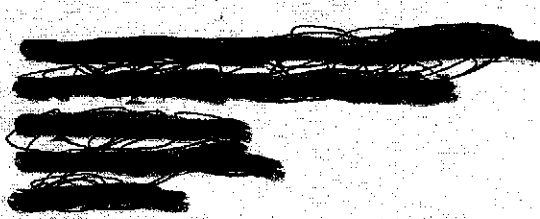


# TECHNIPLATE ELECTROPLATERS

SABS ISO 9001/2000

SOUTH AFRICA



## COMPLIANCE CERTIFICATE

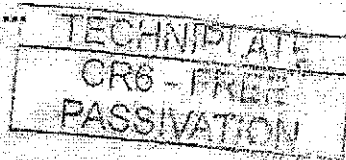
CERTIFICATE NO: 140699

BIN NO: LINE 11

WE HEREBY CERTIFY THAT THE ITEMS NOTED BELOW COMPLY WITH THE  
STATED SPECIFICATION

Description	Part No	Batch No	Specification.	Plating Thickness Min. & Max.
Weight 1304 kg 20MM HT	DIN 934 NUTS	3628	Zinc plated and Trivalent Blue Passivated To minimum of 8 microns to Withstand 96 hours SALT SPRAYTEST For Red Rust	8-10 Microns

Signed:   
Quality Assurance  
Techniplate Electroplaters



# TECHNIPLATE ELECTROPLATERS

SABS ISO 9001/2000


## COMPLIANCE CERTIFICATE

CERTIFICATE NO: 204112

BIN NO: 0

WE HEREBY CERTIFY THAT THE ITEMS NOTED BELOW COMPLY WITH THE  
STATED SPECIFICATION

Description	Part No	Batch No	Specification	Plating Thickness Min. & Max.
16MM H/T NUTS Weight: 1,000 kg	0	5758	Zinc Plated 5 to 9 Mic. Passivated blue Cr6 Free (Tri-Valent) to min 5 mic thick to withstand 96 Hours Salt spray Test to Red Rust	Min: 7 Max: 10 Microns

Signed   
Quality Assurance  
Techniplate Electroplaters  
350 Toop Street

# MATERIAL IDENTIFICATION CERTIFICATE

This document complies to BS EN 10204 3.1

**NAME AND ADDRESS OF SENDER**  
 ArcelorMittal South Africa Limited 1989/002164/06  
 Newcastle Works Iscor Road, Newcastle 2940, South Africa

**CERT. NO. / NL** 2083941  
**ORDER NO.** 18NE 2083941  
**CUSTOMER NO.** 7299/4  
**TRUCK NO.** 11277  
**SAP ORD NO.** 1500184418

**CUSTOMER**

**NAME AND ADDRESS OF CONSIGNEE**

**DESCRIPTION OF GOODS**

# Profile: Bolt and Nut Rounds Coll'd 22 mm  
 # Specification: SAE/ASTM 1015  
 C 11/17 Mn 30, 60 P/S 025X SL 05X AL 09/07 N 008X  
 # LENGTH: mm  
 # TOLERANCE: SPE 231

## CHEMICAL ANALYSIS

Chem	C	Mn	P	S	Si	Al	Nb	Cr	N	Cu	Ni	Mo	V	Ti	Sa	B	Ca	As	Sb	Pb	H#	CEV#	Date Tested
1204453	0.13	0.36	0.012	0.003	0.02	0.034		0.010	0.004	0.007	0.010	0.001											

## MECHANICAL PROPERTIES AND METALLURGICAL RESULTS

Cast	Rel MPa	Rm MPa				A %	Z %	Impact: (J)			Hardness		Bend	Rehard	Grain Sz ASTM	Decarb (mm)		Jominy	Inclusion ASTM E45 Method A					Gross man Factor
		Ave	Min	Max	Std Dev			Ave	Min	Max	HBW	HRB				Ave	Max		A	B	C	D	H	
1204453																								

Rel: Yield Stress Rm: Tensile Strength A: Elongation

Z: Reduction of Area

HB: Brinell Hardness

CEV: Carbon Equivalent Value

### STANDARD REMARKS:

Inclusions: conforms to ASTM E45 level 2 max (type A - D).

