



**INSPECTION CERTIFICATE**  
**PN EN 10204/3.1**

**hutmen**

**No** 126172  
**Date** 2018-12-18

**Purchaser** UAB Baltic Refrigeration Group  
**Adress** S. Zukausko str. 13  
54464 RAMUCIAI, KAUNO RAJ  
LITHUANIA

ul. Grabiszyńska 241; 53-234 Wrocław  
POLSKA / POLAND / POLEN

Order No	Purchase No	Mark	Dimensions	Temper	Netto	Norm	Customer's item	Batch No
			mm		kg			
2/2018	E21582	Cu-DHP	RD 6,35 x 8 x cois	R220	58	PN-EN 12735-1		C1/1-13-2
2/2018	E21582	Cu-DHP	RD 6,35 x 8 x cois	R220	118	PN-EN 12735-1		C1/1-13-3
2/2018	E21582	Cu-DHP	RD 6,35 x 8 x cois	R220	58	PN-EN 12735-1		C1/1-13-4
2/2018	E21582	Cu-DHP	RD 9,52 x 8 x cois	R220	286	PN-EN 12735-1		C1/1-11-3
2/2018	E21582	Cu-DHP	RD 15,87 x 1 x cois	R220	191	PN-EN 12735-1		C1/1-17-2
2/2018	E21582	Cu-DHP	RD 19,05 x 1 x cois	R220	238	PN-EN 12735-1		C1/1-14-1

**CHEMICAL COMPOSITION**

Batch No	Heat No	Cu+Ag	Cu	Ag	Mn	Al	Fe	Zn	Ni	Pb	Sn	Sb	Te	P	Bi	As	S	Se	Mg	O <sub>2</sub>	Other	
		min %	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
C1/1-13-2	2117	99,92					0,0007	0,0002	0,0001	0,0001	0,0001	0,0001		0,0272	0,0001	0,0001	0,0007					
C1/1-13-3	2496	99,92					0,0006	0,0001	0,0001	0,0001	0,0001	0,0001		0,0273	0,0001	0,0001	0,0010					
C1/1-13-4	2477	99,92					0,0009	0,0001	0,0001	0,0001	0,0001	0,0001		0,0276	0,0001	0,0001	0,0010					
C1/1-11-3	2427	99,93					0,0007	0,0001	0,0001	0,0001	0,0001	0,0001		0,0241	0,0001	0,0001	0,0008					
C1/1-17-2	2496	99,92					0,0006	0,0001	0,0001	0,0001	0,0001	0,0001		0,0273	0,0001	0,0001	0,0010					
C1/1-14-1	1354	99,93					0,0010	0,0001	0,0001	0,0001	0,0001	0,0001		0,0250	0,0001	0,0001	0,0006					

**MECHANICAL PROPERTIES**

Batch No	Rm	Rp <sub>0.2</sub>	Rp <sub>1.0</sub>	A <sub>5</sub>	A <sub>10</sub>	A <sub>100</sub>	A <sub>200</sub>	HV	HBW	HBW	HB	MS/m	IACS	Q	Q	Additional studies	
	MPa	Mpa	MPa	%	%	%	%		2.5/2.5	10/100			%	mm <sup>2</sup> /m	g/m <sup>2</sup>	Name	Result
C1/1-13-2	216	57		48,5				55,9									
C1/1-13-3	224	55		57,5				44,2									
C1/1-13-4	223	46		61,0				52,1									
C1/1-11-3	245	86		49,7				55,4								Total carbon (mg/dm <sup>2</sup> )	0,15
C1/1-17-2	240	77		53,3				48,7								Total carbon (mg/dm <sup>2</sup> )	0,05
C1/1-14-1	243	94		53,8				61,4								Total carbon (mg/dm <sup>2</sup> )	0,04