



BIO CATALOG

Freeze Box & 2D Storage Tube

20307 & 20307



Create technology to make significant contribution technology

了解现有技术并了解其目的和机制。 这些方法就是创建未知的技术领域。 这就是我们的技术，我们的力量。

读者们,

Kobe Bio Robotix 2D储存管具有二维条形码（二维码）。这是我们开发的一项突破性技术，以迎接新时代的前沿，向世界推广。

2D储存管的制造满足了客户对生物样品储存的各种需求，由遗传信息研究和管理的生物库，药物研究到化合物库。

我们的产品是通过从注塑，产品装配等一系列自动化过程进行生产。我们对品质设计的要求，塑造了产品的技术性完美。此后，我们将以“Monozukuri（制造业）”为目标，通过扩大我们的求知欲来分享我们对未来的希

厂环境

了符合ISO-14644-1标准的8级洁净室外，高效过滤器和静电消除器还可有效地用于保护产品免受微粒污染。

现无污染的生产环境

调系统设定在23° C恒温，以保持产品质量。

机械和工具

塑机（50吨 - 100吨）x10台
立式双色注塑机（150吨）x1台
卧式双色注塑机（230吨）x4台
自动组裝設備（本公司制造品）x 20台



CERTIFIED RNase DNase SAFE Pyrogen Free Endotoxin Free



ROBOT&ROBOT
KobeBioRobotix Co.,Ltd.

Plastic raw materials

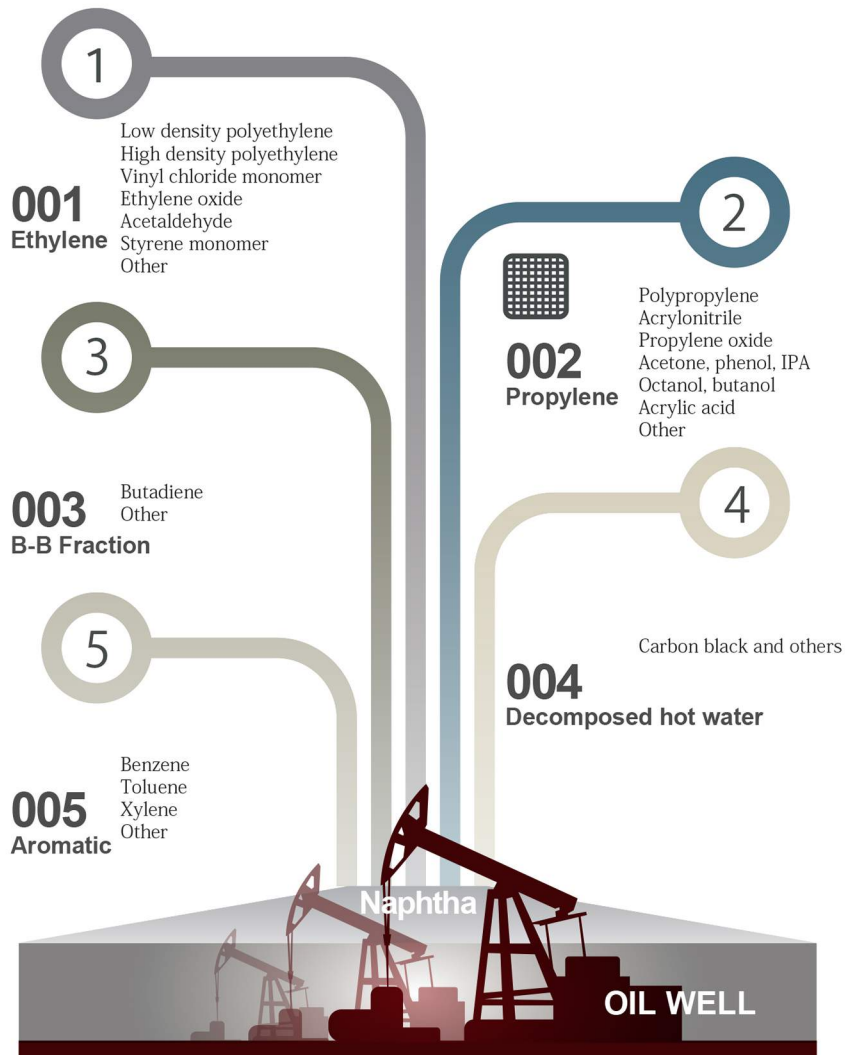
塑料材料的主要组分是合成树脂（包含粘合聚合物）。
塑料材料是通过添加和混合各种配混剂来使用。

