana Figueira
Quality Manager

Imp.IO.12.Q/02B-H



Test Report EN 10 204 (2.2)

Warde Steel & Metals sarl
Charles Helou avenue Warde Building
P. O. Box : 165 886
BEIRUT- LEBANON

Number	Date	Your Order		Invoice	Standard	
96719	23-09-2016	00900 Warde/16WSM		160829	EN 1982 - CuSn12-C-GC CC483K (CB03)	
Description			Quantity		Batch	Analysis
Bushing CB03 076x049x3050			1 Un	76,70 Kg	69428	67484
Mechanical Proprieties						
HB		Rm		Rp 0,2%		A
(250 / 5 / 30)		(N/mm2)		(N/mm2)		(%)
112,0		338		188		10
Tensile testing according to European Standard EN 10 002-1						
Chemical Proprieties						
Cu	Sn	Zn	Pb	P	Ni	Fe
87,72	11,13	0,15	0,64	0,23	0,04	0,05
Al	Mn	Sb	Si	As	S	Impurities
< 0,01	< 0,01	0,02	< 0,01	< 0,01	< 0,01	1,00
						Limite
Analysis made with an emission spectrometer						

Susana Figueira
Quality Manager

Imp.IO.12.Q/02B-H



Test Report EN 10 204 (2.2)

Warde Steel & Metals sarl
Charles Helou avenue Warde Building
P. O. Box : 165 886
BEIRUT- LEBANON

Number	Date	Your Order		Invoice	Standard	
96720	23-09-2016	00900 Warde/16WSM		160829	EN 1982 - CuSn12-C-GC CC483K (CB03)	
Description			Quantity		Batch	Analysis
Bushing CB03 076x054x3050			2 Un	131,00 Kg	69384	67257
Mechanical Proprieties						
HB		Rm		Rp 0,2%		A
(250 / 5 / 30)		(N/mm2)		(N/mm2)		(%)
107,0		333		185		14
Tensile testing according to European Standard EN 10 002-1						
Chemical Proprieties						
Cu	Sn	Zn	Pb	P	Ni	Fe
88,48	10,60	0,07	0,51	0,15	0,12	0,03
Al	Mn	Sb	Si	As	S	Impurities
< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	1,00
						Limite
Analysis made with an emission spectrometer						

Susana Figueira
Quality Manager

Imp.IO.12.Q/02B-H



Test Report EN 10 204 (2.2)

Warde Steel & Metals sarl
Charles Helou avenue Warde Building
P. O. Box : 165 886
BEIRUT- LEBANON

Number	Date	Your Order		Invoice	Standard	
96721	23-09-2016	00900 Warde/16WSM		160829	EN 1982 - CuSn12-C-GC CC483K (CB03)	
Description			Quantity		Batch	Analysis
Bushing CB03 081x063x3050			2 Un	124,05 Kg	68506	63272
Mechanical Proprieties						
HB		Rm		Rp 0,2%		A
(250 / 5 / 30)		(N/mm2)		(N/mm2)		(%)
107,0		333		185		14
Tensile testing according to European Standard EN 10 002-1						
Chemical Proprieties						
Cu	Sn	Zn	Pb	P	Ni	Fe
87,07	12,03	0,10	0,62	0,14	< 0,01	0,02
Al	Mn	Sb	Si	As	S	Impurities
< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	1,00
						Limite
Analysis made with an emission spectrometer						

Susana Figueira
Quality Manager

Imp.IO.12.Q/02B-H



Test Report EN 10 204 (2.2)

Warde Steel & Metals sarl
Charles Helou avenue Warde Building
P. O. Box : 165 886
BEIRUT- LEBANON

Number	Date	Your Order		Invoice	Standard	
96722	23-09-2016	00900 Warde/16WSM		160829	EN 1982 - CuSn12-C-GC CC483K (CB03)	
Description			Quantity		Batch	Analysis
Bushing CB03 082x028x3050			1 Un	131,50 Kg	69616	68415
Mechanical Proprieties						
HB		Rm		Rp 0,2%		A
(250 / 5 / 30)		(N/mm2)		(N/mm2)		(%)
107,0		339		189		11
Tensile testing according to European Standard EN 10 002-1						
Chemical Proprieties						
Cu	Sn	Zn	Pb	P	Ni	Fe
87,83	11,07	0,19	0,64	0,10	0,11	0,02
Al	Mn	Sb	Si	As	S	Impurities
< 0,01	< 0,01	0,01	< 0,01	< 0,01	< 0,01	1,00
						Limite
Analysis made with an emission spectrometer						

Susana Figueira
Quality Manager

Imp.IO.12.Q/02B-H



Test Report EN 10 204 (2.2)

