

Bid invitation

Information

Description: CHANNEL ISMC 100X50X5 MM

Bid invitation number: 6300040003

Version: 1

Bid invitation rules

Bid invitation currency: INR

Timezone: INDIA

Submission period: 09.10.2025 14:00:00

Opening date: 09.10.2025 14:30:00

Created On: 07.10.2025 06:23:50

Bid invitation text:

Material to be supplied as per specification attached to this tender. Otherwise material will be rejected.

Attachments:

Specification

Digital Signature

Bid invitation details

Item	Product	Description	Vendor product number	Delivery date/ performance period	Quantity
1	C100128100	HR IS:2062 CHANNEL ISMC 100X50X5 MM		13.10.2025 00:00:00	3.840 TO
	IGST -Integrated GST	%			
	SGST - State GST	%			
	UTGST	%			
	Basic Price	INR			
	CGST - Central GST	%			

BEML LIMITED

(A Govt. of India Mini Rathna Company under Ministry of Defence)

BEML Soudha, 23/1, 4th Main Road, SR Nagar, Bangalore 560 027.

Phone 080-22963179 email: lakshmana.murthy@bemltd.in

Quotation through GeM platform is invited only from OE / OE authorized firms / Class I steel manufacturers/ Traders for the supply of item as per specification/QAP.

Sl.	Part no	Specification	Shape	BEML STD/Spec	Qty in Kgs	Plant
1	C100128100	HR IS:2062 CHANNEL ISMC 100X50X5 MM	Chanel	C1001-28	3840	KGF

QAP, BEML STD attached in Annexure

Bidders shall submit the QAP /STD accepting parameters with seal & signature for the technical Evaluation. Failing to submit the QAP & TDC, bidder will be disqualified.

Terms& condition

Sl. No.	Particulars	Terms	Bidder Confirmation (Yes/No)
1	Material Grade	As per the material indicated at table above.	
2	Quote	Rate to be quoted as per tendering unit only, including GST.	
3	Delivery Terms	F.o.R BEML – EM Div. EM KGF	
4	Delivery Schedule	Oct'2025.	
5	Payment terms	60 days on receipt & acceptance. For MSME firms, as per MSME act.	
6	MOQ	Buyer may quote MOQ, however, final qty is on BEML discretion.	
7	Local content	Firm shall submit the local content 50% as per Make in India for Class I and 20% for Class II Supplier	
8	Mill TC/ NABL TC	Bidder shall supply material with Mill / NABL TC.	
9	Bidder criteria	Only OE mills / Class -I manufacturer / Traders having BEML vendor code are invited.	
10	Deferent Clause	PO is subject to deferment, re-scheduling, cancellation, Short / Pre-closure based on equipment sales order.	

Bidder's confirmation

I hereby confirm to supply the item as per above tender conditions

Seal & signature



EM DIVISION

QUALITY ASSURANCE PLAN

Sheet No: 1 of 4

MODEL

DOC No.

QAP/C1001RM

PART NAME

C1001 CHANNEL

ISSUE No.