*無可溶性重金属污染物和無DNAs / RNAs。
有DMSO抗性。



Plastic use about 3% of petroleum

原油是制造塑料原料的供应来源。
料有很多种类型，而每种类型都有各自的优点和缺点。
材料的选择是基于产品的特性。（PP/PS/PC/ABS/COC/TPE）
们尽一切努力去了解产品的使用方式。我们完全致力于确保“知识”。

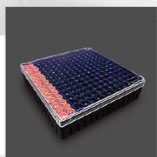




Category management

01

冷冻盒



Freeze Box (冷冻盒) 是以通用设计为基础, 而我们的创意已融入在机架设计中。

100 (10 × 10) storable type and
196 (14 × 14) storable type.

02

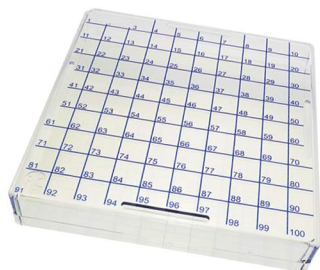
2D储存管



我们提供不同容量和尺寸的夹克管 (2维储存管)
【Kobe Bio Robotix旗舰型】

与现有的夹套储存相比, 引入双色注塑设备,
通过消除夹和储存之间的不平坦表面而提高了
储存的可用性。

Freeze BOX 100 (10*10)



用于冷冻保存生物样品的管架。
管架底部的圆孔有利于一次过读取位于管底部的所有2D形码。

※兼容管：Cryo1.5ml Cryo2.0ml

包含共注射成型技术样品管，能同时实现条形码的样品管理和储存中样品的可视化。

储存尺寸适用于第三方管架（参见第28页）

储存空间为100管。
可用于液氮气相。

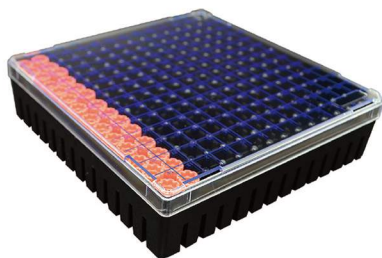
Lid•bottom: polycarbonate
Numbers and letters is attached to each hole.
External dimensions 136.2mm × 136.2mm × (H)52.6mm



Specifications	Quantity
Empty rack	10units
Empty rack 1D bar-code	10units

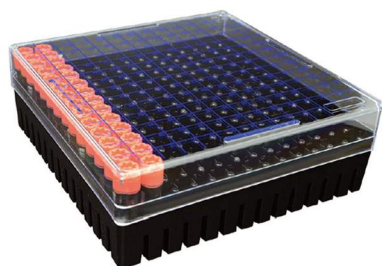
Freeze BOX 196 (14*14)

存储空间可达196管，适用与96孔格式，实现倍增的物样本的低温保存。



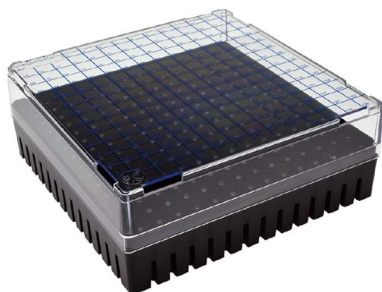
Lid•bottom:polycarbonate
Numbers and letters is attached to each hole.
External dimensions 136.2mm×136.2mm×(H)34.1mm