Warde Steel & Metals sarl
Charles Helou avenue Warde Building
P. O. Box : 165 886
BEIRUT- LEBANON

Number	Date	Your Order		Invoice	Standard	
96723	23-09-2016	00900 Warde/16WSM		160829	EN 1982 - CuSn12-C-GC CC483K (CB03)	
Description			Quantity		Batch	Analysis
Bushing CB03 082x048x3050			1 Un	98,00 Kg	68965	65275
Mechanical Proprieties						
HB		Rm		Rp 0,2%		A
(250 / 5 / 30)		(N/mm2)		(N/mm2)		(%)
102,0		337		188		10
Tensile testing according to European Standard EN 10 002-1						
Chemical Proprieties						
Cu	Sn	Zn	Pb	P	Ni	Fe
88,26	10,75	0,07	0,66	0,17	< 0,01	< 0,01
Al	Mn	Sb	Si	As	S	Impurities
< 0,01	< 0,01	0,02	< 0,01	< 0,01	< 0,01	1,00
						Limite
Analysis made with an emission spectrometer						

Susana Figueira
Quality Manager

Imp.IO.12.Q/02B-H



Test Report EN 10 204 (2.2)

Warde Steel & Metals sarl
Charles Helou avenue Warde Building
P. O. Box : 165 886
BEIRUT- LEBANON

Number	Date	Your Order		Invoice	Standard	
96724	23-09-2016	00900 Warde/16WSM		160829	EN 1982 - CuSn12-C-GC CC483K (CB03)	
Description			Quantity		Batch	Analysis
Bushing CB03 082x058x3050			1 Un	76,00 Kg	69151	66190
Mechanical Proprieties						
HB		Rm		Rp 0,2%		A
(250 / 5 / 30)		(N/mm2)		(N/mm2)		(%)
107,0		338		188		11
Tensile testing according to European Standard EN 10 002-1						
Chemical Proprieties						
Cu	Sn	Zn	Pb	P	Ni	Fe
88,27	10,88	0,09	0,57	0,12	0,02	< 0,01
Al	Mn	Sb	Si	As	S	Impurities
< 0,01	< 0,01	0,01	< 0,01	< 0,01	< 0,01	1,00
						Limite
Analysis made with an emission spectrometer						

Susana Figueira
Quality Manager

Imp.IO.12.Q/02B-H



Test Report EN 10 204 (2.2)

Warde Steel & Metals sarl
Charles Helou avenue Warde Building
P. O. Box : 165 886
BEIRUT- LEBANON

Number	Date	Your Order		Invoice	Standard	
96725	23-09-2016	00900 Warde/16WSM		160829	EN 1982 - CuSn12-C-GC CC483K (CB03)	
Description			Quantity		Batch	Analysis
Bushing CB03 087x058x3050			1 Un	93,50 Kg	69407	67379
Mechanical Proprieties						
HB		Rm		Rp 0,2%		A
(250 / 5 / 30)		(N/mm2)		(N/mm2)		(%)
107,0		337		188		10
Tensile testing according to European Standard EN 10 002-1						
Chemical Proprieties						
Cu	Sn	Zn	Pb	P	Ni	Fe
87,89	10,97	0,14	0,63	0,15	0,14	0,04
Al	Mn	Sb	Si	As	S	Impurities
< 0,01	< 0,01	0,02	< 0,01	< 0,01	< 0,01	1,00
						Limite
Analysis made with an emission spectrometer						

Susana Figueira
Quality Manager

Imp.IO.12.Q/02B-H



Test Report EN 10 204 (2.2)

Warde Steel & Metals sarl
Charles Helou avenue Warde Building
P. O. Box : 165 886
BEIRUT- LEBANON

Number	Date	Your Order		Invoice	Standard	
96726	23-09-2016	00900 Warde/16WSM		160829	EN 1982 - CuSn12-C-GC CC483K (CB03)	
Description			Quantity		Batch	Analysis
Bushing CB03 092x038x3050			1 Un	155,50 Kg	69601	68316
Mechanical Proprieties						
HB		Rm		Rp 0,2%		A
(250 / 5 / 30)		(N/mm2)		(N/mm2)		(%)
99,5		336		187		11
Tensile testing according to European Standard EN 10 002-1						
Chemical Proprieties						
Cu	Sn	Zn	Pb	P	Ni	Fe
88,32	10,70	0,15	0,55	0,18	0,01	0,04
Al	Mn	Sb	Si	As	S	Impurities
< 0,01	< 0,01	0,02	< 0,01	0,01	< 0,01	1,00
						Limite
Analysis made with an emission spectrometer						

Susana Figueira
Quality Manager

Imp.IO.12.Q/02B-H



Test Report EN 10 204 (2.2)

