

ARTICLE NO	d
F 1301-015083	φ 74.8 h 12
F 1328-112850	φ 73.8 h 12

\* FOR INDIGENOUS PRODUCTION.

**INDIGENOUS MATERIAL:-**

IS 2036: 1954 **SUITABLE GRADE WITH AMMONIA CONTENT LESS THAN 0.02% PH VALUE 5.0 TO 8.0 & SATISFYING REQUIREMENTS AS PER CLAUSE 3.1.4, 3.1.1.3 & 3.1.1.4 OF SPEC. F 1301-901520 L.**

NOTE: TESTS FOR 'DENSITY' AND 'MOISTURE CONTENT' MAY BE CARRIED OUT AND RECORDED FOR GENERATING DATA.

R NO	DATE	AUTHORITY	REVISION
11-11-82		36862-A	INDIGENOUS MATL. SPECN. AMENDED & NOTE ** ADDED
23-9-99		36878-A	D.S. CAT NO. 1. DELETED
3-2-95		D.C. 35901-A	INDIGENOUS MATERIAL AMENDED
21-9-94		D.C. 35843-A	INDIGENOUS MATERIAL AMENDED
16-4-84		D.C. 35691-A	BOX GAUGE SERD ADDED & SPEC. WAS SPECN.
30-1-92			TRACED WITHOUT CHANGE.
			PREVIOUS D.S. NOS: 34214-A, 34514-A, 34505-A & 35201-A.

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DRN	TRD	RCD	COMP
CHD	TRD	RCD	COMP

CHD	TRD	RCD	COMP
CHD	TRD	RCD	COMP

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DRN	TRD	RCD	COMP

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DRN	TRD	RCD	COMP

**BASE PLATE 7.8 mm**

FORENÅDE FABRIKSVRKEN HUVUDKONTRET ESKILSTUNA.

Art. No See table

F 1301-015080 K

14192

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D.C. NO. 36766-A

**CHANGE INSTRUCTION (CI)**

Issued by	Designation	Drawing/Document No.
EGTR	Base Plate 7.8 mm	F1301-901520 & (C) (C 111-0306)
Date	Prepared	Product
86-06-17	W	84 mm HEAT FFV 651,
Date	Approved	TPT FFV 65, AT 4
	W	
Reference	Copy to	Sheet
		1 (2)

D.C. No. 36766-A

**DESCRIPTION OF CHANGE**

The specification has been rewritten.

- Para. 1 Description of method F1329-016280 added.  
Sampling procedures and tables for inspection by attributes MIL-STD 105D or SS 02 01 30 added.
- Para. 2 "The base plate is manufactured of paper impregnated with phenolic resin." added.
- Para. 3.1.1.2 Deleted.
- Para. 3.1.1.2 Previous para. 3.1.1.2. "To be determined on the extract specified in para. 6.3.1." changed to "The value is determined for an extract with composition one part by weight of material and 10 parts by weight of water".
- Para. 3.1.1.3 Previous para. 3.1.1.4.
- Para. 3.1.1.4 Previous para. 3.1.1.5.
- Para. 3.1.4 "... as specified in para. 6.3.2", changed to "... according to description of method stated in para. 1.". Mean ( $\bar{x}$ ) =  $90 \pm 10$  kp/sq.cm changed to  $8.8 \pm 1$  MPa. Standard deviation (s) =  $< 7$  kp/sq.cm changed to  $\approx 0.7$  MPa.
- Para. 4.1.1 The text changed from "A manufacturing lot consists of 16000<sup>+800</sup>-400 base plates."
- Para. 4.1.2 The text changed from "All base plates of one manufacturing lot must be made from paper cut of the same paper roll."
- Para. 4.1.3 New para.
- Para. 4.1.4 Previous para. 4.1.3.
- Para. 6.1.1 "These base plates shall, for information, also be inspected in accordance with para. 6.3.2" has been changed to "For information these base plates shall also be inspected as regards bursting pressure according to description of method stated in para. 1."

## CHANGE INSTRUCTION (CI)

FFV<sup>®</sup>

Issued by		Designation	Drawing/Document No.	
Date	Prepared	Base Plate 7.8 mm	F1301-901520K	
Date	Approved	Product	Sheet	
			2 (2)	

Reference

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- Para. 6.1.3 "Inspection to be performed in accordance with para. 6.3.2" has been deleted.
- Para. 6.2 Ammonia content according to para. 3.1.1.2 deleted.
- Para. 6.3 TEST SPECIFICATIONS deleted.

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FFV<sup>®</sup>

## SPECIFICATION (SPEC.)

Sheet

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Issue	K									Appendix	No.	F1301-901520
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3 PRODUCT REQUIREMENTS3.1 PROPERTIES3.1.1 Material

- 3.1.1.1 Type of material specified in the drawing.
- 3.1.1.2 pH-value to be within the limits 5.0 and 8.0. The value is determined for an extract with composition one part by weight of material and 10 parts by weight of water.
- 3.1.1.3 After having been exposed to tropical storage for 5 days, there must be no visible delamination of the paper layers.

Remark: Tropical storage is storage in air with a relative humidity of 100 % and the temperature varying between +20 °C and +40 °C with 9 cycles per 24 hours.

- 3.1.1.4 The mean value,  $(\bar{x})$ , of the moisture absorption during the tropical storage described in para. 3.1.1.4 shall, when tested on 20 base plates, be  $1,42 \pm 0,88 \%$  and the standard deviation (s)  $\leq 0,36 \%$ .   
 (2:30 - 0,54)

$$s = \sqrt{\frac{\sum (x - \bar{x})^2}{n-1}}$$

Moisture absorption to be determined by weighing the base plates before and after the tropical storage.

