



## TW-220 Sharp Edge Tester



### 1. Introduction

**The sharp Edge Tester is used to determine whether accessible edges of toys for use children are liable to cause injury to the child.**

利边测试器用于测定玩具上存在的可触及边缘是否对儿童构成伤害。

**It complies with the requirements of EN71: Part 1:1998 and ASTM F963-03, both relating to the safety of toys with regard to mechanical and physical properties. The instrument must be used in accordance with the requirements specified within the standards.**

此仪器依据 EN71 Part1.1998 及 ASTM F963-03 中有关玩具的物理及机械测试要求,请按以上标准条款内容进行使用。

### 2. Identification of parts 部件清单

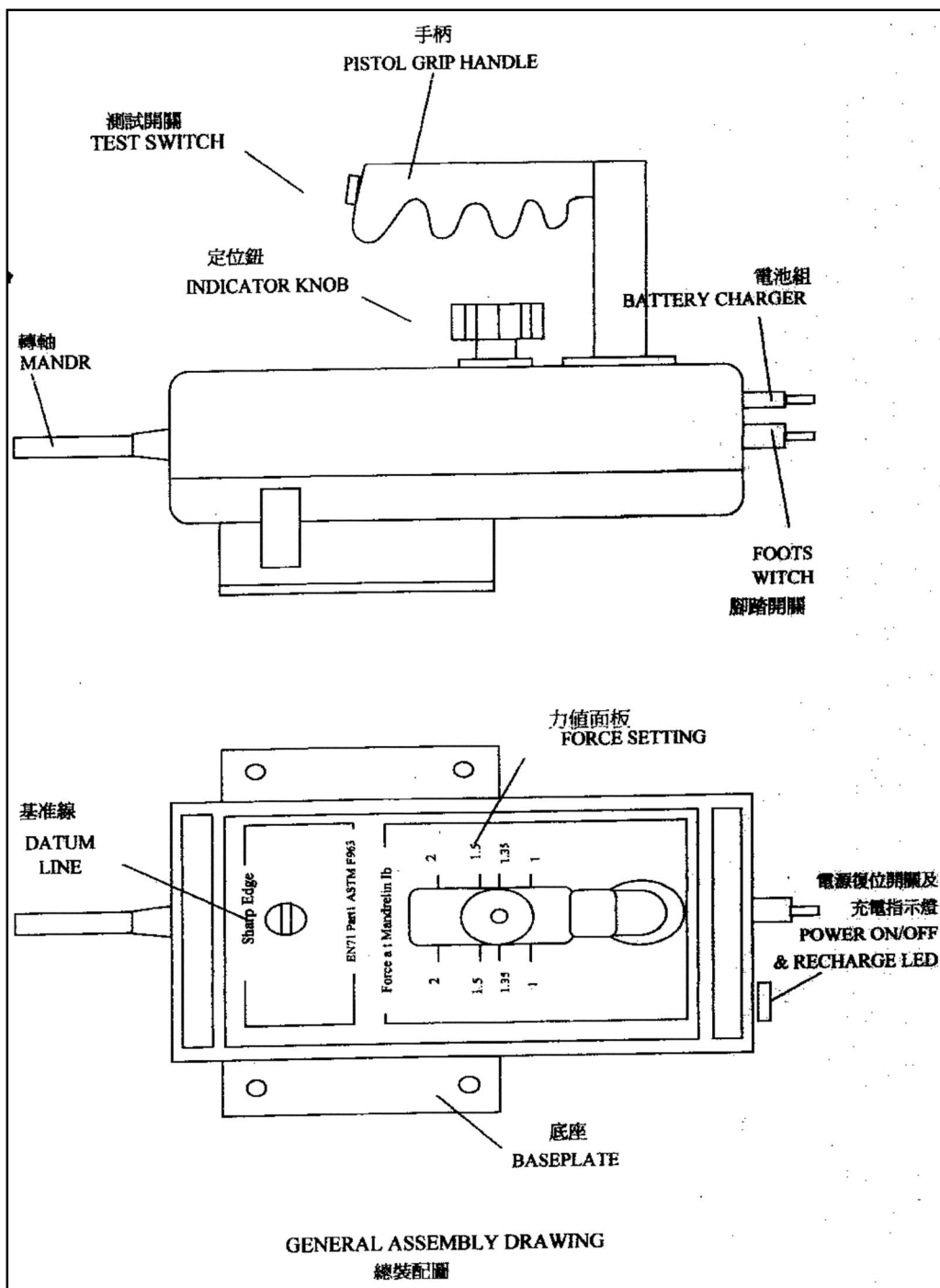
**The sharp edge tester is supplied complete with the following standard accessories:-**

利边测试器包括如下标准附件

- i) 1x Base plate(底座)



- ii) **Ix Foot Switch**(脚踏开关)
- iii) **Ix Operator's Guide**(操作指南)
- iv) **Charging Unit complete with Connecting Lead**(充电器及插头)
- v) **Standard import sharp edge tape 1 roll** (锐利边缘测试胶纸)





## TW-221 Sharp Point Tester



The Sharp Point Tester is used to examine a toy of position whether the existence endanger safe of sharp-edged sharp point. Belong to the test item of the toy safety; All accessories from not the rust material make into. It is consistent to the request of technique parameter all countries.

