


Tubex Mátra Kft.	GENERAL CONDITIONS OF QUALITY ACCEPTANCE	
Oldal: 1/13	MONOBLOCK ALUMINIUM AEROSOL CANS	

GENERAL CONDITIONS OF QUALITY ACCEPTANCE

MONOBLOCK ALUMINIUM AEROSOL CANS



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1. GENERAL DESCRIPTIONS

General Conditions of Quality Acceptance record the quality parameters related to given product and expectations between the two contractual parties, help the conditions of collaboration and ensure the fulfilment of common interests. The quality criterions include and record the control methods.

These General Conditions of Quality Acceptance can be modified upon request from one of both parties. Any change will be subject to an additional clause.

Supplier undertakes to meet Customer's demands (functional parameters, size, internal lacquer type, shoulder profile, groove, etc) in proportion of possibilities. If there is no way parties look for the most optimal solution with common negotiation. Supplier undertakes to provide the Customer with appropriate data, complete the required tests, ensure samples to the Customer's tests. Any kind of modification demand of contractual parties has to be reported and agreed in written form. Customer undertakes to inform the Supplier about changes taken place in cans' appropriation circumstances and in the same time Supplier also undertakes to inform the Customer about raw material and technical changes, which influence the cans' availability. On both parts written agreement is necessary.

General Conditions of Quality Acceptance apply on a compulsory basis and constitute the integral part of the General Terms and Conditions of Sale TUBEX Mátra Kft.

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2. GENERAL CONDITIONS OF QUALITY ACCEPTANCE OF ALUMINIUM MONOBLOC AEROSOL CANS

2.1. DIMENSIONAL SPECIFICATIONS

Description	Standard	Size	Figure
External diameter	FEA 220 = EN15008	$D \pm 0,30$	Figure 1
Total height	FEA 204 = EN15010	$H \pm 0,40$ mm $H \leq 260$ mm $H \pm 0,50$ mm $H > 260$ mm	Figure 1
Rim internal diameter (25,4mm opening)	FEA 203 = EN15006	$25,4 \pm 0,10$ mm	Figure 3
Rim external diameter (25,4mm opening)	FEA 203 = EN15006	$31,30 \pm 0,20$ mm	Figure 3
Rim internal diameter (20mm opening)	FEA 215	$15 \pm 0,5$ mm	Figure 2
Rim external diameter (20mm opening)	FEA 215	$20 +0/-0,2$ mm	Figure 2
Contact height (25,4mm opening)	FEA 203 = EN15006	$4,25\text{mm} \pm 0,2\text{mm}$	Figure 3
The difference among the 3 values measured on the same can can not be higher than 0.5 mm. And the average value in case of controlled cans originated from the same batch has to be $4,25 \pm 0,2$ mm.			
Contact height (20mm opening)	FEA 215	$4\text{mm} \pm 0,3\text{mm}$	Figure 2
Measurement effected with special meter produced by MÁTRAMETÁL KFT.			
Height of the shoulder (measurement of cover seat height)	FEA 421	Tolerance of "Hs" $\pm 1,00$ mm (on occasion depend on product)	Figure 4

As per Customer's requirements the bead surface can be milled or unmilled, and in accordance with relative technical drawing of Tubex Mátra KFT.