01

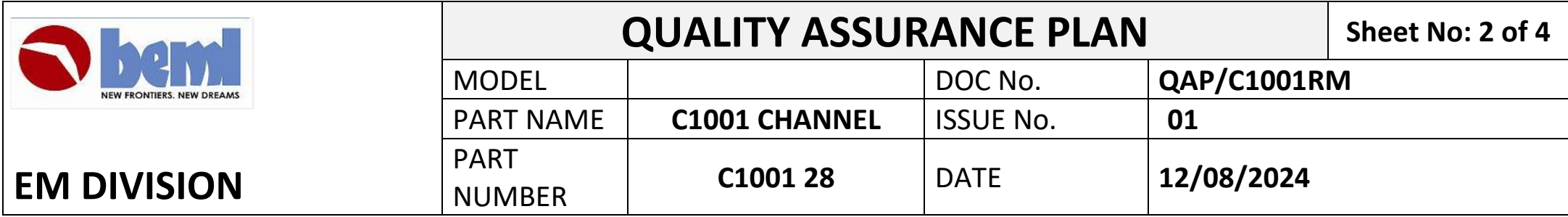
PART
NUMBER

C1001 28


DATE

12/08/2024


Sl. No.	Components / Operation	Characteristics to be assessed	Type / method of Check	Quantum of Check	Reference Standards or Documents	Acceptance Norms	Format of records	Inspection on scope												
							Supplier	BEML												
1	HOT ROLLED CHANNELS	Manufacturing route	MILL TC	--	Hot rolling process	MILL TC	P	R												
2		Chemical Composition	CHEMICAL ANALYSIS (SPECTROMETER/ WET ANALYSIS)	One sample/ heat /cast batch	One sample per heat/cast batch shall be checked for chemical composition and shall conform to the company standard C1001 as below as mentioned in & reports to be submitted along with supply <table border="1"><tr><td>Elements</td><td>Requirement</td></tr><tr><td>C</td><td>0.24 Max</td></tr><tr><td>Si</td><td>0.43 Max</td></tr><tr><td>Mn</td><td>1.55 Max</td></tr><tr><td>S</td><td>0.05 Max</td></tr><tr><td>P</td><td>0.05 Max</td></tr></table> Total Micro alloy elements(Ti, V,Nb,B etc)shall not exceed 0.25% Nitrogen content shall not exceed 0.012% Copper may be present up to 0.20% Max Supplier shall ensure that elements not indicated above shall not present in product	Elements	Requirement	C	0.24 Max	Si	0.43 Max	Mn	1.55 Max	S	0.05 Max	P	0.05 Max	MILL TC/ NABL LAB REPORT	P	R
Elements		Requirement																		
C	0.24 Max																			
Si	0.43 Max																			
Mn	1.55 Max																			
S	0.05 Max																			
P	0.05 Max																			
3	Carbon equivalent	Carbon equivalent calculation from chemistry		0.41 Max	Mill TC/NABL lab report	P	R													



Sl. No.	Components / Operation	Characteristics to be assessed	Type / method of Check	Quantum of Check	Reference Standards or Documents	Acceptance Norms	Format of records	Inspection scope
							Supplier	BEML
4	HOT ROLLED CHANNELS	Mechanical properties	Mechanical properties testing on specimen	One sample/ heat /cast batch	One sample per heat/cast batch shall be checked for Mechanical properties as per C1001 standard	Mill TC/NABL lab report	P	R
					Parameters	requirements		
					Ultimate Tensile strength, MPa	410 Min		
					Yield strength ,Mpa	250 Min		
					% Elongation	23 Min		
					Bend test	Intenal bend diameter 2T (T Thickness of plate) for plate thickness less than 25 mm] Intenal bend diameter 3T (T Thickness of plate) for plate thickness above 25 mm]		
5		DIMENSIONS & TOLERANCES	MEASUREMENT	SAMPLING PLAN	Dimensions of equal angles as per IS 808 Permissible limits for camber & sweep shall be 0.2% of the length Tolerance on depth of channels shall be as follows	Dimension report	P	R
					DEPTH	TOLERANCES		
					Up to & including 200 mm	± 2.5 mm		
					Above 200 up to & equal to 400 mm	± 3.0 mm		

 EM DIVISION	QUALITY ASSURANCE PLAN				Sheet No: 3 of 4
	MODEL		DOC No.	QAP/C1001RM	
	PART NAME	C1001 CHANNEL	ISSUE No.	01	
	PART NUMBER	C1001 28	DATE	12/08/2024	