Warde Steel & Metals sarl
Charles Helou avenue Warde Building
P. O. Box : 165 886
BEIRUT- LEBANON

Number	Date	Your Order		Invoice	Standard	
96727	23-09-2016	00900 Warde/16WSM		160829	EN 1982 - CuSn12-C-GC CC483K (CB03)	
Description			Quantity		Batch	Analysis
Bushing CB03 092x068x3050			2 Un	172,50 Kg	69494	67775
Mechanical Proprieties						
HB		Rm		Rp 0,2%		A
(250 / 5 / 30)		(N/mm2)		(N/mm2)		(%)
107,0		342		191		10
Tensile testing according to European Standard EN 10 002-1						
Chemical Proprieties						
Cu	Sn	Zn	Pb	P	Ni	Fe
88,49	10,52	0,10	0,66	0,16	0,02	< 0,01
Al	Mn	Sb	Si	As	S	Impurities
< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	1,00
						Limite
Analysis made with an emission spectrometer						

Susana Figueira
Quality Manager

Imp.IO.12.Q/02B-H



Test Report EN 10 204 (2.2)

Warde Steel & Metals sarl
Charles Helou avenue Warde Building
P. O. Box : 165 886
BEIRUT- LEBANON

Number	Date	Your Order		Invoice	Standard	
96728	23-09-2016	00900 Warde/16WSM		160829	EN 1982 - CuSn12-C-GC CC483K (CB03)	
Description			Quantity		Batch	Analysis
Bushing CB03 097x068x3050			1 Un	107,00 Kg	69652	68635
Mechanical Proprieties						
HB		Rm		Rp 0,2%		A
(250 / 5 / 30)		(N/mm2)		(N/mm2)		(%)
99,5		341		190		8
Tensile testing according to European Standard EN 10 002-1						
Chemical Proprieties						
Cu	Sn	Zn	Pb	P	Ni	Fe
88,12	11,09	0,15	0,49	0,11	0,01	0,02
Al	Mn	Sb	Si	As	S	Impurities
< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	1,00
						Limite
Analysis made with an emission spectrometer						

Susana Figueira
Quality Manager

Imp.IO.12.Q/02B-H



Test Report EN 10 204 (2.2)

Warde Steel & Metals sarl
Charles Helou avenue Warde Building
P. O. Box : 165 886
BEIRUT- LEBANON

Number	Date	Your Order		Invoice	Standard	
96729	23-09-2016	00900 Warde/16WSM		160829	EN 1982 - CuSn12-C-GC CC483K (CB03)	
Description			Quantity		Batch	Analysis
Bushing CB03 097x073x3050			1 Un	92,00 Kg	69371	67219
Mechanical Proprieties						
HB		Rm		Rp 0,2%		A
(250 / 5 / 30)		(N/mm2)		(N/mm2)		(%)
107,0		339		189		8
Tensile testing according to European Standard EN 10 002-1						
Chemical Proprieties						
Cu	Sn	Zn	Pb	P	Ni	Fe
88,40	10,64	0,08	0,68	0,13	0,02	0,01
Al	Mn	Sb	Si	As	S	Impurities
< 0,01	< 0,01	0,01	< 0,01	< 0,01	< 0,01	1,00
						Limite
Analysis made with an emission spectrometer						

Susana Figueira
Quality Manager

Imp.IO.12.Q/02B-H



Test Report EN 10 204 (2.2)

Warde Steel & Metals sarl
Charles Helou avenue Warde Building
P. O. Box : 165 886
BEIRUT- LEBANON

Number	Date	Your Order		Invoice	Standard	
96730	23-09-2016	00900 Warde/16WSM		160829	EN 1982 - CuSn12-C-GC CC483K (CB03)	
Description			Quantity		Batch	Analysis
Bushing CB03 110x073x3050			1 Un	147,50 Kg	66370	53934
Mechanical Proprieties						
HB		Rm		Rp 0,2%		A
(250 / 5 / 30)		(N/mm2)		(N/mm2)		(%)
107,0		377		214		17
Tensile testing according to European Standard EN 10 002-1						
Chemical Proprieties						
Cu	Sn	Zn	Pb	P	Ni	Fe
87,96	11,27	0,07	0,56	0,10	< 0,01	0,01
Al	Mn	Sb	Si	As	S	Impurities
< 0,01	< 0,01	0,02	< 0,01	< 0,01	< 0,01	1,00
						Limite
Analysis made with an emission spectrometer						

Susana Figueira
Quality Manager

Imp.IO.12.Q/02B-H



Test Report EN 10 204 (2.2)

Warde Steel & Metals sarl
Charles Helou avenue Warde Building
P. O. Box : 165 886
BEIRUT- LEBANON