Specifications	Quantity
Empty rack	10units
Empty rack 1D bar-code	10units



Lid•bottom:polycarbonate
Numbers and letters is attached to each hole.
External dimensions 136.2mm×136.2mm×(H)46.8mm

Specifications	Quantity
Empty rack	10units
Empty rack 1D bar-code	10units



Lid•bottom:polycarbonate
Numbers and letters is attached to each hole.
External dimensions 136.2mm×136.2mm×(H)52.6mm

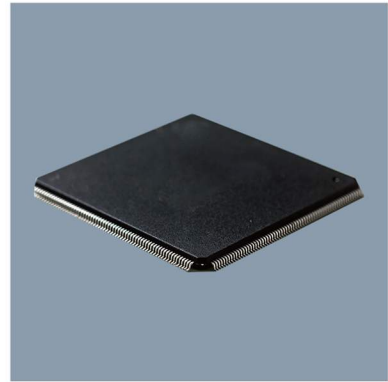
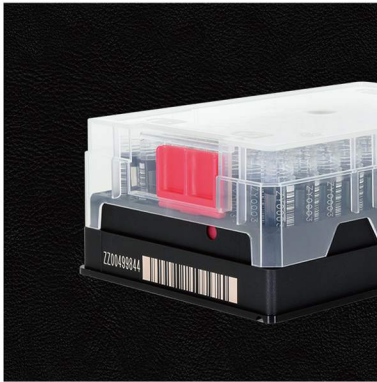
Specifications	Quantity
Empty rack	10units
Empty rack 1D bar-code	10units