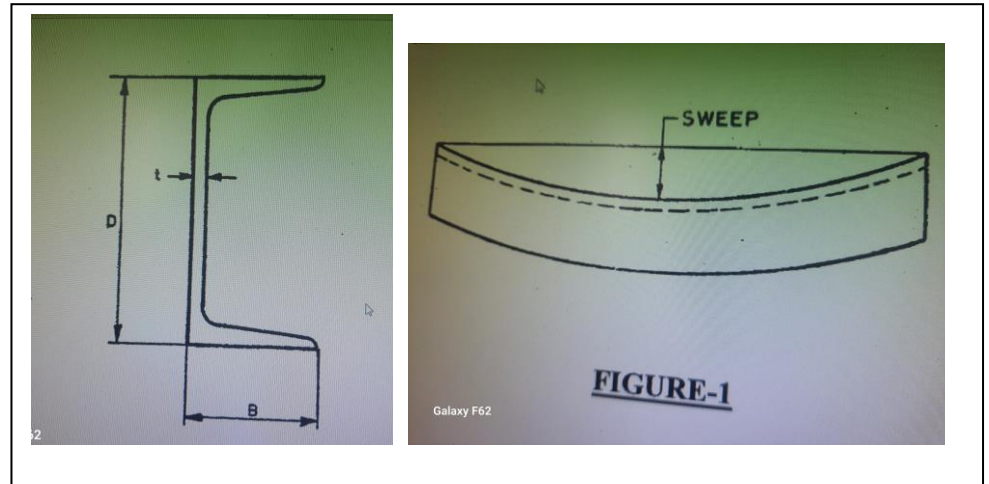
Sl. No.	Components / Operation	Characteristics to be assessed	Type / method of Check	Quantum of Check	Reference Standards or Documents	Acceptance Norms	Format of records	Inspection scope				
							Supplier	BEML				
6	HOT ROLLED CHANNELS	DIMENSIONS & TOLERANCES	MEASUREMENT	SAMPLING PLAN	The tolerances on flange width up to & including 100 mm shall be ± 2.0 mm Out of squareness or out of parallel: the flange shall be parallel with in the tolerance of 1 in 60 Flatness of web : The tolerances on flatness of outer surface of web shall be as follows <table border="1"><tr><td>Convexity</td><td>Not permitted</td></tr><tr><td>Concavity</td><td>15% of Nominal thickness of web</td></tr></table> Tolerances shall be as per latest issuances IS1852	Convexity	Not permitted	Concavity	15% of Nominal thickness of web	DIMENSION CHECK SHEET	P	R
Convexity						Not permitted						
Concavity						15% of Nominal thickness of web						
7												
8												
9												
10												
		WEIGHT	MEASUREMENT	100%	In the case of channels tolerances on weight per meter shall be ± 2.5%	DIMENSION CHECK SHEET	P	R				
		VISUAL EXAMINATION	Visual	100 % ON ALL BARS	Material shall be free from defects such as lamination, crabs, cracks, Mill scale & rust. No weld repairs are permitted	TEST REPORT	P	R				
		MARKING	VISUAL	100 % ON ALL BARS	All material in each consignment shall be suitably marked to identify the supplier, material grade, size & length.	--	P	R				

 EM DIVISION	QUALITY ASSURANCE PLAN			Sheet No: 4 of 4
	MODEL		DOC No.	QAP/C1001RM
	PART NAME	C1001 CHANNEL	ISSUE No.	01
	PART NUMBER	C1001 28	DATE	12/08/2024

Sl. No.	Components / Operation	Characteristics to be assessed	Type / method of Check	Quantum of Check	Reference Standards or Documents	Acceptance Norms	Format of records	Inspection scope
							Supplier	BEML

Note: Sampling Plan: As per IS: 2500- 2000, Part 1, Level -II. Details mentioned in below.

Lot Size in Nos.	Sample Size in Nos.	AQL	P - Perform the Activity W - Witnessing of Activity R - Reviewing of QA Report A - Audit check the activity
2 ~ 50	8	1.5%	
51 ~ 90	13	1.0%	
91~150	20	0.65%	
151~280	32	0.40%	
281~500	50	0.25%	
501~1200	80	0.15%	
1201~3200	125	0.10%	
3201~10000	200	0.065%	



Prepared By :	Checked By :	Reviewed By :	Approved By :
C.VASANTHAKUMAR Sr. Manager – Receiving Quality	MAHESH KULKARNI DGM – Receiving Quality		Chief of Quality Engineering



COMPANY STANDARDS

AMENDMENT No. 01

TITLE:

C1001- CHANNELS, HOT ROLLED

DATE: 2020-09-28

STD No. C1001-28

AMENDMENT SHEET - 1/1

ISSUE No. 02

In page 4 of 4, add the following sizes in TABLE - 1:

TABLE - 1, DESIGNATIONS FOR DIFFERENT SIZES

SL. No	Depth of Channel (D), mm	Width of flange (B), mm	Thickness of Web (t), mm	Mass, kg/m	Designation
9	380	85	10	44.8	C100128380

Ref: GEH Mail, dated 12.01.2019

APPROVED BY:


GE



COMPANY STANDARDS

C1001-28

TITLE:

C1001 - CHANNELS,
HOT ROLLED

PAGE No. 01 OF 04

DATE: 2008-09-13

0. GENERAL INFORMATION :

- This is a branch standard of Company Standard C1001 Issue-03 and is meant for channels, hot rolled.
- The quality requirements of the steel grades shall be as per C1001 Issue-03.
- This Issuance supersedes C1001-28 Issue-01 dated 1994-01-10 and incorporates subsequent amendment.
- This revision is necessitated consequent to the revision of Company Standard C1001 / IS : 2062.