Number	Date	Your Order		Invoice	Standard	
96731	23-09-2016	00900 Warde/16WSM		160829	EN 1982 - CuSn12-C-GC CC483K (CB03)	
Description			Quantity		Batch	Analysis
Bushing CB03 112x078x3050			1 Un	151,50 Kg	69751	69119
Mechanical Proprieties						
HB		Rm		Rp 0,2%		A
(250 / 5 / 30)		(N/mm2)		(N/mm2)		(%)
107,0		343		192		8
Tensile testing according to European Standard EN 10 002-1						
Chemical Proprieties						
Cu	Sn	Zn	Pb	P	Ni	Fe
88,26	10,92	0,11	0,43	0,14	0,02	0,07
Al	Mn	Sb	Si	As	S	Impurities
< 0,01	< 0,01	0,02	< 0,01	0,01	< 0,01	1,00
						Limite
Analysis made with an emission spectrometer						

Susana Figueira
Quality Manager

Imp.IO.12.Q/02B-H



Test Report EN 10 204 (2.2)

Warde Steel & Metals sarl
Charles Helou avenue Warde Building
P. O. Box : 165 886
BEIRUT- LEBANON

Number	Date	Your Order		Invoice	Standard	
96732	23-09-2016	00900 Warde/16WSM		160829	EN 1982 - CuSn12-C-GC CC483K (CB03)	
Description			Quantity		Batch	Analysis
Bushing CB03 122x078x3050			1 Un	196,50 Kg	69068	65706
Mechanical Proprieties						
HB		Rm		Rp 0,2%		A
(250 / 5 / 30)		(N/mm2)		(N/mm2)		(%)
104,0		338		188		11
Tensile testing according to European Standard EN 10 002-1						
Chemical Proprieties						
Cu	Sn	Zn	Pb	P	Ni	Fe
88,15	10,73	0,27	0,61	0,17	0,02	0,02
Al	Mn	Sb	Si	As	S	Impurities
< 0,01	< 0,01	0,01	< 0,01	< 0,01	< 0,01	1,00
						Limite
Analysis made with an emission spectrometer						

Susana Figueira
Quality Manager

Imp.IO.12.Q/02B-H



Test Report EN 10 204 (2.2)

Warde Steel & Metals sarl
Charles Helou avenue Warde Building
P. O. Box : 165 886
BEIRUT- LEBANON

Number	Date	Your Order		Invoice	Standard	
96733	23-09-2016	00900 Warde/16WSM		160829	EN 1982 - CuSn12-C-GC CC483K (CB03)	
Description			Quantity		Batch	Analysis
Bushing CB03 122x098x3050			1 Un	124,00 Kg	69189	66361
Mechanical Proprieties						
HB		Rm		Rp 0,2%		A
(250 / 5 / 30)		(N/mm2)		(N/mm2)		(%)
107,0		348		195		7
Tensile testing according to European Standard EN 10 002-1						
Chemical Proprieties						
Cu	Sn	Zn	Pb	P	Ni	Fe
88,20	10,80	0,13	0,69	0,13	0,02	< 0,01
Al	Mn	Sb	Si	As	S	Impurities
< 0,01	< 0,01	0,02	< 0,01	< 0,01	< 0,01	1,00
						Limite
Analysis made with an emission spectrometer						

Susana Figueira
Quality Manager

Imp.IO.12.Q/02B-H



Test Report EN 10 204 (2.2)

Warde Steel & Metals sarl
Charles Helou avenue Warde Building
P. O. Box : 165 886
BEIRUT- LEBANON

Number	Date	Your Order		Invoice	Standard	
96734	23-09-2016	00900 Warde/16WSM		160829	EN 1982 - CuSn12-C-GC CC483K (CB03)	
Description			Quantity		Batch	Analysis
Bushing CB03 127x098x3050			1 Un	147,00 Kg	69675	68747
Mechanical Proprieties						
HB		Rm		Rp 0,2%		A
(250 / 5 / 30)		(N/mm2)		(N/mm2)		(%)
95,0		336		187		9
Tensile testing according to European Standard EN 10 002-1						
Chemical Proprieties						
Cu	Sn	Zn	Pb	P	Ni	Fe
87,93	11,14	0,07	0,67	0,14	0,01	0,01
Al	Mn	Sb	Si	As	S	Impurities
< 0,01	< 0,01	0,01	< 0,01	< 0,01	< 0,01	1,00
						Limite
Analysis made with an emission spectrometer						

Susana Figueira
Quality Manager

Imp.IO.12.Q/02B-H



Test Report EN 10 204 (2.2)