是否经历过这样的情况：用墨水笔直接手写在样品管上的研究样本的信息会变得模糊，而这些信息在长期储存期变得难以辨认？

是否遇到过将样品管上的全部或部分黏贴标签剥掉的情？

细小的储存管只有有限的空间写入信息，并且存在储存问题。而从管架上取出储存管也极为耗时，降低储存管的操作性。Jacket Tube就可以解决以上问题。

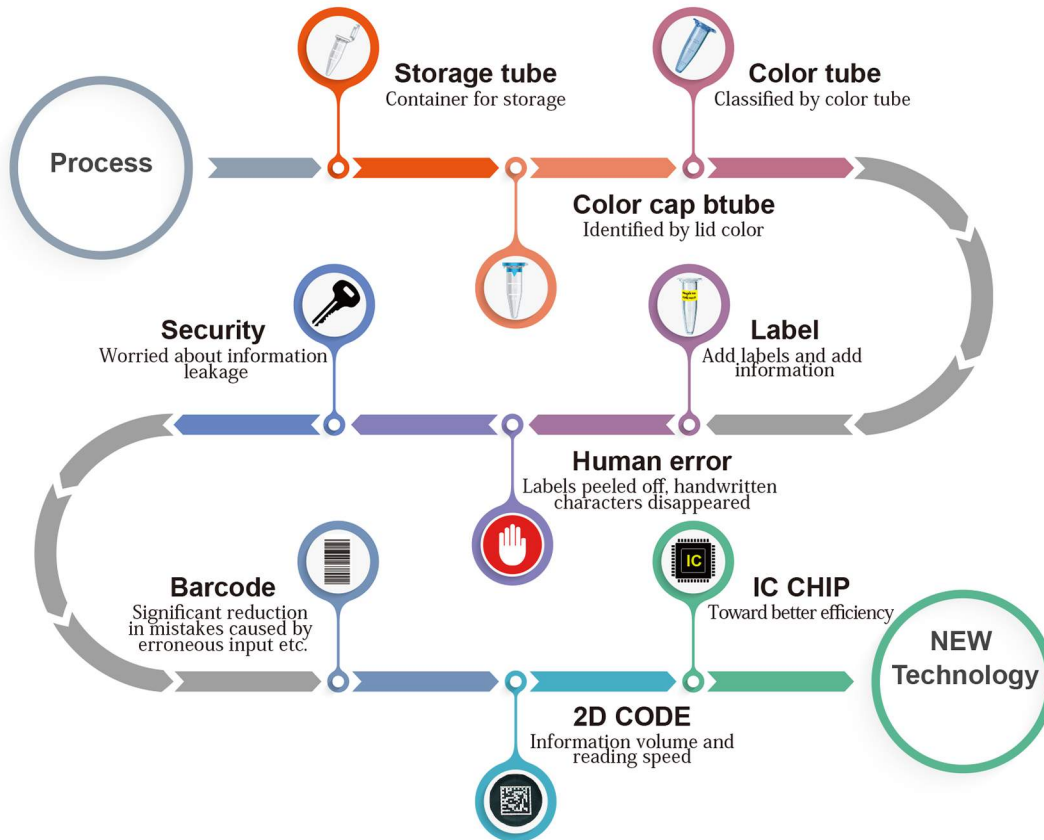


扫描仪能扫描管上的2D和1D条形码信息，这些信息可个人电脑管理。可以读取管架内所有储存管位置编号并快速检索所需的样品管。这种方法主要针对由机器人控制自动拣选系统操作的样品库。

我们的样品管开发是基于储存管的风险管理（信息丢失问题），并与海外公司的产品相比具有竞争优势。

Evolution of storage tube

2D 存管带来更美好的未来， 安稳可靠的研究！



2D storage tube

2 color molding



Polypropylene

Autoclavable

DMSO

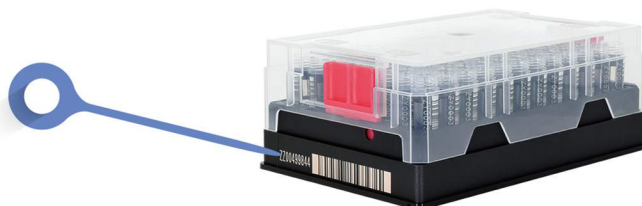
Speedy, reliable and safe sample management with 2D code added tube

光处理用于三种类型的表达（1D条形码，2D条形码和在小于条形码的区域中写入信息。

于2D条形码表示使用二维图形图案的信息，因此可以小于条形码的区域中写入信息。

于在底部打印了2D代码，并且在管侧使用1D条形码和字母数字字符，因此可以使用条形码读取器读取信息而无需倾斜样品管，这样便不会对样品构成压力。

尽管2D条形码上有10%至30%污垢或磨损，通过信息恢复功能，信息也能被恢复。





2Code

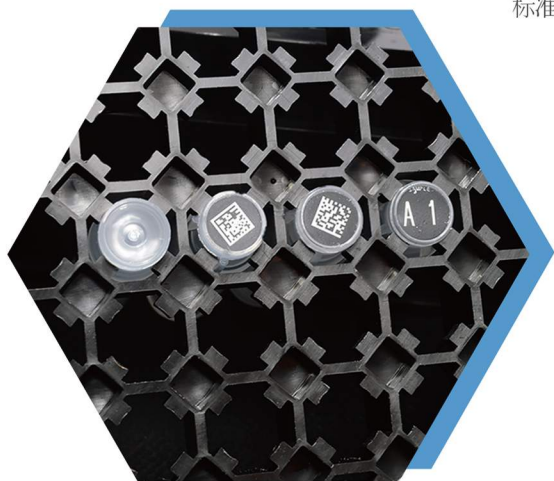
Data Matrix ECC200

二维码品质

Data Matrix ECC200 的品质是通过“ISO/IEC TR29158:2011 Direct Part Mark (DPM) Quality Guideline”