M16 DIN 934 H4 Nuts BLK 12RL 14HDG

ISO 9001:2008 CERTIFICATION (QMS CERTIFICATION SYSTEM) THE MATERIAL HEREIN HAS BEEN MADE USING THE BASIC OXYGEN PROCESS AND CONTINGUOUSLY CAST. SAMPLING IS EXECUTED BY THE PLANT ACCORDING TO THE SPECIFICATION REQUIREMENTS TESTING IS CONDUCTED BY SANAS. ISO 17025:2005 ACCREDITATION TESTING IS PERFORMED ACCORDING TO THE PATTERNS AND SAMPLING REQUIREMENTS AND ADDITIONAL CUSTOMER REQUIREMENTS FOR THE MATERIAL. A COPY OF THE DCS CERTIFICATE IS AVAILABLE UPON REQUEST (NOT ACCREDITED) BY SANAS. EN 10004-1:2003 AND EN 10004-2:2003. ITENS MARKED # ARE NOT SANAS ACCREDITED. UNIFORMITY AND HNC VALUES ARE AVAILABLE ON REQUEST.

### 3 - Revision 3.0

Figure 1 is a scatter plot with 'Number of children in the household' on the x-axis (ranging from 0 to 10) and 'Number of children in the neighborhood' on the y-axis (ranging from 0 to 10). The plot shows a positive correlation between the two variables. The size of the dots represents the number of children in the neighborhood, with larger dots indicating a higher number of children in the neighborhood. The data points are scattered, with a slight positive correlation.

1. The first step in the process is to identify the problem or issue that needs to be addressed. This involves gathering information and understanding the context of the problem.

[illegible]

Arceion Millat South Africa Newcastle Works Iscor Road, Newcastle, 2940, South Africa

NAME AND ADDRESS OF CONSIGNEE

DESCRIPTION OF GOODS

**Profile:** Bolt and Nut Rounds Coiled .28 mm

Specification: SAE/ASTM 1015  
C11/17 Mr 30/ 60 P/5 025x Si 05x Al 03/ 07 N 008x

LENGTH: mm

TOLERANCE: SPE 23

# CHEMICAL ANALYSIS

[illegible]

## MECHANICAL PROPERTIES AND METALLURGICAL RESULTS

Cast	Reel	Rm				A	Z	Impact Test	Hardness		Bend	Retend	Grain Size	Decarb.		Jominy	Inclusion ASTM E46 Method A								Gross-man Factor#
		MPa		HB	Min				Max	min				Max	A		B	C	D						
		Ave	Min					Max			Sat Dev	%	%			Ave				Max	T	H	T	H	T
0802117	256	376	375	378		37	64						ASTM												

STANDARD REMARKS:

100

Age Group	1970	1980	1990	2000	2010	2020
0-14	20	18	15	12	10	10
15-24	15	14	13	12	11	10
25-34	12	11	10	9	8	7
35-44	10	9	8	7	6	5
45-54	8	7	6	5	4	3
55-64	6	5	4	3	2	1
65+	10	12	15	18	22	25

SANA

**Inclusions:** conforms to ASTM E45 level 2 max (type A - D)

3 DIN 934, Class 8  
M20 x 2,5P  
M20 x 1,5P

**EDMUND KHMALO  
PRODUCT CERTIFICATION**

S A N A  

 NATIONAL AERONAUTICS  
 AND SPACE ADMINISTRATION  
 WASHINGTON, D. C. 20546

[illegible]

This certificate is issued with the ArceomMital logo in colour and without erasure or alteration

**ArcelorMitt**