Dimensions: 112× 16× 16mm

Weight: 80 g

Standards:

16 CFR 1500.48, ASTM F963 4.8, EN-71 1998 8.14, ISO 8124

Accessories:weight,batteries,bulb 2 pieces

锐利尖点测试仪是用来检测玩具可触及到的位置是否存在危害安全的锐利尖点。属玩具安全性测试项目,对于技术参数各国的要求是一致的。

尺寸: 112× 16× 16mm

符合标准: 16 CFR 1500.48      ASTM F 963 4.8      EN-71 1998 8.14

重量: 1 磅重

附件: 配重砝码 电池一对 灯泡 2 支

Range:

1. This test applies to toys and items for children under the age of 8 used in the normal use and both before and after abuse test(excluding the bite test) result in contact part-ASTM/ CPSC.
2. This test applies to toys and items for children under the age of 14 used in the normal use and both before and after abuse test(excluding the bite test) result in contact part-EN71

范围:

- 2.1.此测试应用于 8 岁以下儿童使用的玩具及物品分别在正常使用及滥用测试前后(不包括咬力测试)所引来可接触性部份一,ASTM / CPSC。
- 2.2.此测试应用于 14 岁以下儿童使用的玩具及物品分别在正常使用及滥



## 用测试前后(不包括咬力测试)所引来可接触性部份——EN71

### Definition:

- 4.1. Accessible point – use the point tester described in 16 CFR 1500.49 or EN71 18.10 to test any gap on toys
- 4.2. Toys -- It is means any kind of toy games or other toys for children which is identified by any design, label advertising or other items.
- 4.3. Sharp point -- There are metal or glass sharp point in toys which must be tested by point tester. If the indicator lamp lights up, then the sharp is identified as sharp point.
- 4.4. Inaccessible point – If the gap between metal or glass sharp point and other neighboring surface is less than 0.02 inch after both before and after abuse test (excluding the bite test), then such sharp point is inaccessible point.
- 4.5. Glass – It is a no crystallization of hard-brittle material that made from silica and silicate which contains soda and lime ingredients under the result of melting.

### 定义

- 4.1.可触摸的角——利用 16 CFR 1500. 49 或 EN71 Part 1 8. 10 所述的触摸探棒触摸玩具上的任何缝隙。
- 4.2.玩具--指任何设计、标贴广告或其它各项均表明供儿童使用的任何一种玩具游戏或其它玩物。
- 4.3.利角——玩具或用品存有金属或玻璃尖端，能用利角器在标准操作下，上部指示灯亮,则此尖端识别为“利角”
- 4.4.不可接触性边——分别在滥用测试前后(不包括咬力测试)，如果金属或玻璃尖端各邻近表面之间而做成间隙不超过 0.02 英寸，则此尖点为不可接触性尖点。
- 4.5.玻璃——一种由硅土及硅酸盐含有苏打及石灰成份作互相溶化而制成脆硬无结晶物质。

### TW-206 Small Parts Cylinder





To determine whether toys & other articles intended for use by children under 3 years old present choking, aspiration, or ingestion hazards because of small parts. If any objects can fit completely into the cylinder without compressing & in any orientation, it is defined as a "Small Part". Its internal dimensions simulate the fully expanded throat of a child under 3 years old.

Standards:

16 CFR 1500.48, ASTM F963 4.8, EN-71 1998 8.2, ISO 8124

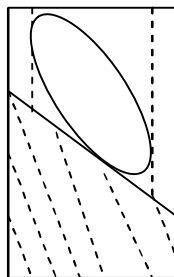
Dimensions: 70\*38\*38mm

Weight: 430g

**Annotation:** ASTM F963 / EN71 Part 1 and the measurements of small objects tube designed by some users:

Specified request Name	measure position(unit: mm)		
	A	B	C
ASTM F963 / EN71 Part	31.70	25.40	57.10
HASBRO	35.24	28.58	61.91
TOMY	38.20	25.40	57.20
EMI(力口大 10%)	34.87	27.94	62.81
SENTE	34.93	25.40	60.32
FISHER-PRICE	34.93	27.94	62.87