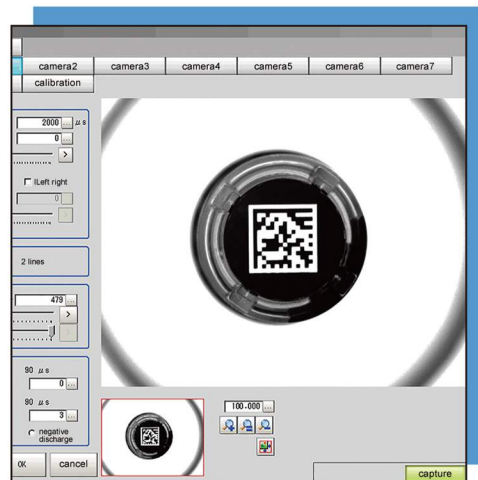
和“ISO/IEC 16022 Data Matrix bar code symbology specification” 来鉴定

标准代码大小:14×14个单元格



代码库

码适用于由Kobe Bio Robotix 开发的Code Bank System 代码库系统) 所发布和管理的产品。
于系统可防止代码重复和累积, 从生产到运送, 产品信息的追踪管理会被启动。



0.3ML

Co-mold Tubes

External Type



Capacity available 0.3 ml

0.3ml



Rack size-127.8 x 85.5x22.0
Tube size-18.6 x Ø 8.7

JT-03-EX

Specifications	Quantity
Bulk Tubes	960units
Racked	96units × 10racks
Bulk Caps	960units
Empty rack	10racks

0.5ML

Co-mold Tubes



External Type



Capacity available 0.5 ml

0.5ml



Rack size-127.8 x 85.5x32.9
Tube size-29.8 x \varnothing 8.7

JT-W0.5-EX



Specifications	Quantity
Bulk Tubes	960units
Racked	96units \times 10racks
Bulk Caps	960units
Empty rack	10racks

Internal Type



Capacity available 0.5ml

0.5ml



Rack size-127.8 x 85.5x38.0
Tube size-33.9 x \varnothing 8.6

JT-W0.5-IN



Specifications	Quantity
Bulk Tubes	960units
Racked	96units \times 10racks
Bulk Caps	960units
Empty rack	10racks

0.7ML

Co-mold Tubes

Internal Type



Capacity available 0.7ml

0.7ml



Rack size-127.8 x 85.5x50.8
Tube size-45.1 x \varnothing 8.6

JT-W0.7-IN

Specifications	Quantity
Bulk Tubes	960units
Racked	96units × 10racks
Bulk Caps	960units
Empty rack	10racks

1.0ML

Co-mold Tubes



External Type



Capacity available 1.0ml

1.0ml



Rack size-127.8 x 85.5x53.2
Tube size-49.6 x \varnothing 8.7

JT-W1.0-EX



Specifications	Quantity
Bulk Tubes	960units
Racked	96units \times 10racks
Bulk Caps	960units
Empty rack	10racks

Internal Type



Capacity available 1.0ml

1.0ml



Rack size-127.8 x 85.5x61.8
Tube size-52.5 x \varnothing 8.6

JT-W1.0-IN



Specifications	Quantity
Bulk Tubes	960units
Racked	96units \times 10racks
Bulk Caps	960units
Empty rack	10racks

1.5ML

2.0ML

Co-mold Tubes

External Type



Capacity available 1.6 ml

1.5ml

JT-CRYO1.5-EX



Rack size-127.8 x 85.5x49.4
Tube size-36.3 x \varnothing 12.8

Specifications	Quantity
Bulk Tubes	480units
Racked	48units \times 10racks
Bulk Caps	480units
Empty rack	10racks

External Type



Capacity available 2.0 ml

2.0ml

JT-CRYO2.0F-EX



Rack size-127.8 x 85.5x49.4
Tube size-43.9 x \varnothing 12.8

Specifications	Quantity
Bulk Tubes	480units
Racked	48units \times 10racks
Bulk Caps	480units
Empty rack	10racks