1. SCOPE :

This standard provides supply conditions, material, designation, dimensions and tolerances and marking of channels, hot rolled, of different depths and widths. 'Channels' fall under the category of 'Indian Standard Medium Weight Channels (ISMC) of IS : 808.

2. CONDITION OF SUPPLY :

- The steel grades used shall conform to grade A or B of Company Standard C1001 Issue-03 / IS : 2062.
- Weld repairs to eliminate surface flaws is not permitted.
- Material shall be supplied to the dimensions as specified in the Purchase Order / Contract.
- Material supplied shall be free from heavy rust, corrosion pitting, surface flaws such as seams and cracks, laminations, imperfect edges and other harmful defects. Channels shall also be free from twists and bends.

3. MATERIAL :

The material shall conform to grade A or B of Company Standard C1001 Issue-03 'Medium Strength Structural Steel'.

PREPARED BY:CSD/
CFWC-MATERIALS

ISSUE No. :
02

REPLACES:
--

REF :
IS : 808

APPROVED BY :

G

ED (E)

D (M)

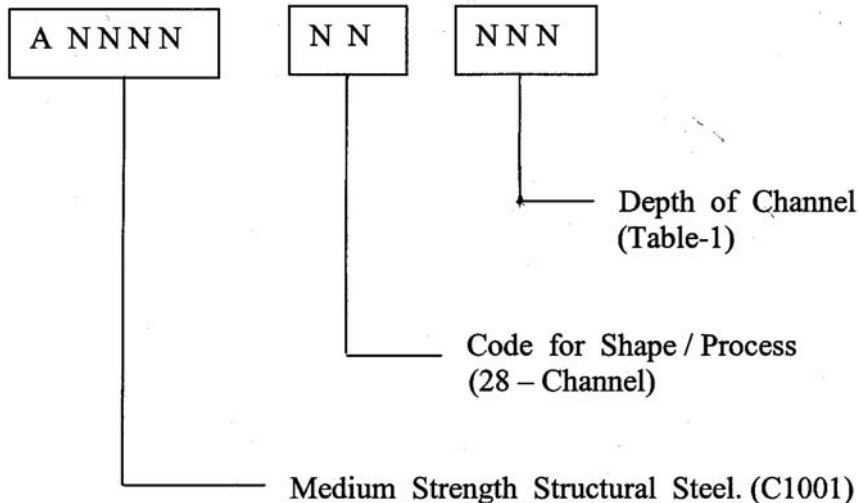
4. DESIGNATION :

A channel is designated by 10 – digit code.

The first 5 digits pertain to the material. 6th and 7th digits signify shape/process. The last 3 digits signifies the depth of the channel in mm.

Example :

A channel having depth of 75 mm shall be designated as C100128075 and depth of 250 mm shall be designated as C100128250.

**5. DIMENSIONS AND TOLERANCES :**

Sizes of channels shall be as indicated in Figure-2 and Table-1 along with the corresponding designations. Sectional properties shall be as per IS : 808 'Dimensions for hot rolled channel sections'.

6. LENGTH :

Unless otherwise specified in the Purchase Order / Contract, hot rolled channels shall be supplied in 3 to 5 meters length.

7. TOLERANCES :

The tolerances on depth, width of flange, out of square or out of parallel, flatness of web, camber & sweep and weight shall be as per the following clauses :

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- 7.1 CAMBER AND SWEEP :** The maximum permissible camber and sweep for channels shall be 0.20 percent of the length. (Figure-1)

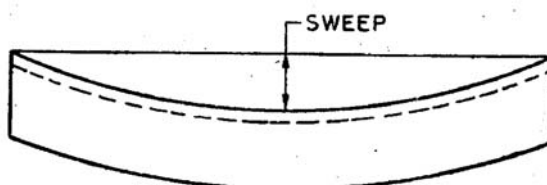


FIGURE-1

- 7.2 DEPTH :** The tolerances on depth of channels shall be as follows :

Depth	Tolerance
Upto and including 200 mm	± 2.5 mm
Over 200 mm and upto and including 400 mm	± 3.0 mm

- 7.3 WIDTH OF FLANGE :** The tolerance on flange width upto and including 100 mm shall be ± 2.0 mm.

- 7.4 OUT OF SQUARE OR OUT OF PARALLEL :**

The flanges shall be parallel within the tolerance of 1 in 60.