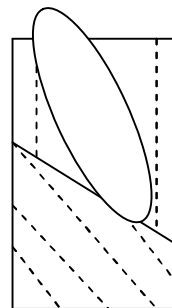
图 1



a

a. accessory can put into cylinder completely

图 2

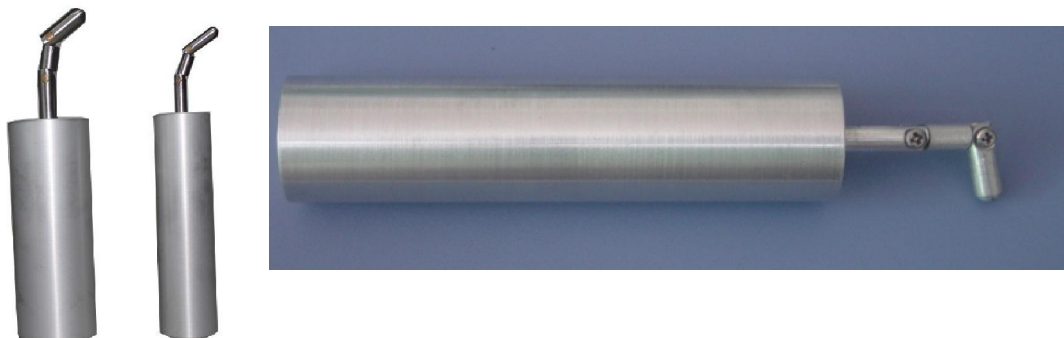


b

b. accessory could not put into cylinder completely



## TW-204 Accessibility Probes AB



To determine whether any part or component of a toy can be contacted by the probe. The probe simulates the finger of the infant or child touching the accessible points or edges of a toy, which may then be subject to tests of sharp points or sharp edges.

Accessibility probes are designed for two age groups:

Probe A for 0-36 months

Probe B for 37-96 months

Standard: **ISO8124--1: 5.7 accessibility of a part or component, EN71-1 2011 8.10**

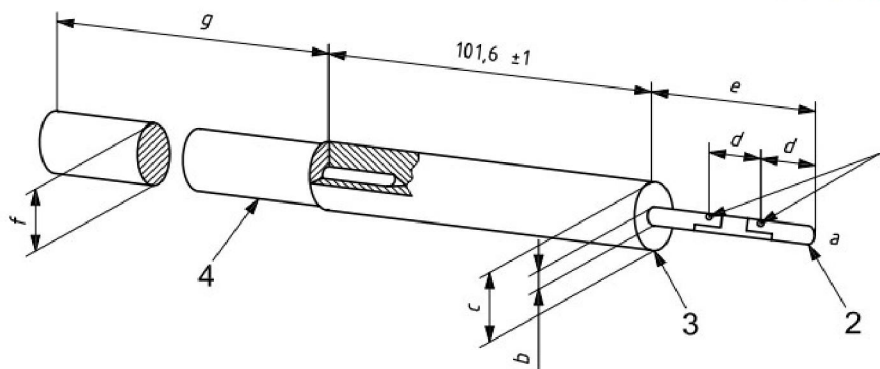
Net weight:330g

Table 1 — Dimensions of accessibility probes

Age grading <sup>a</sup>	Probe	Dimensions <sup>b</sup>						
		mm						
		(a)	B	c	d	e	f	g
Under 36 months	A	2,8	5,6	25,9	14,7	44,0	25,4	464,3
36 months and over	B	4,3	8,6	38,4	19,3	57,9	38,1	451,6

<sup>a</sup> Toys intended for children spanning both age groups should be tested using both probes.  
<sup>b</sup> See Figure 19.

Dimensions in millimetres



### Key

- 1 pivot points
- 2 spherical radius (a)
- 3 collar
- 4 extension

Figure 19 — Accessibility probe



1. Purpose: Evaluate the danger caused by touching the specific parts or accessories (in other words, points and edges) on any toys.

2. Range:

2.1 This test applies to the toys or other articles for children under 8, before and after the normal use and the abusing test respectively (The Bite Force test is not included)-- ASTM / CPSC.

2.2 This test applies to the toys or other articles for children under 14, before and after the normal use and the abusing test respectively (The Bite Force test is not included)-- EN71.

2.3 This test meets the requirements of USA 16 CFR1500.48, 1500.49 and ASTM F963-96a, Part I of EN71.

2.4 Exemption: It is viewed as untouchable area if the protuberance of the point, edge or the interval between the surface and the point and edge is within 0.02 inches.

3. Definition:

3.1 Touchableness—design in accordance with 16 CFR 1500. 48 and 1500. 49 and Chapter 8.10 of Part I of EN71 and touch any parts of the toy as figure 1 describes.

3.2 Toys-- any design, label ads or other forms of games or articles for children playing.