4.0ML

Co-mold Tubes

External Type



Capacity available 4.1ml

4.0ml

Rack size-127.8 x 85.5x86.2
Tube size-80.7 x ϕ 12.8

JT-CRYO4.0L-EX

Specifications	Quantity
Bulk Tubes	480units
Racked	48units \times 10racks
Bulk Caps	480units
Empty rack	10racks



6.0ML

Jacket Tubes

ExternalType



Capacity available 5.4ml

6.0ml



Rack size-127.8 x 85.5x66.5
Tube size-62.6 x ø 17.0

TU-JT6.0 +JA-6.0-EX

Specifications	Quantity
Bulk Tubes	240units
Racked	24units × 10racks
Bulk Caps	240units
Empty rack	10racks



10.0ML

Co-mold Tubes



External Type



Capacity available 8.1ml

10.0ml

Rack size-127.8 x 85.5x88.5
Tube size-83.6 x \varnothing 17.0

JT-10.0-EX

Specifications	Quantity
Bulk Tubes	240units
Racked	24units \times 10racks
Bulk Caps	240units
Empty rack	10racks



6.0 μ L

Non-Jacket Tubes

384 Type



Capacity available 0.1 ml

0.1ml

Rack size-127.8 x 85.5x23.0
Tube size-14.0 x 4.4

2D-384 R/SQ

Specifications	Quantity
Racked	348units \times 10racks
Empty rack	10racks



200 μ L

Non-Jacket Tubes



External Type



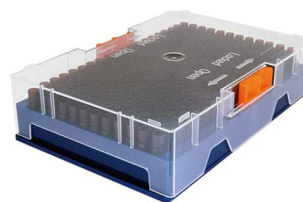
Capacity available 0.2 ml

0.2ml

Rack size-127.8 x 87.2x32.0
Tube size-27.2 x ϕ 5.8

TU-OS240-EX

Specifications	Quantity
Bulk Tubes	2400units
Racked	240units \times 10racks
Bulk Caps	2400units
Empty rack	10racks



Certificate of quality

EACH STATEMENT

approved candidate substance
th of * approved substance ca
on the substances corresponding with
ances are present in the above mention

te has been prepared on the based on the information fro
d subcontractors related to the target product. However, it is
received as of the date described above; therefore, it is subj
ce due to new establishment and/or abolition of the domestic and
lations and new findings.

Product:

RNase / DNase Free:

This is to certify that this products are RNase / DNase free.
We perform a periodic test defined in our quality management system.

Endotoxin (pyrogen) Free:

It is certified that this product contains no endotoxin (pyrogen).
We perform a periodic test defined in our quality management system.

PCR inhibitor Free:

We certify that our products are PCR-inhibitor free.
We perform a periodic test defined in our quality management system.

Heavy Metal Free:

We certify that heavy metal(Lead/Cadmium/Mercury/Hexavalent
in our products and meets CONEG requirements.*2

Animal Free Statement (TSE/BSE):

We certify that our products are not manufactured from
of animal origin.*2

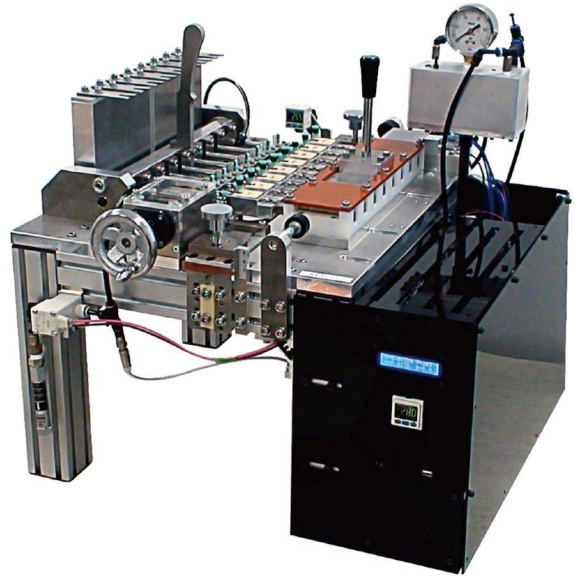
*1 The content of this specification is current as
*2 This certificate has been prepared on the b
and subcontractors related to the target r
ived as of the date described above
establishment and/or abolition

