

CLORINDO APPO S.R.L.



REPORTE DE CALIDAD DEL MATERIAL (MATERIAL QUALITY REPORT)

Reporte N°/Report Nr.

Cliente: (Customer) KSU	Nombre de Parte (Part Name)	Recepcion Muestras (Sample Receiving)	X
Cant. Mtrs Controladas ----- (Qty of Controlled Samples)	Origen Muestra (Sample) Clorindo Appó S.R.L.	Embarques (Shipment)/ O.C (P.O.) Nº: 4001453	
Total Mtrs. Enviadas ----- (Total Sent Samples)	Material (Material) Ni Resist	PPAP-O.C.(P.O.) Nº:	

TIPO DE ENSAYO (TYPE OF TEST)		ESPECIFICACION MATERIAL (MATERIAL SPECIFICATION) AGV - 700.001	RESULTADO DEL ENSAYO (TEST RESULTT)					OK NO OK
			Modelo (Part nr)	Modelo (Part nr)	Modelo (Part nr)	Modelo (Part nr)	Modelo (Part nr)	
			Fecha Colada (Casting Date)/ Turno (Shift)					
25	QUIMICO (CHEMICAL)	C: 2,30 - 3,00%						
		Si: 1,50 - 2,50%						
		Mn: 0,80 - 1,50%						
		Cr: 1,00 - 1,60%						
		Ni: 13,50 - 17,00%						
		Cu: 5,00 - 7,00%						
		P: 0,10% Máx						
		S: 0,10% Máx.						
26	ESTRUCTURA (STRUCTURE)	Matriz Austenitica Austenitic Matrix	Control Superficial (Surface Controlj - Overlaping)			O.K. <input checked="" type="checkbox"/>	NO O.K. <input type="checkbox"/>	
	Grafito (% tamaño) Graphite (% size)	A	1%					
	A- (50% Min) B- (10% Máx) C- No admisible (Not Permissible) D- (10% Máx) E- (20% Máx) Tamaño 4 - 7 ASTM	B	1%					
		C	PRESENT					
		D	1%					
		E	1%					
	Carburos 5% Máx. (Carbides)	Cantidad (Qty.)	1%					
	Finos y Uniformemente distribuidos (Small and Randomly Dispersed)	Tamaño/Distribución (Size/Distrib.)	Small and Randomly Dispersed					
27	DUREZA (HARDNESS)	Min.	1HB					
	120 to 160 HB	Máx.	1HB					
		Promedio (Average)	1HB					
		Ver Adjunto reporte dureza/ see enclosed hardness report		-----				

NOTAS/NOTES: Método de Control de Dureza (Hardness Control Method)

NOTAS/NOTES: Método de Control de Dureza (Hardness Control Method) Brinell/Bolilla(Ball) Ø2.5mm carna(charge) 187.50 kgs // Rockwell R: Bolilla(Ball) Ø1/16" carga(charge)100kgs

Brinell B0.050 (Ball) Ø2,5mm

Resistencia a la tracción (Tensile Strength)

(Tensile Strength)
Alargamiento (%)

Alargamiento (%)
(Elongation)

Coeficiente de Dilatacion Térmica: (10E-

Heat Enlogation Coeficient 20 to 300 °C)

$\Delta = 150$

≥ 150

01/16

188

v

1

X

1

v

1

NOMBRE (name)

FIRMA (signature):

FECHA-(date)
03/01/18



Sample Result Name	Type	Measure Date Time	Recalculation Date Time	Origin	Method Name	Method Version	Operator Name	Correction Type	Type Corr Sample Name
FU 245	Unknown	13/12/2017 12:32:17	13/12/2017 12:33:41	Measured	Fe-65-All		Operator	None	
Check Type	Check Status		Grade Verification Name		Grade Verification Similarity	Grade Search Name		Grade Search Similarity	
Grade Warning	Failed		NIR1 Federal Mogul Export		0 %			100 %	
Horno	Colada	Codigo FU-232	Codigo FU-305	Codigo FU-300	Codigo FU-356	Codigo FU-301			
FU 245	325	4803.5	4804.5		4803.5	2761			