Warde Steel & Metals sarl
Charles Helou avenue Warde Building
P. O. Box : 165 886
BEIRUT- LEBANON

Number	Date	Your Order		Invoice	Standard	
96735	23-09-2016	00900 Warde/16WSM		160829	EN 1982 - CuSn12-C-GC CC483K (CB03)	
Description			Quantity		Batch	Analysis
Bushing CB03 132x088x3050			1 Un	213,00 Kg	69608	68347
Mechanical Proprieties						
HB		Rm		Rp 0,2%		A
(250 / 5 / 30)		(N/mm2)		(N/mm2)		(%)
99,5		333		185		14
Tensile testing according to European Standard EN 10 002-1						
Chemical Proprieties						
Cu	Sn	Zn	Pb	P	Ni	Fe
88,26	10,69	0,08	0,58	0,25	0,08	0,03
Al	Mn	Sb	Si	As	S	Impurities
< 0,01	< 0,01	0,02	< 0,01	< 0,01	< 0,01	1,00
						Limite
Analysis made with an emission spectrometer						

Susana Figueira
Quality Manager

Imp.IO.12.Q/02B-H



Test Report EN 10 204 (2.2)

Warde Steel & Metals sarl
Charles Helou avenue Warde Building
P. O. Box : 165 886
BEIRUT- LEBANON

Number	Date	Your Order		Invoice	Standard	
96736	23-09-2016	00900 Warde/16WSM		160829	EN 1982 - CuSn12-C-GC CC483K (CB03)	
Description			Quantity		Batch	Analysis
Bushing CB03 152x118x3050			1 Un	210,50 Kg	69671	68756
Mechanical Proprieties						
HB		Rm		Rp 0,2%		A
(250 / 5 / 30)		(N/mm2)		(N/mm2)		(%)
107,0		333		185		13
Tensile testing according to European Standard EN 10 002-1						
Chemical Proprieties						
Cu	Sn	Zn	Pb	P	Ni	Fe
88,20	10,87	0,17	0,57	0,11	0,02	0,03
Al	Mn	Sb	Si	As	S	Impurities
< 0,01	< 0,01	0,01	< 0,01	< 0,01	< 0,01	1,00
						Limite
Analysis made with an emission spectrometer						

Susana Figueira
Quality Manager

Imp.IO.12.Q/02B-H



Test Report EN 10 204 (2.2)

Warde Steel & Metals sarl
Charles Helou avenue Warde Building
P. O. Box : 165 886
BEIRUT- LEBANON

Number	Date	Your Order		Invoice	Standard	
96737	23-09-2016	00900 Warde/16WSM		160829	EN 1982 - CuSn12-C-GC CC483K (CB03)	
Description			Quantity		Batch	Analysis
Bar	CB03 021x000x3050		2 Un	20,00 Kg	69313	66948
Mechanical Proprieties						
HB		Rm		Rp 0,2%		A
(250 / 5 / 30)		(N/mm2)		(N/mm2)		(%)
112,0		344		192		9
Tensile testing according to European Standard EN 10 002-1						
Chemical Proprieties						
Cu	Sn	Zn	Pb	P	Ni	Fe
88,39	10,71	0,09	0,57	0,13	0,04	0,02
Al	Mn	Sb	Si	As	S	Impurities
< 0,01	< 0,01	0,02	< 0,01	< 0,01	< 0,01	1,00
						Limite
Analysis made with an emission spectrometer						

Susana Figueira
Quality Manager

Imp.IO.12.Q/02B-H



Test Report EN 10 204 (2.2)

Warde Steel & Metals sarl
Charles Helou avenue Warde Building
P. O. Box : 165 886
BEIRUT- LEBANON

Number	Date	Your Order		Invoice	Standard	
96738	23-09-2016	00900 Warde/16WSM		160829	EN 1982 - CuSn12-C-GC CC483K (CB03)	
Description			Quantity		Batch	Analysis
Bar	CB03 031x000x3050		2 Un	45,50 Kg	69698	68877
Mechanical Proprieties						
HB		Rm		Rp 0,2%		A
(250 / 5 / 30)		(N/mm2)		(N/mm2)		(%)
107,0		342		191		10
Tensile testing according to European Standard EN 10 002-1						
Chemical Proprieties						
Cu	Sn	Zn	Pb	P	Ni	Fe
87,77	11,18	0,06	0,68	0,18	0,02	0,08
Al	Mn	Sb	Si	As	S	Impurities
< 0,01	< 0,01	0,01	< 0,01	< 0,01	< 0,01	1,00
						Limite
Analysis made with an emission spectrometer						

Susana Figueira
Quality Manager

Imp.IO.12.Q/02B-H



Test Report EN 10 204 (2.2)