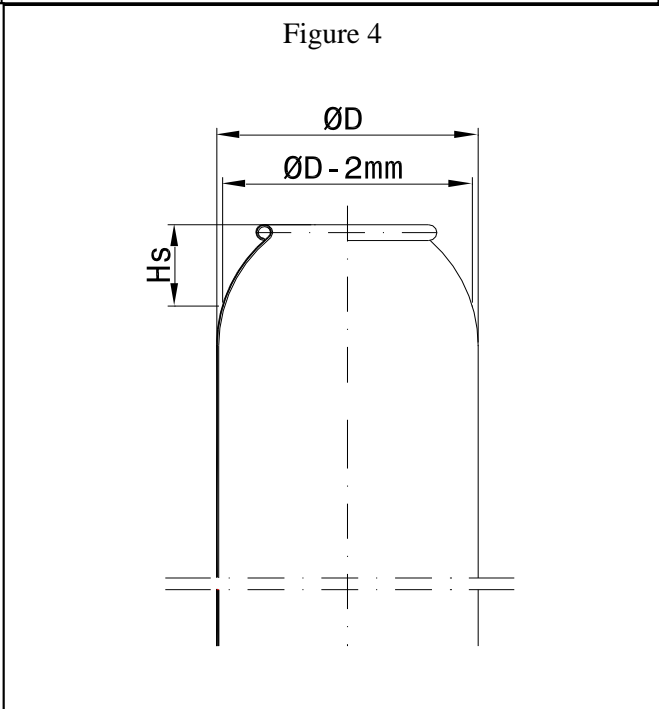
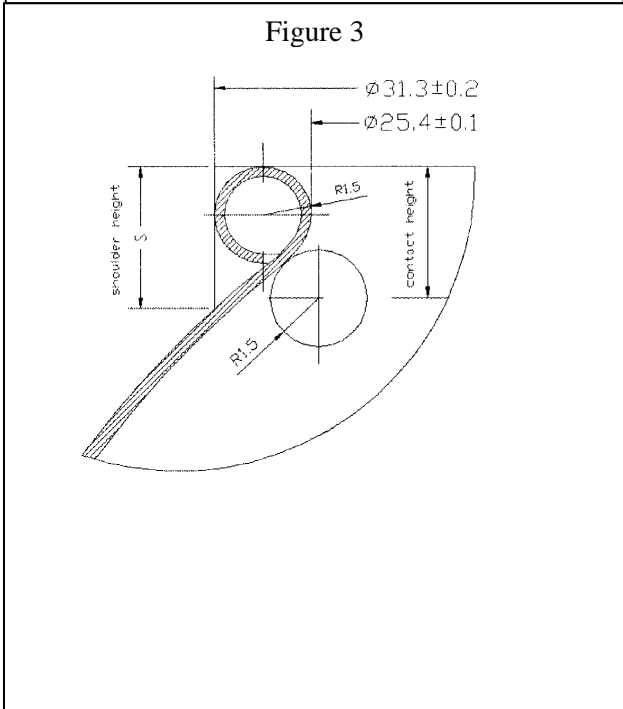
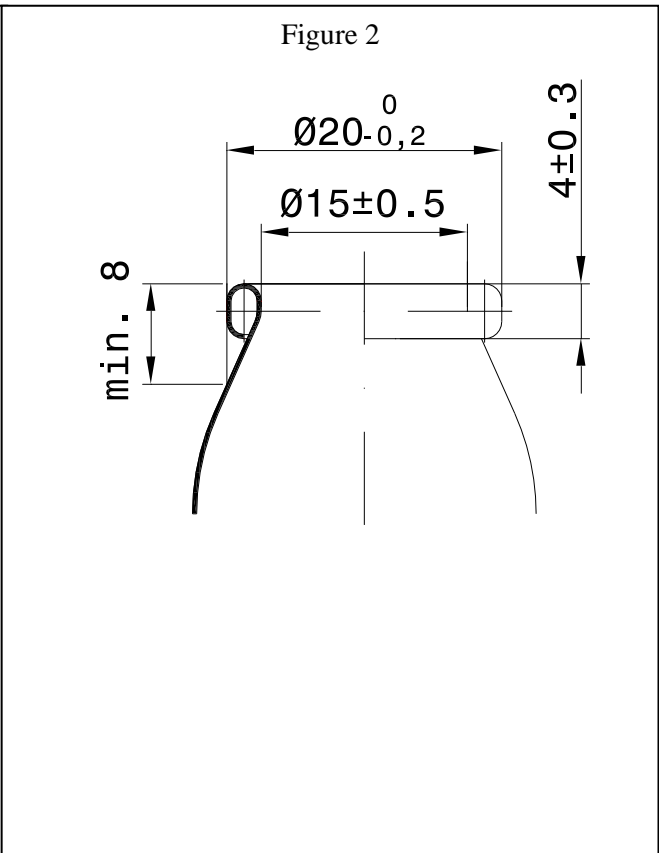
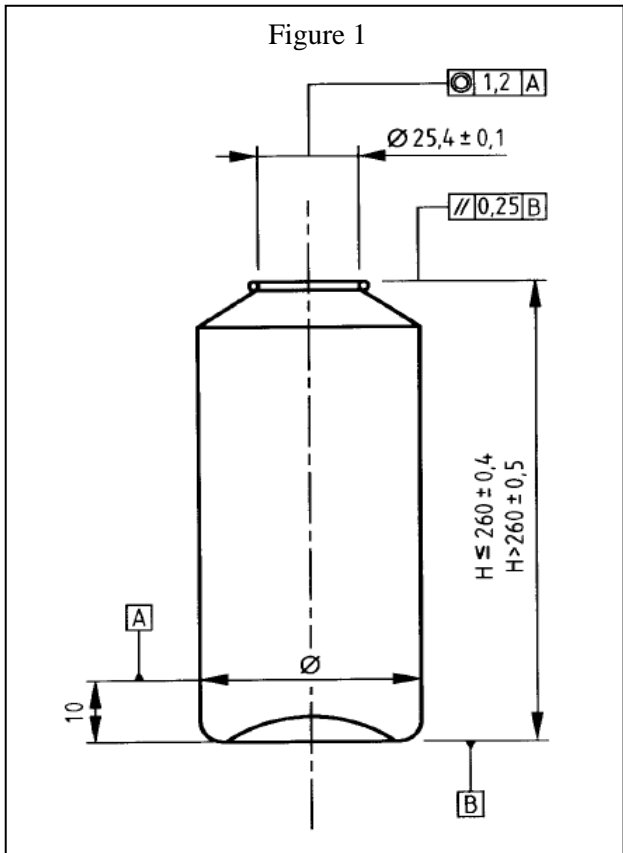
It shall be approved by mutual agreement for dimension and shape of not standard can-type.


