

A01 en A05 ARCELORMITTAL BREMEN GMBH KARL-BENZ-STRASSE 30 BREMEN		A03 Number 94761 Datum 05/08/2014		A08 O/Ord N°. 171935 Datum 13/05/2014		A07 Y/Ord N°. TL-738/14 Datum 13/05/2014		Contract Nr.	
ARCELORMITTAL ESP HRSH Twee Molensstraat 8 2440 GEBEL 014241510 014285274		LEPPINEN STEEL TERASTIE 61400 YLISTARO		LEPPINEN STEEL TERASTIE 61400 YLISTARO		LEPPINEN STEEL TERASTIE 61400 YLISTARO			
A06.1 Customer		LEPPINEN STEEL TERASTIE 61400 YLISTARO		A06.2 Destination		LEPPINEN STEEL TERASTIE 61400 YLISTARO			
A02 3.1 / EN10204 + KV									
B01 - B04 SPECIFICATION MATERIAL - Item 2 TOL DKP-AMSTRONG355MC-O IT GEOLIED ARCELORMITTAL DKP-AMSTRONG355MC-O									

B09 Number	B11 Length mm	B12 Width mm	B13 Thick. mm
Item 2	3000.000	1500.000	12.000

Package	1751809, 1751810, 1751813, 1751811, 1751812
B07 Coilnr. Mill Coil No	7150952 E 7150952
B08 Heat No	048565
Number of pieces : 36 Totale weight (kg) : 15760 Groupage : 20140805043	

CHEMICAL ANALYSIS														HARDNESS TEST			
	C71	C72	C73	C74	C75	C76	C77	C78	C79	C80	C81	C82	C83	C84	C85	C89	C30
B07 B07.1	C	Mn	Si	P	S	N	Al	MB	Ti	V	B	Cr	Cu	Ni	Mo	Cev	H
Heat No	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	C32
E 7150952	0.080	0.710	0.014	0.019	0.007	0.0052	0.039	0.0402	0.0014	0.0020	0.0001	0.049	0.040	0.040	0.006	0.215	

TENSILE TEST										BEND TEST					NOTCH TOUGHNESS				
	C04	C03	C02	C11 yield size	C12 Tensile strength	C13 Elongat	C14 Hardening	C15 Anisotropy	C50	C02	C03	C42	C42	C42	C42	C42	C43		
B07 Mill coil No	Condition	Test temp	Direction	Rp0.2	Rm	A5.65	n90	n90	r90	Direction	Test temp	KC1	KC2	KC3	KC3	Mean value			
E 7150952	F	+20	L	405	MPA	496	MPA	31.0		L	-20	225	218	200	214.3				

STAMPING

We certify hereby that the above mentioned products are consistent with the order prescriptions.
Quality control ESP
M. Van Loon
Dr. W. Breitschuh

C02 Direction of the test piece in relation to the rolling direction (L = 0° - T = 90° - S = 45°)	C04 Condition (V = Aged - F = Fresh - N = Normalized)	C50 Bend test 1 = O.K.
Visual : O.K.	Measurement control : O.K.	Stamping : O.K.

A01 en A05 ARCELORMITTAL BREMEN GMBH KARL-BENZ-STRASSE 30 28237 BREMEN		A03 Number 94761 Datum 05/08/2014		A08 O/Ord N° 171935 Datum 13/05/2014		A07 Y/Ord N° TL-738/14 Datum 13/05/2014		Contract Nr.	
ARCELORMITTAL ESP HRSH Twee Molensstraat 8 2440 GEBEL 014241510 014285274		LEPPINEN STEEL TERASTIE 61400 YLLISTARO		LEPPINEN STEEL TERASTIE 61400 YLLISTARO		LEPPINEN STEEL TERASTIE 61400 YLLISTARO			
A06.1 Customer 61400 YLLISTARO		A06.1 LEPPINEN STEEL TERASTIE 61400 YLLISTARO		A06.2 Destination 61400 YLLISTARO		A06.2 Destination 61400 YLLISTARO			
A02 3.1 / EN10204 + KV		A02 3.1 / EN10204 + KV		A02 3.1 / EN10204 + KV		A02 3.1 / EN10204 + KV			
B01 - B04 SPECIFICATION MATERIAL - Item 2 TOL DKP-AMSTRONG355MC-O LT GEOLIED ARCELORMITTAL DKP-AMSTRONG355MC-O									