- 7.5 FLATNESS OF WEB :** The tolerance on flatness of outer face of web shall be as follows :

Convexity	not permitted
Concavity	15 percent of nominal thickness of web

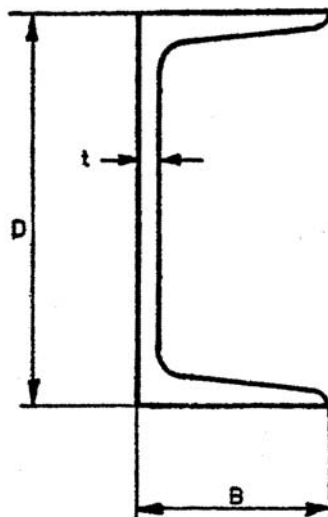
- 7.6 WEIGHT :**

In the case of channels tolerances on weight per metre shall be ± 2.5 percent.

- 7.7** Unless otherwise specified, tolerance shall be as per latest issuance of IS : 1852 'Rolling and cutting tolerances for hot rolled steel products'.

- 8. COLOUR CODE :**

As only channels of a single material are being procured, no colour codification is necessary.

**FIGURE - 2****TABLE-1****DESIGNATIONS FOR DIFFERENT SIZES**

SL No	Depth of Channel (D) mm	Width of Flange (B) mm	Thickness of Web (t) mm	Mass kg/m	Designation
1	75	40	4.8	7.14	C100128075
2	100	50	5.0	9.56	C100128100
3	125	65	5.3	13.10	C100128125
4	150	75	5.7	16.80	C100128150
5	175	75	6.0	19.60	C100128175
6	200	75	6.2	22.30	C100128200
7	* 250	83	11.0	38.10	C100128250
8	300	90	7.8	36.30	C100128300

* - Heavy section

9. MARKING :

The supplies shall be suitably marked to identify the following :

Manufacturer's Name / Trade Mark

Grade of material

Size

Heat number

--oOo--

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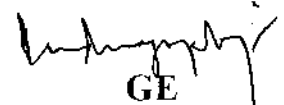
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TABLE - 1, DESIGNATIONS FOR DIFFERENT SIZES

SL. No	Depth of Channel (D), mm	Width of flange (B), mm	Thickness of Web (t), mm	Mass, kg/m	Designation
9	380	85	10	44.8	C100128380

Ref: GEH Mail, dated 12.01.2019

APPROVED BY:


GE



NEW FRONTIERS. NEW DREAMS

COMPANY STANDARDS

TITLE:

C1001 - CHANNELS,
HOT ROLLED

C1001-28

PAGE No. 01 OF 04

DATE: 2008-09-13

0. GENERAL INFORMATION :

- a) This is a branch standard of Company Standard C1001 Issue-03 and is meant for channels, hot rolled.
- b) The quality requirements of the steel grades shall be as per C1001 Issue-03.
- c) This Issuance supersedes C1001-28 Issue-01 dated 1994-01-10 and incorporates subsequent amendment.
- d) This revision is necessitated consequent to the revision of Company Standard C1001 / IS : 2062.

1. SCOPE :

This standard provides supply conditions, material, designation, dimensions and tolerances and marking of channels, hot rolled, of different depths and widths. 'Channels' fall under the category of 'Indian Standard Medium Weight Channels (ISMC) of IS : 808.

2. CONDITION OF SUPPLY :

- a) The steel grades used shall conform to grade A or B of Company Standard C1001 Issue-03 / IS : 2062.
- b) Weld repairs to eliminate surface flaws is not permitted.
- c) Material shall be supplied to the dimensions as specified in the Purchase Order / Contract.
- d) Material supplied shall be free from heavy rust, corrosion pitting, surface flaws such as seams and cracks, laminations, imperfect edges and other harmful defects. Channels shall also be free from twists and bends.

3. MATERIAL :

The material shall conform to grade A or B of Company Standard C1001 Issue-03 'Medium Strength Structural Steel'.