Quality of material:

- 99,5% clearance aluminium EN AW 1050; MSZ EN 573-3
- internal protecting lacquer: gold - pigmented
- external base coating to the printing

Finish: according to the approved documentation with actual texts

Internal coating of lacquered aluminium cans shall be met the food hygienic requirements.



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2.2 MECHANICAL SPECIFICATIONS

Pressure resistance

The cans supplied by Tubex Mátra Kft. resist to pressure test and bursting pressure required by the Customer and meet the requirements laid down in 75/324/EEC Directive.

Pressure test

A can maintained during 25 seconds under the test pressure (hydraulic pressure) should not present either visible or permanent deformation.

However, a slight deformation of the bottom or of the wall is admitted if the can satisfies to the bursting pressure test. The test pressure is included in the definition of the aerosol can in the same way than the nominal capacity, the diameter and the height.

Test pressure should be 150% of the filling pressure on 20°C.

Max. filling pressure	Test pressure	Bursting pressure \geq test pressure x 1,2
8 bar	12 bar	14,4 bar
10 bar	15 bar	18 bar
12 bar	18 bar	21,6 bar

2.3 INTERNAL LACQUER SPECIFICATIONS

Thickness

The minimum thickness of dry internal coating is 4 μ m.

Porosity test

The porosity control of internal lacquer with porosity enamel rater. An NaCl solution at 10.2g/l in demineralized water is used as electrolyte. After immersion of the electrode, the filling level of the electrolyte shall be checked in order to be between 1 and 3mm under the top of the bead. The measure of porosity is made in milliampers (mA).


2.4 EXTERNAL COATING SPECIFICATIONS

Resistance to hot water

The external coating must not present any damage or slackening after 5 minutes immersion in a bath of 50°C.