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Issue	K	Appendix	No.
			F1301-901520

3.1.2 Dimensions

Toleranced dimensions must be within the specified tolerance zones. An AQL of 0.65 % is applicable to the dimensions listed below:

- ∅ 78 h11
- 7.8 h12
- 1.2 H13
- d (∅ 73.8 h12 or ∅ 74.8 h12)
- 6.25 h13

An AQL of 2.5 % is applicable to other toleranced dimensions.

3.1.3 Surface Quality

- 3.1.3.1 Colour as specified in the drawing.
- 3.1.3.2 Cracks and scratches are not permissible.

3.1.4 Functioning

When testing 100 base plates in a pressure testing device according to description of method stated in para. 1,  $\bar{x}$  and s shall be as follows:

Mean ( $\bar{x}$ ) =  $8.8 \pm 1$  MPa OR  $79.56 \text{ kg/cm}^2$  to  $99.96 \text{ kg/cm}^2$

Standard deviation (s) =  $\leq 0.7$  MPa OR  $\leq 7.14 \text{ kg/cm}^2$  (6)

$$s = \sqrt{\frac{\sum (x - \bar{x})^2}{n-1}}$$

No individual value should be less than  $75 \text{ kg/cm}^2$  (6)

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3.1.5 Marking

The base plates shall be marked with lot designation and FFV article number inside the circle 68. The designation shall consist of manufacturer's symbol, year of manufacture and lot number (example 13764001). The FFV article number is stated in the order. "F1301-" in the FFV article number may be omitted when marking.

4 MANUFACTURE

4.1 PLANNING AND FOLLOW-UP

4.1.1 A manufacturing lot consists of  $5\ 000 \pm 500$ , ~~10 000~~<sup>+800</sup><sub>-400</sub> or ~~16 000~~<sup>+800</sup><sub>-400</sub> pcs. Unless otherwise stated in the order, the base plate shall be delivered in the largest lot size stated here. Larger lot size than stated here is not permissible. (6)

4.1.2 In a manufacturing lot, paper from only one manufacturing lot is permissible.

4.1.3 In a manufacturing lot resin from only one resin batch may be included.

4.1.4 A manufacturing journal shall be kept and be shown on request. The journal shall give information on used material. Further, the journal shall state the results of analyses made during manufacture as well as essential alterations in the manufacturing process.



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5 DELIVERY

## 5.1 PACKING

The package shall protect the base plates from scratches and other damage during transport, handling and storing. The different lots to be kept strictly apart.

## 5.2 TRANSPORTATION MARKING

The package shall be marked with the name of the product, FFV article number, number of parts and lot number.

6 INSPECTION

## 6.1 VENDOR'S INSPECTION

The inspection shall comprise the requirements of para. 3. Where an AQL is specified, the sample size must not be less than 200 base plates.

6.1.1 At least 20 base plates per lot shall be inspected as regards the requirements of paras. 3.1.1.4 and 3.1.1.5. For information, these base plates shall also be inspected as regards bursting pressure according to description of method stated in para. 1.

5.1.2 The requirement of para. 3.1.3.2 shall be inspected by means of 100 % visual inspection. Special attention to be paid to transverse cracks and scratches. Defective base plates to be removed.



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6.1.3 100 base plates per lot shall be inspected as regards the requirement of para. 3.1.4. If the requirements are not met, the result shall be submitted to the purchaser for decision (firing test).

## 6.2 CERTIFICATES

Inspection as specified in para. 6.1 of the requirements below shall be accounted for by means of test certificates.

pH-value in accordance with para. 3.1.1.3

Tropical storage test " - 3.1.1.4

Test of moisture absorption " - 3.1.1.5

The following dimensions " - 3.1.2

∅ 78 h11

d (∅ 73.8 h12 or ∅ 74.8 h12)

∅ 73.35 h12

∅ 72.5 h12

∅ 77 h12

7.8 h12

8.5 h13

6.25 h13

1.2 H13

1 +0.1  
0

Surface quality in accordance with para. 3.1.3

Functioning " - 3.1.4

This information contained in this drawing is the property of FFV. All unauthorized use thereof will be prosecuted.



Base Plate 7.8 mm

F1301-9015

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Issue	Date	Prepared	Checked	Appd	Issue	Date	Prepared	Checked	Appd	Issue	Date	Prepared	Checked	Appd
K	86-06-17	LN		A.E.										

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RELEVANT DOCUMENTS

In addition to this specification:

- Drawing F1301-015080
- Description of method for static F1329-016280
- bursting hydraulic pressure test
- Sampling procedures and tables for MIL-STD-105D or
- inspection by attributes SS 02 01 30

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DESCRIPTION OF PRODUCT

The base plate is used to the igniter 506 for 84 mm ammunition. Since the base plate closes the rear end of the round, it is essential that the variations in its bursting pressure are as small as possible.

The base plate is manufactured of paper impregnated with phenolic resin.

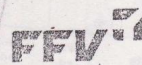
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SPECIFICATION (REQ)

F1301-9015

CHANGE INSTRUCTION (CI)



Issued by FGTR		Designation Base Plate 7.8 mm	Drawing/Document No. F1301-901520 J.
Date 85-08-21	Prepared LN	Product 84 mm HEAT Round FFV 651 and TPT FFV 65	Sheet
Date	Approved		

Reference

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DESCRIPTION OF CHANGE

Para. 3.1.2            ∅ 74.8 h12 has been changed to  
and para. 6.2            d (∅ 73.8 h12 or ∅ 74.8 h12)

Para. 6.3.2            Drawing No. F1301-012340 has been added.

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