PREPARED BY:CSD/
CFWC-MATERIALSISSUE No. :
02

REPLACES:

--

REF :

IS : 808

APPROVED BY :

G
ED (E)
D (M)

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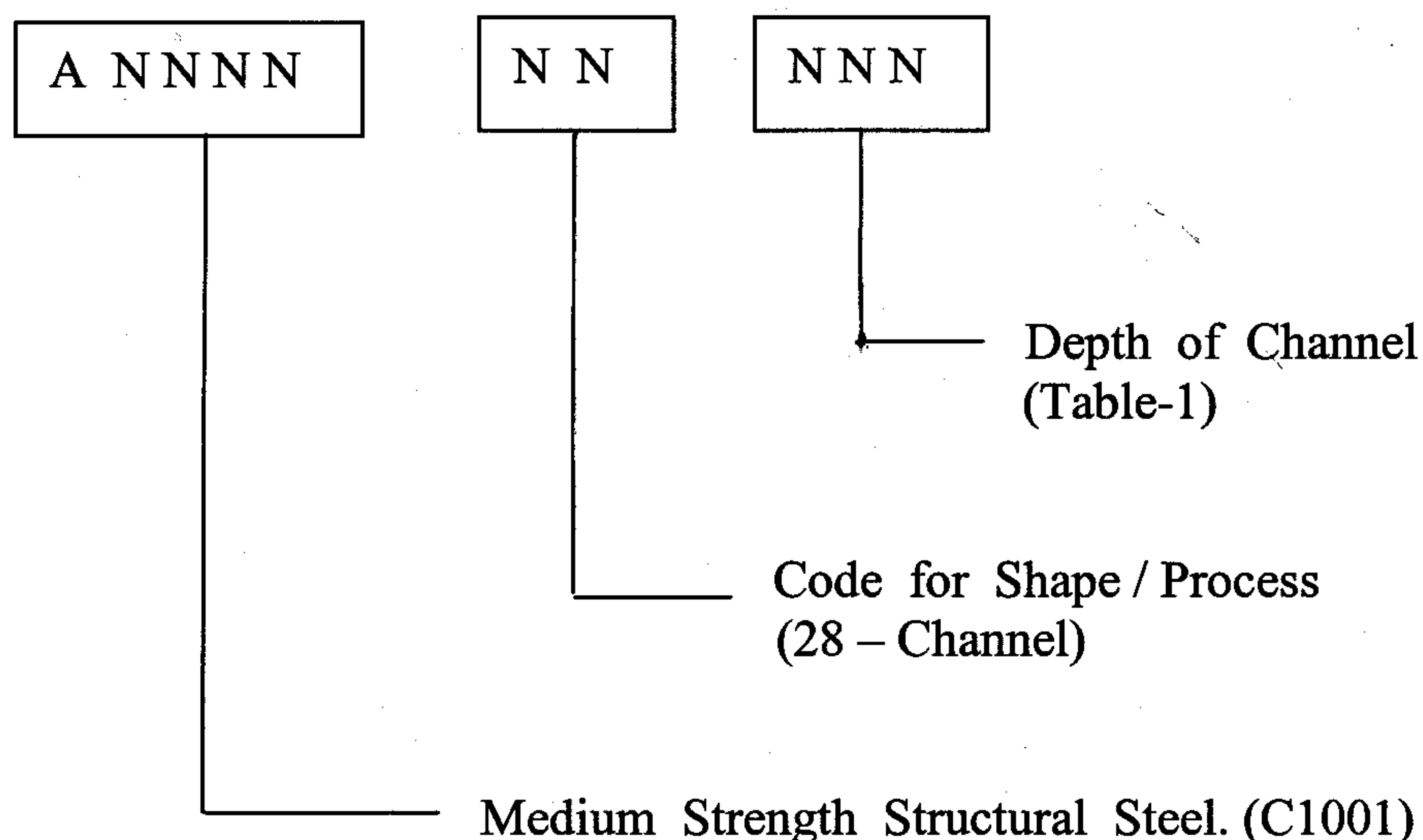
4. DESIGNATION :

A channel is designated by 10 – digit code.

The first 5 digits pertain to the material . 6th and 7th digits signify shape/ process. The last 3 digits signifies the depth of the channel in mm.

Example :

A channel having depth of 75 mm shall be designated as C100128075 and depth of 250 mm shall be designated as C100128250.

**5. DIMENSIONS AND TOLERANCES :**

Sizes of channels shall be as indicated in Figure-2 and Table-1 along with the corresponding designations. Sectional properties shall be as per IS : 808 'Dimensions for hot rolled channel sections'.

6. LENGTH :

Unless otherwise specified in the Purchase Order / Contract, hot rolled channels shall be supplied in 3 to 5 meters length.