Resistance of acetone

Cylinder part of the can have to easily rub by cotton wool infected with acetone 30 times there and back. Discoloration is not allowable to be realised on the cotton wool.

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2.5 PACKAGING SPECIFICATIONS

A bale contains only items of the same kind and size. To create a bale undamaged and clean pallets shall be used.

Dimensions of a pallet: 800x1200mm standard EUR pallet or 1140x1140mm standard US pallet depending on delivery method.

A sheet of carton paper shall be put on the pallet as well as the items packed in honeycomb units, side by side, turned their oriflances up or down (as per the customer's demand). A sheet of wrapping paper shall be put on each layer.

The item not to hang down from the pallet. For the purpose of protection against environmental damage as well as slipping and falling down of the item each bale shall be covered with shrink foil or stretch foil.

Before defining bale height, stability respects of it as well as the whole consignment to be considered.

2.6 MARKING OF A BALE

Each bale shall be marked with a label showing data as per customers' demand:

- naming and article number of the item
- quantity of the item per bale
- name of the manufacturer
- etc.

Labels shall be put on a side of the bale as per customer's demand.

3. CONTROL AND TESTS

3.1 DEFINITION OF AN ITEM - SAMPLING

The control is based on sampling control. The word "item" indicates a group of products what shall be controlled and classified on the basis of a sample is taken out from the actual production.

AN ITEM AT TUBEX MÁTRA KFT.


Group of cans from the same run production processed at the same time on the same production line.

AN ITEM AT THE CUSTOMER

Part or whole delivery of identical cans from the same production.

SAMPLING

Sampling is made by taking some cans from the item by chance without considering their quality.

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3.2 SAMPLING SCHEDULE

The sampling schedule determinates the number of items to be checked according to the followings:

- quantity of the item
- checking level of Military II.

Batch size	Key Sign
-8	A
9 - 15	B
16 - 25	C
26 - 50	D
51 - 90	E
91 - 150	F
151 - 280	G
281 - 500	H
501 - 1200	J
1201 - 3200	K
3201 - 10000	L
10001 - 35000	M
35001 - 150000	N
150001 - 500000	P
500001 -	Q

The sampling schedule accepts the annexed Table 2-A for simple plan-type in normal control.

3.3 CLASSIFICATION OF DEFECTS

Critical defects

Defects which can lead to a lack of safety and endanger using of the final product as well as to make using or selling a part or the whole of the delivery impossible.

Major defects

Defects preventing correct working of the system or largely lessening the market value of the product.


Minor defects

Defects which are not preventing correct working of the system and/or not lessening the market value of the product excessively.

3.4 CLASSIFICATION OF DEFECTIVE ITEMS

The effected control is a control according to “attributes” where inferences shall be drawn from the cans defected.

If an item presents various defects of different types, it is classified in the most serious type of defect.

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3.5 ACCEPTABLE QUALITY LEVEL (AQL %)

Type of defect	Classification	AQL %
Appearance	Critical	1,00
	Major	2,50
	Minor	6,50
Porosity	Critical	1,00
	Major	2,50
Dimensions		1,5
Pressure test		0,4
External coating		1,5

Classification of defects: Annex 1

4. CERTIFICATE OF CONFORMITY

In order to finalise the contract of Quality Assurance (§1-1), Tubex Mátra Kft. offers to his Customers to work with Conformity Certificates after presentation and discussion about General Conditions of Quality Acceptance.

Each order from the Customer placed with Tubex Mátra Kft. refers to one or more deliveries.

The Certificate of Conformity established by the Supplier certifies the delivered cans' conformity with the General Conditions of Quality Acceptance.

5. PROCEDURE FOR HANDLING CLAIMS


Quality control of claimed cans shall be started within 8 working days after receipt of the relevant claim. Required lead-time for presenting a claim is 30 days after receipt of delivery.