Elements
Type Conc

Meas.	C	Si	Mn	Cr	Ni	Cu	P
%	%	%	%	%	%	%	%
Conc							
1	2.73006	1.85090	1.07854	1.07128	13.7027	5.82509	0.055548
2	2.65947	1.85016	1.07656	1.08214	13.7157	5.80853	0.056486
3	2.69751	1.79496	1.08159	1.07497	13.7502	5.84411	0.054578
Min Warn	2.60000	1.65000	1.05000	1.05000	13.6000	5.70000	0.000000
Min Acc					13.5000	5.50000	
Rep	>2.69568	>1.83201	1.07890	1.07613	13.7228	>5.82591	0.055537
Max Acc					17.0000	7.00000	
Max Warn	2.68000	1.80000	1.12000	1.15000	13.8000	5.80000	0.080000
Mean	>2.69568	>1.83201	1.07890	1.07613	13.7228	>5.82591	0.055537
SD	0.035331	0.032086	0.002533	0.005524	0.024526	0.017805	0.000954
RSD	1.31066	1.75142	0.234811	0.513285	0.178724	0.305614	1.71759

Meas.	S	Sn	Zn	Al	Pb	Ti	Nb
%	%	%	%	%	%	%	%
Conc	Conc	Conc	Conc	Conc	Conc	Conc	Conc
1	0.076867	0.006132	0.010384	0.006344	0.005812	0.018032	<0.003000
2	0.079432	0.006627	0.010664	0.006228	<0.005000	0.016916	0.003775
3	0.078208	0.006812	0.010335	0.006591	0.005576	0.017429	<0.003000
Min Warn	0.060000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Rep	0.078169	0.006523	0.010461	0.006387	0.005463	0.017459	0.003258
Max Warn	0.080000	0.020000	0.030000	0.008000	0.007000	0.030000	0.030000
Mean	0.078169	0.006523	0.010461	0.006387	0.005463	0.017459	0.003258
SD	0.001283	0.000351	0.000177	0.000185	0.000418	0.000559	0.000447
RSD	1.64092	5.38670	1.69396	2.90407	7.64474	3.19950	13.7269

Meas.	Mo	W	V	Co	Ca	Mg	Ce
%	%	%	%	%	%	%	%
Conc	Conc	Conc	Conc	Conc	Conc	Conc	Conc
1	0.053857	<0.012000	0.024632	0.061111	0.000221	<0.000500	<0.003000
2	0.054857	<0.012000	0.026012	0.061381	0.000187	<0.000500	<0.003000
3	0.054560	<0.012000	0.025437	0.060843	0.000204	<0.000500	<0.003000
Min Warn	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Rep	0.054425	<0.012000	>0.025360	0.061112	0.000204	<0.000500	<0.003000
Max Warn	0.070000	0.030000	0.025000	0.200000	0.010000	0.010000	0.010000
Mean	0.054425	<0.012000	>0.025360	0.061112	0.000204	<0.000500	<0.003000
SD	0.000513	0.000000	0.000693	0.000269	0.000017	0.000000	0.000000
RSD	0.943259	0.000000	2.73261	0.440148	8.46402	0.000000	0.000000

Meas.	As	Bi	La	B	Zr	Fe	
%	%	%	%	%	%	%	
Conc	Conc	Conc	Conc	Conc	Conc	Conc	
1	0.007589	0.011778	0.001137	0.008412	<0.001000	73.3741	
2	0.007635	0.013750	0.001347	0.008561	<0.001000	73.4321	
3	0.007552	0.011806	0.001151	0.008314	<0.001000	73.3878	
Min Warn	0.000000	0.000000	0.000000	0.000000	0.000000		
Rep	0.007592	0.012445	0.001211	0.008429	<0.001000	73.3980	