7. TOLERANCES :

The tolerances on depth, width of flange, out of square or out of parallel, flatness of web, camber & sweep and weight shall be as per the following clauses :

- 7.1 **CAMBER AND SWEEP :** The maximum permissible camber and sweep for channels shall be 0.20 percent of the length. (Figure-1)

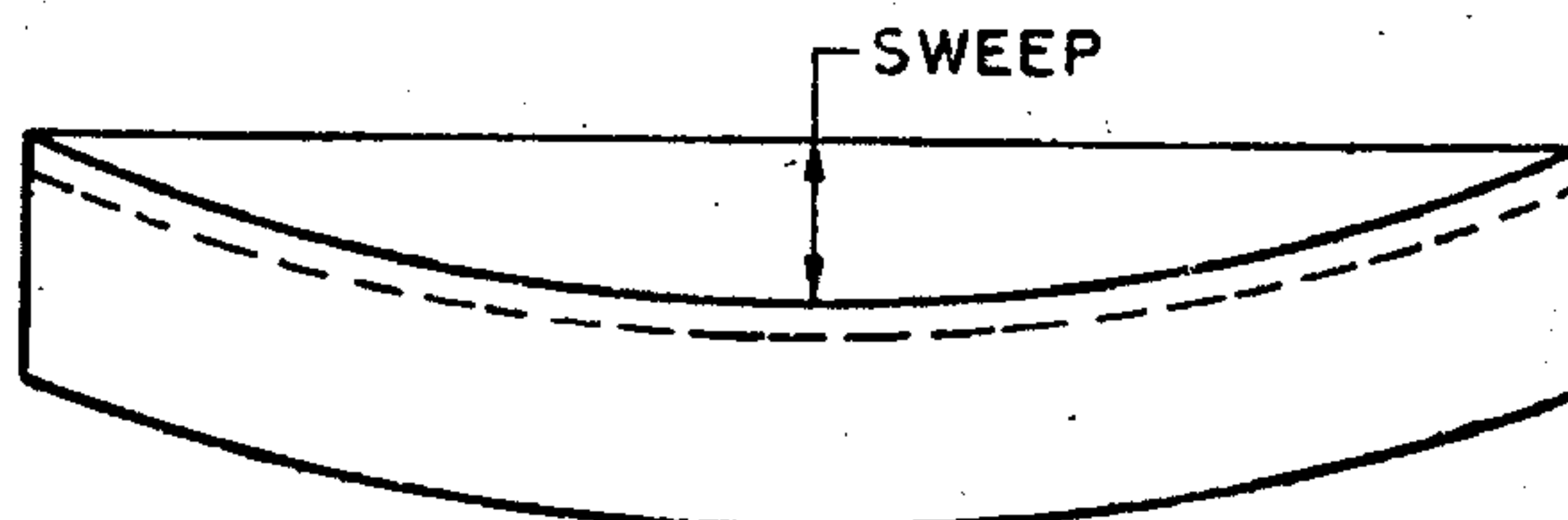


FIGURE-1

- 7.2 **DEPTH :** The tolerances on depth of channels shall be as follows :

Depth	Tolerance
Upto and including 200 mm	± 2.5 mm
Over 200 mm and upto and including 400 mm	± 3.0 mm

- 7.3 **WIDTH OF FLANGE :** The tolerance on flange width upto and including 100 mm shall be ± 2.0 mm.

- 7.4 **OUT OF SQUARE OR OUT OF PARALLEL :**

The flanges shall be parallel within the tolerance of 1 in 60.

- 7.5 **FLATNESS OF WEB :** The tolerance on flatness of outer face of web shall be as follows :

Convexity	not permitted
Concavity	15 percent of nominal thickness of web

- 7.6 **WEIGHT :**

In the case of channels tolerances on weight per metre shall be ± 2.5 percent.

- 7.7 Unless otherwise specified, tolerance shall be as per latest issuance of IS : 1852 'Rolling and cutting tolerances for hot rolled steel products'.

8. **COLOUR CODE :**

As only channels of a single material are being procured, no colour codification is necessary.