B09 Number Item	B11 Length mm	B12 Width mm	B13 Thick. mm
2	3000.000	1500.000	12.000

Package	1751814		
B07 COIL No	Coilnr. Mill Coil No	B08 Heat No	Number of pieces : Totale weight (kg) :
E 7150952	7150952 E 7150952	048565	6 2622
Groupage : 20140804040			

CHEMICAL ANALYSIS														HARDNESS TEST			
	C71	C72	C73	C74	C75	C76	C77	C78	C79	C80	C81	C82	C83	C84	C85	C89	C30
B07	B07.1	C	Mn	Si	P	S	N	Al	Nb	Ti	V	Cr	Cu	Ni	Mo	Cev	H
Mill coil No	Heat No	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	C32
E 7150952	048565	0.080	0.710	0.014	0.019	0.007	0.0052	0.039	0.0402	0.0014	0.0020	0.0001	0.040	0.040	0.006	0.215	

TENSILE TEST										BEND TEST					NOTCH TOUGHNESS				
	C03	C02	C11 yield stre	C12 tensile stre	C13 Ellongat	C14 Hardening	C15 Anisotropy	C50	C02	C03	C42	C42	C42	C42	C43	C43	C43		
B07	C03	C02	C11 yield stre	C12 tensile stre	C13 Ellongat	C14 Hardening	C15 Anisotropy	C50	C02	C03	C42	C42	C42	C42	C43	C43	C43		
Mill coil No	Direction	Direction	Rp0.2	Rm	A5.65	n90	r90		Direction	Test temp	KC1	KC2	KC2	KC3	Mean value				
E 7150952	F	L	405	496	31.0				L	-20	J	J	J	J	200	214.3			

STAMPING

We certify hereby that the above mentioned products are consistent with the order prescriptions.
Quality control ESP
M. Van Loon
Dr. W. Breitschuh

C02 Direction of the test piece in relation to the rolling direction (L = 0° - T = 90° - S = 45°)		C04 Condition (V = Aged - F = Fresh - N = Normalized)		C50 Bend test 1 = O.K.	
Visual : O.K.	Measurement control : O.K.	Stamping : O.K.			

A01 en A05 ARCELORMITTAL BREMEN GMBH CARL-BENZ-STRASSE 30 28237 BREMEN		A03 Number 94759 Datum 05/08/2014		A08 O/Ord N° 171935 Datum 13/05/2014		A07 Y/Ord N° TL-738/14 Datum 13/05/2014		Contract Nr.	
ARCELORMITTAL ESP HRSH Twee Molensstraat 8 2440 GREL 014241510 014285274		LEPPINEN STEEL TERASTIE 61400 YLISTARO		LEPPINEN STEEL TERASTIE 61400 YLISTARO		LEPPINEN STEEL TERASTIE 61400 YLISTARO			
A06.1 Customer		A06.1 LEPPINEN STEEL TERASTIE 61400 YLISTARO		A06.2 Destination		A06.2 LEPPINEN STEEL TERASTIE 61400 YLISTARO			
A02 3.1 / EN10204 + KV		A02 3.1 / EN10204 + KV		A02 3.1 / EN10204 + KV		A02 3.1 / EN10204 + KV			
B01 - B04 SPECIFICATION MATERIAL -Item 2 TOL DXP-AMSTRONG355MC-O IT GEOLIED ARCELORMITTAL DXP-AMSTRONG355MC-O									

B09 Number	Item	B11 Length mm	3000.000	B12 Width mm	1500.000	B13 Thick. mm	12.000
---------------	------	------------------	----------	-----------------	----------	------------------	--------