When a defect is observed by the Customer, it to be notified in written form to Tubex Mátra Kft. enclosing a photocopy of the bale-label(s) allowing the identification of the implicated item(s) as well as the exact reason and measure of the claim.

Tubex Mátra Kft. reserves all rights to co-consider the merits of a claim, to determine the claim damage, to define the method of compensation.

Both contract parties liable for common cooperation in order to decrease the claim damage and for reduction the damage as the case may be.

If the claim is accepted, the cans will be returned and replaced to the debit of Tubex Mátra Kft.'s account. Over 30 days' claim presentation Tubex Mátra Kft. accepts only claims about latent defects in merchandise.

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6. LATENT DEFECTS

Latent defects are defects what can't be realised by tests made thoroughly and professionally in accordance with the requirements of General Conditions of Quality Acceptance, but only during its utilization.

7. DELIVERY

Bales to be delivered on dry, clean and hooded trucks protected against precipitation by the way of avoiding any defects on them during delivery. All cases the forwarder to be responsible for the assuring of the above mentioned conditions.

8. STORING

Storing to be effected in a closed packaging protected against mechanical defects, in a confined place at room temperature, defended from sunlight and precipitation.

9. QUALITY PROOF

As an annex of shipping documents a Quality Certificate is issued in which the Supplier proofs the conformity of the product concerning technical and graphical as well as packaging requirements.

The quality of the certificate may contain the following general data that may, according to customer needs:

- naming and quantity of the product,
- name of the manufacturer,
- production/delivery contract number,
- date of manufacturing,
- quality specification number,
- pressure,
- the date of issue of the certificate.

10. STANDARDS


List of standards used in reference:

FEA 203: this standard is replaced by EN 15006

FEA 204: this standard is replaced by EN 15010

FEA 220: this standard is replaced by EN 15008


FEA 215; FEA 219; DIN 55505 or FEA 421

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Classification of defects

Definition of defects	Examined parameter	AQL %
Dimensions	sizes for orifice and bead	1,5
	bead defects /obstructed the closing/	1,5
	total height	1,5
	diameter of the can	1,5
	form resistance	1,5
Porosity	25 mA <	1,0
	>15 mA és < 25 mA	2,5

Definition of defects	Examined parameter	AQL %
Pressure test	deformation	0,4
	cracking	0,4
External coating	hot water resistance of external coating	1,5
	acetone resistance	1,5

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Annex 1.

Definition of defects Appearance	Classification of failures		
	Critical AQL 1%	Major AQL 2,5%	Minor AQL 6,5%
Incomplete and striped outside lacquer		+	
Fitting fault, overlapping over 2mm		+	
Inclined print			+
Double print, colour slip not allowed on the front-side		+	
Double print, colour slip allowed max. 0,2mm on the backside		+	
Colour difference from the accepted colour tolerance limits		+	
Faulty print with readable text			
- 3 letters unidentifiable		+	
- 1 or 2 letters unidentifiable not to be considered as a defect			
Barcode legibility: handheld device (pencil and using in the shops)	+		
Scratches			
a.) On the outside lacquer where nails get entangled in or on the paint coating covered with a lacquer			
- up to 1mm not failure			
- over 1mm			+
b.) Scratches on the paint coating till the base lacquer			
- up to 1mm			+
- over 1mm		+	
Paint-coating defects, spots up to 1 mm			
up to 0,4mm allowed			
one			+
more than one		+	
over 1mm		+	
Abrasion up to 1mm		+	
Abrasion over 1mm	+		
Dent and lacquer clotting			
up to 1mm allowed			
less than 3mm wide			+
over 3mm		+	
Print blur in stripes		+	
Swelling		+	
Crater up to 1mm allowed			
- round lack on the base lacquer			
One			+
more than one		+	
- aluminium defect, angular edge surface			
One		+	
more than one	+		
Elementary thread			+
Crinkled lacquer under the bead			+

Visual examination is from distance 30cm.