Warde Steel & Metals sarl
Charles Helou avenue Warde Building
P. O. Box : 165 886
BEIRUT- LEBANON

Number	Date	Your Order		Invoice	Standard	
96739	23-09-2016	00900 Warde/16WSM		160829	EN 1982 - CuSn12-C-GC CC483K (CB03)	
Description			Quantity		Batch	Analysis
Bar	CB03 041x000x3050		1 Un	37,50 Kg	69504	67854
Mechanical Proprieties						
HB		Rm		Rp 0,2%		A
(250 / 5 / 30)		(N/mm2)		(N/mm2)		(%)
112,0		342		191		11
Tensile testing according to European Standard EN 10 002-1						
Chemical Proprieties						
Cu	Sn	Zn	Pb	P	Ni	Fe
88,28	10,82	0,05	0,58	0,17	0,06	< 0,01
Al	Mn	Sb	Si	As	S	Impurities
< 0,01	< 0,01	0,01	< 0,01	0,01	< 0,01	1,00
						Limite
Analysis made with an emission spectrometer						

Susana Figueira
Quality Manager

Imp.IO.12.Q/02B-H



Test Report EN 10 204 (2.2)

Warde Steel & Metals sarl
Charles Helou avenue Warde Building
P. O. Box : 165 886
BEIRUT- LEBANON

Number	Date	Your Order		Invoice	Standard	
96740	23-09-2016	00900 Warde/16WSM		160829	EN 1982 - CuSn12-C-GC CC483K (CB03)	
Description			Quantity		Batch	Analysis
Bar	CB03 051x000x3050		1 Un	57,00 Kg	69609	68370
Mechanical Proprieties						
HB		Rm		Rp 0,2%		A
(250 / 5 / 30)		(N/mm2)		(N/mm2)		(%)
99,5		341		192		11
Tensile testing according to European Standard EN 10 002-1						
Chemical Proprieties						
Cu	Sn	Zn	Pb	P	Ni	Fe
88,43	10,53	0,15	0,66	0,14	0,01	0,04
Al	Mn	Sb	Si	As	S	Impurities
< 0,01	< 0,01	0,02	< 0,01	0,01	< 0,01	1,00
						Limite
Analysis made with an emission spectrometer						

Susana Figueira
Quality Manager

Imp.IO.12.Q/02B-H



Test Report EN 10 204 (2.2)

Warde Steel & Metals sarl
Charles Helou avenue Warde Building
P. O. Box : 165 886
BEIRUT- LEBANON

Number	Date	Your Order		Invoice	Standard	
96741	23-09-2016	00900 Warde/16WSM		160829	EN 1982 - CuSn12-C-GC CC483K (CB03)	
Description		Quantity		Batch	Analysis	
Bar	CB03 061x000x3050	1 Un	81,50 Kg	69666	68709	
Mechanical Proprieties						
HB		Rm		Rp 0,2%		A
(250 / 5 / 30)		(N/mm2)		(N/mm2)		(%)
112,0		344		195		11
Tensile testing according to European Standard EN 10 002-1						
Chemical Proprieties						
Cu	Sn	Zn	Pb	P	Ni	Fe
88,36	10,51	0,27	0,62	0,15	0,01	0,04
Al	Mn	Sb	Si	As	S	Impurities
< 0,01	< 0,01	0,01	< 0,01	< 0,01	< 0,01	1,00
						Limite
Analysis made with an emission spectrometer						

Susana Figueira
Quality Manager

Imp.IO.12.Q/02B-H



Test Report EN 10 204 (2.2)

Warde Steel & Metals sarl
Charles Helou avenue Warde Building
P. O. Box : 165 886
BEIRUT- LEBANON

Number	Date	Your Order		Invoice	Standard	
96742	23-09-2016	00900 Warde/16WSM		160829	EN 1982 - CuSn12-C-GC CC483K (CB03)	
Description			Quantity		Batch	Analysis
Bar	CB03 066x000x3050		1 Un	95,00 Kg	69633	68541
Mechanical Proprieties						
HB		Rm		Rp 0,2%		A
(250 / 5 / 30)		(N/mm2)		(N/mm2)		(%)
102,0		338		188		11
Tensile testing according to European Standard EN 10 002-1						
Chemical Proprieties						
Cu	Sn	Zn	Pb	P	Ni	Fe
88,44	10,71	0,12	0,53	0,12	0,03	0,02
Al	Mn	Sb	Si	As	S	Impurities
< 0,01	< 0,01	0,02	< 0,01	< 0,01	< 0,01	1,00
						Limite
Analysis made with an emission spectrometer						

Susana Figueira
Quality Manager

Imp.IO.12.Q/02B-H



Test Report EN 10 204 (2.2)