C1001-28

COMPANY STANDARDS

PAGE No. 04 OF 04

TITLE :

C1001 - CHANNELS,
HOT ROLLED

DATE: 2008-09-13

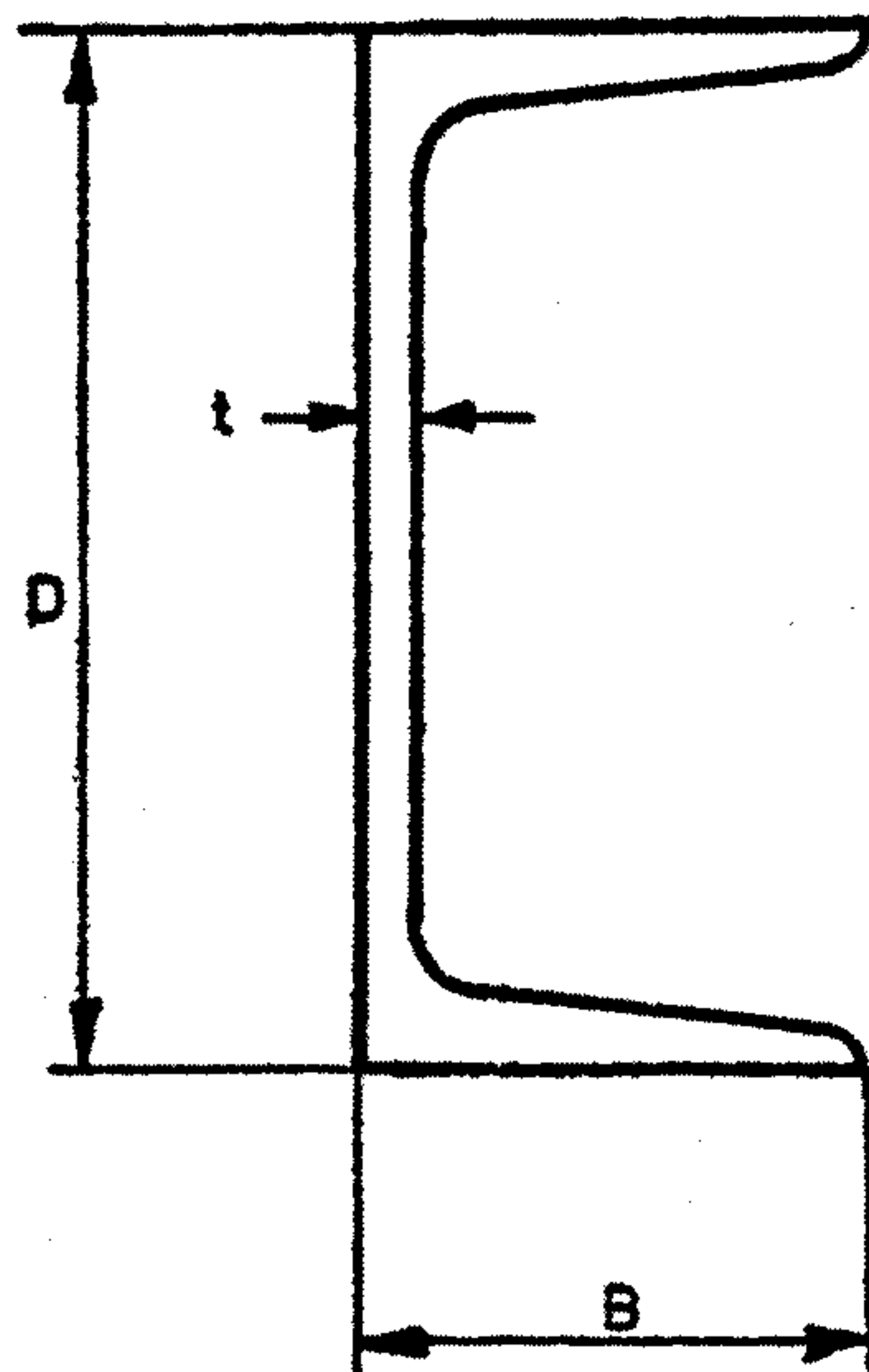


FIGURE - 2

TABLE-1

DESIGNATIONS FOR DIFFERENT SIZES

SL No	Depth of Channel (D) mm	Width of Flange (B) mm	Thickness of Web (t) mm	Mass kg/m	Designation
1	75	40	4.8	7.14	C100128075
2	100	50	5.0	9.56	C100128100
3	125	65	5.3	13.10	C100128125
4	150	75	5.7	16.80	C100128150
5	175	75	6.0	19.60	C100128175
6	200	75	6.2	22.30	C100128200
7	* 250	83	11.0	38.10	C100128250
8	300	90	7.8	36.30	C100128300

* - Heavy section

9. MARKING :

The supplies shall be suitably marked to identify the following :

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