NATO STANDARD

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INTEROPERABILITY CRITERIA FOR MASK DRINKING SYSTEMS (MDS)

Edition A Version 1
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NORTH ATLANTIC TREATY ORGANIZATION

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NORTH ATLANTIC TREATY ORGANIZATION (NATO)

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NATO LETTER OF PROMULGATION

18 November 2022

1. The enclosed Allied Engineering Publication AEP-4475, Edition A, Version 1, INTEROPERABILITY CRITERIA FOR MASK DRINKING SYSTEMS (MDS), which has been approved by the nations in the NATO ARMY ARMEMENTS GROUP (NAAG), is promulgated herewith. The agreement of nations to use this publication is recorded in STANAG 4475.

2. AEP-4475, Edition A, Version 1, is effective upon receipt

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4. This publication shall be handled in accordance with C-M(2002)60.

Dimitrios SIGOULAKIS
Major General, GRC (A)
Director, NATO Standardization Office

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RECORD OF RESERVATIONS

CHAPTER	RECORD OF RESERVATION BY NATIONS
Note: The reservations listed on this page include only those that were recorded at time of promulgation and may not be complete. Refer to the NATO Standardization Document Database for the complete list of existing reservations.	

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RECORD OF SPECIFIC RESERVATIONS

[nation]	[detail of reservation]
FRA	Screw threads of a different size than the size given in the STANAG might be used on French canteens and their caps.
Note: The reservations listed on this page include only those that were recorded at time of promulgation and may not be complete. Refer to the NATO Standardization Document Database for the complete list of existing reservations.	

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CHAPTER 1 INTRODUCTION

1.1. Aim

The aim of this Agreement is to establish standardised canteen cap screw threads cap to achieve full interoperability between NATO's Mask Drinking Systems (MDS) and water canteens, irrespective of national origin of masks and canteens.

Participating nations agree to apply the principles listed below in order to adapt the canteen’s screw with the aim of achieving interoperability between the different mask drinking systems.

1.2. General

The MDS will supply liquids for drinking to a soldier wearing NBC protective mask. In some cases, such a number of canteens may be necessary to be adequately hydrated, and these canteens may be provided by other NATO country. In this case the MDS must to be able to connect to all NATO canteens.

Interoperability will be achieved by using a standardised screw in the top of the canteen. A second standardised screw will be used on the connection between MDS and the canteen. Both screws must comply with the specifications according with the profiles of Annex A.

The MDS design is unspecified for each nation but it must comply with the use of the standardised screw detailed in the Annex A.

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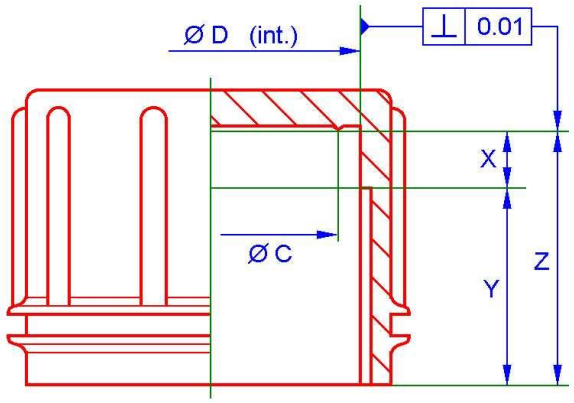
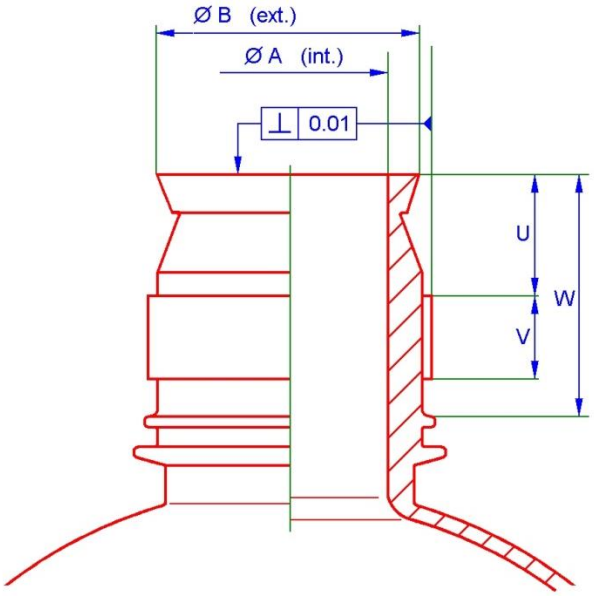
ANNEX A PROFILE OF THE STANDARDISED ELEMENTS OF THE CANTEEN



