



STANDARD PRODUCTS OF NALCO

BILLETS:HOMOGENISED BILLETS

SL .NO	PRODUCT	PRODUCT DESCRIPTION	SPECIFICATION											PRODUCT CODE
			% Si	%Fe	%Cu	%Mn	%Mg	%Zn	%Ti	%Cr	%Sr	% Other Impurities Each	% Other Impurities Total	
1	CH01 Cut Length	Aluminium Billets (CH01)	0.30 to 0.70	0.50 max	0.05 max	0.03 max	0.40 to 0.90	0.10 max	0.10 max	0.03 max	-	0.10 max	-	CH01
2	CH 10 Cut Length	Aluminium Billets (CH10)	0.38 to 0.48	0.10 to 0.20	0.02 max	0.03 max	0.47 to 0.57	0.03 max	0.02 max	0.03 max	-	0.03 max	0.10 max	CH10
3	CH 11 Cut Length	Aluminium Billets (CH10)	0.38 to 0.48	0.10 to 0.20	0.02 max	0.03 max	0.47 to 0.57	0.03 max	0.04 max	0.03 max	-	0.03 max	0.10 max	CH11
4	CH 16 Cut Length	Aluminium Billets (CH16)	0.25 max	0.35 max	0.05 max	0.03 max	0.03 max	0.05 max	0.03 max	%V= 0.05 max	-	0.03 max	%Al= 99.60 min	CH16
5	CH 20 Cut length	Aluminium Billets (CH20)	0.49 to 0.55	0.15 to 0.25	0.02 max	0.03 max	0.58 to 0.70	0.03 max	0.02 max	0.03 max	-	0.03 max	0.10 max	CH20
6	CH 51 Cut Length	Aluminium Billets (CH51)	0.60 to 1.30	0.60 max	0.10 max	0.40 to 1.00	0.40 to 1.20	0.10 max	0.20 max	0.25 max	-	-	-	CH51
7	CH60 Cut Length	Aluminium Billets (CH60)	0.30 to 0.60	0.10 to 0.30	0.10 max	0.10 max	0.35 to 0.60	0.15 max	0.10 max	0.05 max	-	0.05 max	-	CH60
8	CH 63 Cut length	Aluminium Billets (CH63)	0.30 to 0.70	0.60 max	0.10 max	0.30 max	0.40 to 0.90	0.20 max	0.20 max	0.10 max	-	-	-	CH63
9	CH 61 Cut Length	Aluminium Billets (CH61)	0.40 to 0.80	0.70 max	0.15 to 0.40	0.15 max	0.80 to 1.20	0.25 max	0.15 max	0.04 to 0.35	-	0.05 max	0.15 max	CH61
10	CH 64 Cut Length	Aluminium Billets (CH64)	0.43 to 0.53	0.35 max	0.10 max	0.10 max	0.46 to 0.52	0.10 max	0.10 max	0.10 max	-	0.05 max	0.15 max	CH64



STANDARD PRODUCTS OF NALCO

SL. NO	PRODUCT	PRODUCT DESCRIPTION	SPECIFICATION											PRODUCT CODE
			% Si	%Fe	%Cu	%Mn	%Mg	%Zn	%Ti	%Cr	% Sr	% Other Impurities Each	% Other Impurities Total	
11	CH 65 Cut Length	Aluminium Billets (CH65)	0.44 to 0.60	0.35 max	0.10 max	0.10 max	0.39 to 0.51	0.10 max	0.10 max	0.10 max	-	0.05 max	0.15 max	CH65
12	CH 82 Cut Length	Aluminium Billets (CH82)	0.70 to 1.3	0.50 max	-	0.40 to 1.0	0.60 to 1.2	-	-	-	-	-	-	CH82
13	CH05 Cut Length	Aluminium Billets (CH05)	0.60 To 1.0	0.35 max	0.10 max	0.10 max	0.45 To 0.80	0.10 max	0.10 max	0.10 max	-	0.05 max	0.15 max	CH05
14	CH50	Aluminium Billets (CH50)	0.25 max	0.40 max	0.05 max	0.05 max	0.05 max	0.05 max	0.03 max	%V = 0.05 max	-	0.03 max	%Al= 99.50 min	CH50
15	CH70	Aluminium Billets (CH70)	0.20 max	0.25 Max	0.04 max	0.03 max	0.03 max	0.04 max	0.03 max	%V = 0.05 max	-	0.03 max	%Al= 99.70 min	CH70
16	CH90	Aluminium Billets (CH90)	0.40 To 0.45	0.15 To 0.18	0.02 max	0.01 To 0.05	0.40 To 0.45	0.03 max	0.03 max	0.03 max	-	0.03 max	0.10 max	CH90
17	CH91	Aluminium Billets (CH91)	0.40 To 0.48	0.10 To 0.30	0.02 max	0.05 max	0.47 To 0.57	0.03 max	0.02 max	0.03 max	0.05 max	-	-	CH91

PACKING The Billets will be strapped on Wooden Runners .The no. of pieces in each bundle and bundle weight will depend upon the cut length .

DIMENSIONS

- **DIAMETER**

- 127 mm ± 1.5 mm
- 152 mm ± 1.5 mm
- 178 mm ± 1.5 mm
- 203 mm ± 1.5 mm
- 229 mm ± 1.5 mm
- 254 mm ± 1.5 mm



NATIONAL ALUMINIUM COMPANY LIMITED
SMELTER PLANT , ANGUL ,ORISSA

STANDARD PRODUCTS OF NALCO

DOC/QC/SPEC/01/BILLET ISSUE No 004.Rev 06

PAGE 3 OF 3

- **LENGTH** Up to 5800 mm with a tolerance of ± 5 mm for every 1000 mm length or part thereof
- **SQUARENESS** 1mm max. per 100 mm diameter
- **BOW** 2mm per meter with 10mm max. per log

LIST OF ABBREVIATIONS

ABBREVIATION	EXPANDED FORM	ABBREVIATION	EXPANDED FORM
Al	Aluminium	Imp	Impurities
Approx	Approximate	Max	Maximum
Cr	Chromium	Min	Minimum
Cu	Copper	Mg	Magnesium
Fe	Iron	Mn	Manganese
Sl.No	Serial Number	Ni	Nickel
Ti	Titanium	OI	Other Impurities
Si	Silicon	Zn	Zinc
Sr	Strontium	V	Vanadium