Package	1751815						
B07 COIL No	Coilnfr.	7150952		B08 Heat No	048565		
	Mill Coil No	E 7150952			Number of pieces : 6 Totale weight (kg) : 2624		
Groupage : 20140804039							

CHEMICAL ANALYSIS														HARDNESS TEST			
	C71	C72	C73	C74	C75	C76	C77	C78	C79	C80	C81	C82	C83	C84	C85	C89	C30
B07	B07.1	C	Mn	P	S	N	Al	Nb	Ti	V	B	Cr	Cu	Ni	Mo	Cev	H
Mill coil No	Heat No	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	C32
E 7150952	048565	0.080	0.710	0.014	0.019	0.007	0.0052	0.039	0.0402	0.0014	0.0001	0.049	0.040	0.040	0.006	0.215	

TENSILE TEST										BEND TEST					NOTCH TOUGHNESS				
	C04	C03	C02	C11 Yield stre	C12 tensile str	C13 Ellongat	C14 Hardening	C15 Anisotropy	C50	C02	C03	C42	C42	C42	C42	C43	C43		
Mill coil No	Conditio	Test temp	Direction	Rp0.2	Rm	A5.65	n90	n90	x90	Direction	Test temp	KC1	KC2	KC2	KC3	Mean value			
E 7150952	F	+20	L	405	496	31.0	A%			L	-20	225	218	200	214.3				

STAMPING

We certify hereby that the above mentioned products are consistent with the order prescriptions.
Quality control ESP
M. Van Loon
Quality control ARCELORMITTAL BREMEN GMBH
Dr. W. Breitschuh

C02 Direction of the test piece in relation to the rolling direction (L = 0° - T = 90° - S = 45°)		C04 Condition (V = Aged - F = Fresh - N = Normalized)		C50 Bend test 1 = O.K.	
Controls carried out:	Visual : O.K.	Measurement control : O.K.	Stamping : O.K.		

A01 en A05 ARCELORMITTAL BREMEN GMBH KARL-BENZ-STRASSE 30 28237 BREMEN		A03 Number 94750 Datum 05/08/2014		A08 O/Ord N° 171935 Datum 13/05/2014		A07 Y/Ord N° TL-738/14 Datum 13/05/2014		Contract Nr.	
ARCELORMITTAL ESP HRSH Twee Molensstraat 8 2440 GEEL 014241510 014285274		LEPPINEN STEEL TERASTIE 61400 YLISTARO		LEPPINEN STEEL TERASTIE 61400 YLISTARO		A06.2 Destination 61400 YLISTARO			
A06.1 Customer 61400 YLISTARO		LEPPINEN STEEL TERASTIE 61400 YLISTARO							
A02 3.1 / EN10204 + KV									
B01 - B04 SPECIFICATION - Item 2 TOL DKP-AMSTRONG355MC-O IT GEOLIED ARCELORMITTAL DKP-AMSTRONG355MC-O									

B09 Number	B11 Length mm	B12 Width mm	B13 Thick. mm
2	3000.000	1500.000	12.000

Package 1751819, 1751820, 1751821, 1751822, 1751823, 1751824, 1751826

B07
COIL No 7150889
Mill Coil No E 7150889

B08
Heat No 048565

Number of pieces : 54
Totale weight (kg) : 23628

Groupage : 20140804040

CHEMICAL ANALYSIS													HARDNESS TEST				
	C71	C72	C73	C74	C75	C76	C77	C78	C79	C80	C81	C82	C83	C84	C85	C89	C30
B07	C	Mn	%	P	S	N	Al	Nb	Ti	V	B	Cr	Cu	Ni	Mo	Cev	H
Heat No	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	C32
E 7150889	0.080	0.710	0.014	0.019	0.007	0.0052	0.039	0.0402	0.0014	0.0020	0.0001	0.049	0.040	0.040	0.006	0.215	