Tolerances of the functional dimensions for the cap (All dimensions in mm)									
C: Diameter		**D**: Diameter		**X**: Length of the runout of thread		**Y**: Length of screw (S 38x5)		**Z**	
max	min	max	min	max	min	max	min	max	min
33	28	36.0	35.5	9	6	23	17	32	29.5

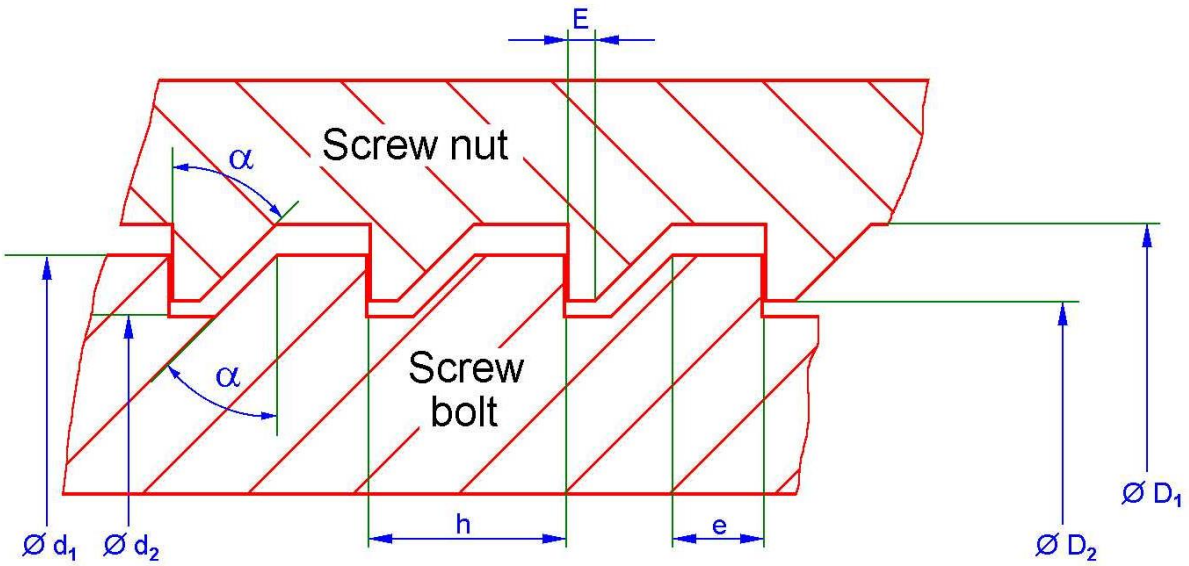
Fig.1 Profile of the screw for the cap

Note: X+Y must always be greater to or equal Z_{min}



Tolerances of the functional dimensions for the canteen (All dimensions in mm)									
A: Diameter (int)		**B**: Diameter (ext)		**U**: Length of unthreaded shank		**V**: Length of the screw (S 38x5)		**W**	
max	min	max	min	max	min	max	min	max	min
26	22	35.3	34.3	16	13	16	11	32.5	32

Fig 2. Profile of the screw for the canteen



Tolerances of the profile of the screw (distance dimensions in mm; angle dimensions in º)															
Short designation	Thread Limits								Pitch **h**	Angle: **α**		Crest Bolt **e**		Crest Nut **E**	
	Screw Bolt Diameter				Screw Nut Diameter										
	Major d_1		**Minor d_2**		**Major D_1**		**Minor D_2**								
	max	min	max	min	min	max	min	max		max	min	max	min	max	min
S 38×5	38.2	37.5	35.4	35.1	38.3	38.9	35.5	36.0	5	45	44°	2.1	2.0	1.0	0.8

Fig 3. Detail profile of the screw. (No angle dimensions in mm)

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