Warde Steel & Metals sarl
Charles Helou avenue Warde Building
P. O. Box : 165 886
BEIRUT- LEBANON

Number	Date	Your Order		Invoice	Standard	
96743	23-09-2016	00900 Warde/16WSM		160829	EN 1982 - CuSn12-C-GC CC483K (CB03)	
Description			Quantity		Batch	Analysis
Bar	CB03 071x000x3050		1 Un	108,50 Kg	69620	68035
Mechanical Proprieties						
HB		Rm		Rp 0,2%		A
(250 / 5 / 30)		(N/mm2)		(N/mm2)		(%)
99,5		339		189		12
Tensile testing according to European Standard EN 10 002-1						
Chemical Proprieties						
Cu	Sn	Zn	Pb	P	Ni	Fe
88,19	10,93	0,09	0,56	0,10	0,07	0,02
Al	Mn	Sb	Si	As	S	Impurities
< 0,01	< 0,01	0,01	< 0,01	< 0,01	< 0,01	1,00
						Limite
Analysis made with an emission spectrometer						

Susana Figueira
Quality Manager

Imp.IO.12.Q/02B-H



Test Report EN 10 204 (2.2)

Warde Steel & Metals sarl
Charles Helou avenue Warde Building
P. O. Box : 165 886
BEIRUT- LEBANON

Number	Date	Your Order		Invoice	Standard	
96744	23-09-2016	00900 Warde/16WSM		160829	EN 1982 - CuSn12-C-GC CC483K (CB03)	
Description			Quantity		Batch	Analysis
Bar	CB03 076x000x3050		1 Un	125,50 Kg	69444	67546
Mechanical Proprieties						
HB		Rm		Rp 0,2%		A
(250 / 5 / 30)		(N/mm2)		(N/mm2)		(%)
112,0		336		187		11
Tensile testing according to European Standard EN 10 002-1						
Chemical Proprieties						
Cu	Sn	Zn	Pb	P	Ni	Fe
88,53	10,54	0,13	0,51	0,14	0,07	0,04
Al	Mn	Sb	Si	As	S	Impurities
< 0,01	< 0,01	0,02	< 0,01	< 0,01	< 0,01	1,00
						Limite
Analysis made with an emission spectrometer						

Susana Figueira
Quality Manager

Imp.IO.12.Q/02B-H



Test Report EN 10 204 (2.2)

Warde Steel & Metals sarl
Charles Helou avenue Warde Building
P. O. Box : 165 886
BEIRUT- LEBANON

Number	Date	Your Order		Invoice	Standard	
96745	23-09-2016	00900 Warde/16WSM		160829	EN 1982 - CuSn12-C-GC CC483K (CB03)	
Description			Quantity		Batch	Analysis
Bar	CB03 087x000x1015		2 Un	108,15 Kg	69092	65820
Mechanical Proprieties						
HB (250 / 5 / 30)		Rm (N/mm2)		Rp 0,2% (N/mm2)		A (%)
102,0		326		177		12
Tensile testing according to European Standard EN 10 002-1						
Chemical Proprieties						
Cu	Sn	Zn	Pb	P	Ni	Fe
87,03	12,10	0,09	0,58	0,14	0,02	< 0,01
Al	Mn	Sb	Si	As	S	Impurities
< 0,01	< 0,01	0,02	< 0,01	0,01	< 0,01	1,00
						Limite
Analysis made with an emission spectrometer						

Susana Figueira
Quality Manager

Imp.IO.12.Q/02B-H



Test Report EN 10 204 (2.2)

Warde Steel & Metals sarl
Charles Helou avenue Warde Building
P. O. Box : 165 886
BEIRUT- LEBANON

Number	Date	Your Order		Invoice	Standard	
96746	23-09-2016	00900 Warde/16WSM		160829	EN 1982 - CuSn12-C-GC CC483K (CB03)	
Description			Quantity		Batch	Analysis
Bar	CB03 092x000x1015		2 Un	122,10 Kg	69222	66493
Mechanical Proprieties						
HB		Rm		Rp 0,2%		A
(250 / 5 / 30)		(N/mm2)		(N/mm2)		(%)
107,0		335		187		12
Tensile testing according to European Standard EN 10 002-1						
Chemical Proprieties						
Cu	Sn	Zn	Pb	P	Ni	Fe
88,30	10,82	0,06	0,58	0,16	0,02	0,01
Al	Mn	Sb	Si	As	S	Impurities
< 0,01	< 0,01	0,02	< 0,01	< 0,01	< 0,01	1,00
						Limite
Analysis made with an emission spectrometer						

Susana Figueira
Quality Manager

Imp.IO.12.Q/02B-H



Test Report EN 10 204 (2.2)