TENSILE TEST										BEND TEST					NOTCH TOUGHNESS				
	C03	C02	C11 yield stre	C12 tensile stre	C13 Elongat	C14 Hardening	C15 Anisotropy	C50	C02	C03	C42	C42	C42	C43	C43	C43	C43		
B07	Test temp	Direction	RP0.2	Rm	A5.65	n90	r90		Direction	Test temp	KC1	KC2	KC3	Mean value					
Mill coil No	C°		MPa	MPa	A%						C°	J	J	J	J	J	J		
E 7150889	+20	L	415	505	30.5				L	-20	225	252	266	247.7					

STAMPING

We certify hereby that the above mentioned products are consistent with the order prescriptions.
Quality control ESP
M. Van Loon

Quality control ARCELORMITTAL BREMEN GMBH
Dr. W. Breitschuh

C02 Direction of the test piece in relation to the rolling direction (L = 0° - T = 90° - S = 45°) C04 Condition (V = Aged - F = Fresh - N = Normalized) C50 Bend test 1 = O.K.

Controls carried out: Visual : O.K. Measurement control : O.K. Stamping : O.K.

A01 en A05 ARCELORMITTAL ATLANTIQUE RUE DU COMTE JEAN-GRANDE SYNTHÉ . . 59381 DUNKERQUE CEDEX 1		A03 Number 94759 Datum 05/08/2014		A08 O/Ord N° 171935 Datum 13/05/2014		A07 Y/Ord N° TL-738/14 Datum 13/05/2014		Contract Nr.	
ARCELORMITTAL ESP HRSH Twee Molensstraat 8 2440 GEEL 014241510 014285274		LEPPINEN STEEL TERASTIE 61400 YLISTARO		LEPPINEN STEEL TERASTIE 61400 YLISTARO		LEPPINEN STEEL TERASTIE 61400 YLISTARO			
A06.1 Customer		A06.1 LEPPINEN STEEL TERASTIE 61400 YLISTARO		A06.2 Destination		A06.2 LEPPINEN STEEL TERASTIE 61400 YLISTARO			
A02 3.1 / EN10204 + KV									
B01 - B04 SPECIFICATION - Item 2 TOL DKP-AMSTRONG355MC-O IT GEOLIED ARCELORMITTAL DKP-AMSTRONG355MC-O MATERIAL									

B09 Number	Item	B11 Length mm	B12 Width mm	B13 Thick. mm
	2	3000.000	1500.000	12.000

Package	1751830, 1751831, 1751833, 1751834, 1751829, 1751834, 1751834, 1751832, 1751836, 1751835, 1751838
B07 COIL No	Coilnr. 7151120 Mill Coil No 27428600
B08 Heat No B173048738	
B09 Number of pieces : 56 Totale weight (kg) : 24506	
Groupage : 20140804039	

CHEMICAL ANALYSIS													HARDNESS TEST				
	C71	C72	C73	C74	C75	C76	C77	C78	C79	C80	C81	C82	C83	C84	C85	C89	C30
B07	C	Mn	Si	P	S	N	Al	Nb	Ti	V	B	Cr	Cu	Ni	Mo	Cev	H
Mill Coil No	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	C32
27428600	B173048738	0.070	0.708	0.015	0.012	0.005	0.0047	0.040	0.0414	0.0013	0.0005	0.045	0.036	0.034	0.008	0.203	

TENSILE TEST										BEND TEST					NOTCH TOUGHNESS				
	C04	C03	C02	C11 yield stre	C12 tensile str	C13 Elongat	C14 hardening	C15 Anisotropy	C50	C02	C03	C42	C42	C42	C43	C43	C43		
Mill coil No	Conditio	Test temp	Direction	Rp0.2	Rm	A5.65	n90	r90		Direction	Test temp	KC1	KC2	KC3	Mean value				
27428600	F	+20	L	410	501	30.0				L	-20	212	211	156	193.0				

STAMPING

We certify hereby that the above mentioned products are consistent with the order prescriptions.
Quality control ESP
M. Van Loon

C02 Direction of the test piece in relation to the rolling direction (L = 0° - T = 90° - S = 45°)		C04 Condition (V = Aged - F = Fresh - N = Normalized)		C50 Bend test 1 = O.K.	
Visual : O.K.	Measurement control : O.K.	Stamping : O.K.			