Warde Steel & Metals sarl
Charles Helou avenue Warde Building
P. O. Box : 165 886
BEIRUT- LEBANON

Number	Date	Your Order		Invoice	Standard	
96747	23-09-2016	00900 Warde/16WSM		160829	EN 1982 - CuSn12-C-GC CC483K (CB03)	
Description			Quantity		Batch	Analysis
Bar	CB03 102x000x1015		1 Un	77,60 Kg	69624	68096
Mechanical Proprieties						
HB		Rm		Rp 0,2%		A
(250 / 5 / 30)		(N/mm2)		(N/mm2)		(%)
102,0		331		184		12
Tensile testing according to European Standard EN 10 002-1						
Chemical Proprieties						
Cu	Sn	Zn	Pb	P	Ni	Fe
88,18	10,85	0,11	0,67	0,11	0,03	0,01
Al	Mn	Sb	Si	As	S	Impurities
< 0,01	< 0,01	0,01	< 0,01	< 0,01	< 0,01	1,00
						Limite
Analysis made with an emission spectrometer						

Susana Figueira
Quality Manager

Imp.IO.12.Q/02B-H



Test Report EN 10 204 (2.2)

Warde Steel & Metals sarl
Charles Helou avenue Warde Building
P. O. Box : 165 886
BEIRUT- LEBANON

Number	Date	Your Order		Invoice	Standard	
96748	23-09-2016	00900 Warde/16WSM		160829	EN 1982 - CuSn12-C-GC CC483K (CB03)	
Description			Quantity		Batch	Analysis
Bushing CB03 061x024x3050			1 Un	68,00 Kg	69763	69719
Mechanical Proprieties						
HB		Rm		Rp 0,2%		A
(250 / 5 / 30)		(N/mm2)		(N/mm2)		(%)
107,0		341		190		10
Tensile testing according to European Standard EN 10 002-1						
Chemical Proprieties						
Cu	Sn	Zn	Pb	P	Ni	Fe
88,42	10,75	0,02	0,52	0,15	0,09	< 0,01
Al	Mn	Sb	Si	As	S	Impurities
< 0,01	< 0,01	0,02	< 0,01	0,01	< 0,01	1,00
						Limite
Analysis made with an emission spectrometer						

Susana Figueira
Quality Manager

Imp.IO.12.Q/02B-H



Test Report EN 10 204 (2.2)

Warde Steel & Metals sarl
Charles Helou avenue Warde Building
P. O. Box : 165 886
BEIRUT- LEBANON

Number	Date	Your Order		Invoice	Standard	
96749	23-09-2016	00900 Warde/16WSM		160829	EN 1982 - CuSn12-C-GC CC483K (CB03)	
Description			Quantity		Batch	Analysis
Bushing CB03 071x039x3050			1 Un	78,00 Kg	69787	69634
Mechanical Proprieties						
HB		Rm		Rp 0,2%		A
(250 / 5 / 30)		(N/mm2)		(N/mm2)		(%)
107,0		344		192		11
Tensile testing according to European Standard EN 10 002-1						
Chemical Proprieties						
Cu	Sn	Zn	Pb	P	Ni	Fe
87,96	11,18	0,02	0,62	0,15	0,02	< 0,01
Al	Mn	Sb	Si	As	S	Impurities
< 0,01	< 0,01	< 0,01	< 0,01	0,01	< 0,01	1,00
						Limite
Analysis made with an emission spectrometer						

Susana Figueira
Quality Manager

Imp.IO.12.Q/02B-H



Test Report EN 10 204 (2.2)

Warde Steel & Metals sarl
Charles Helou avenue Warde Building
P. O. Box : 165 886
BEIRUT- LEBANON

Number	Date	Your Order		Invoice	Standard	
96750	23-09-2016	00900 Warde/16WSM		160829	EN 1982 - CuSn7Zn4Pb7-C-GC	
Description			Quantity		Batch	Analysis
Flat Bar CB01 312x072x1000			1 Un	215,20 Kg	35138	69734
Mechanical Proprieties						
HB (250 / 5 / 30)		Rm (N/mm2)		Rp 0,2% (N/mm2)		A (%)
82,0		284		174		12
Tensile testing according to European Standard EN 10 002-1						
Chemical Proprieties						
Cu	Sn	Zn	Pb	P	Ni	Fe
82,60	6,48	3,42	6,87	0,05	0,31	0,08
Al	Mn	Sb	Si	Ag	S	Impurities
< 0,01	< 0,01	0,09	< 0,01	0,01	0,06	0,50
						Limite
Analysis made with an emission spectrometer						

Susana Figueira
Quality Manager

Imp.IO.12.Q/02B-H