品质管理

所有制造过程中采用各种测试和检查方法,以确保产品的品质。
这种方法可以从生产线中排除低于我们品质标准的产品和/或部件。

塑产品检验

肉眼检查
配件性能检查(螺纹加工, 泄漏 *1)
尺寸检查
激光标记产品检查
物负载值测量
脱测试



※1) Air Tightness Testing (ALD), 气密性测试

气密性是以“JIS Z2332 Leak Testing Method using Pressure Change”的方法进行测试。这个测试是用测试器(如图所示)对内管进行加压。
测试结果确认符合“IATA Dangerous Goods Regulations PI602 / 650”的高水平气密性。

01

Endotoxin (Pyrogen) Free

02

DNA/RNA DNase/RNase Free

03

Heavy Metals Free

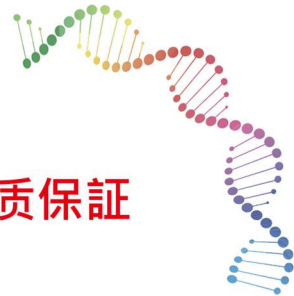
04

Animal (TSE/BSE) Free



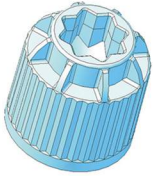
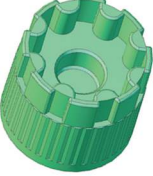
05

Cytotoxicity Free

品质保証



Cap Range Summary

				
KBR Name	Screw Cap-96	Screw Cap-96	Screw Cpa-48	Screw Cap-24
Shape	External	Internal	External	External
Type	Single/carrier	Single/carrier	Single cap	Single cap
Material	PP	PP + TPE	PP	PP
Min Temperature (°C)	-196	-196	-196	-196
Color	11 different colors	11 different colors	10 different colors	11 different colors



Screw Cap-96 Internal



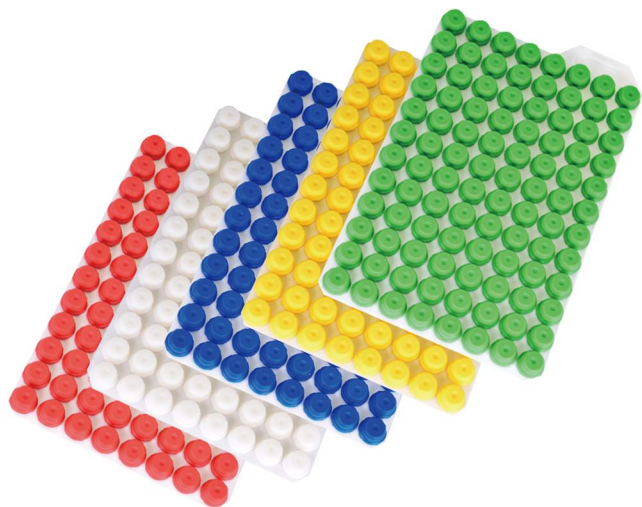
Screw Cap-96 External



Screw Cap-48 External

				
384-Cap	Screw Cap-240	Septum Cap	Septum Cap	Air Film
—	External	External	Internal	—
Racked cap	Single cap	Single + Mat of 96 caps	Single + Mat of 96 caps	Sealed of 96 caps
PP	PP	TPE	TPE	Aluminum + PET
-196	-196	-196	-196	-196
1 color	2 different colors	1 color	5 different colors	1 color

Mat of 96 caps



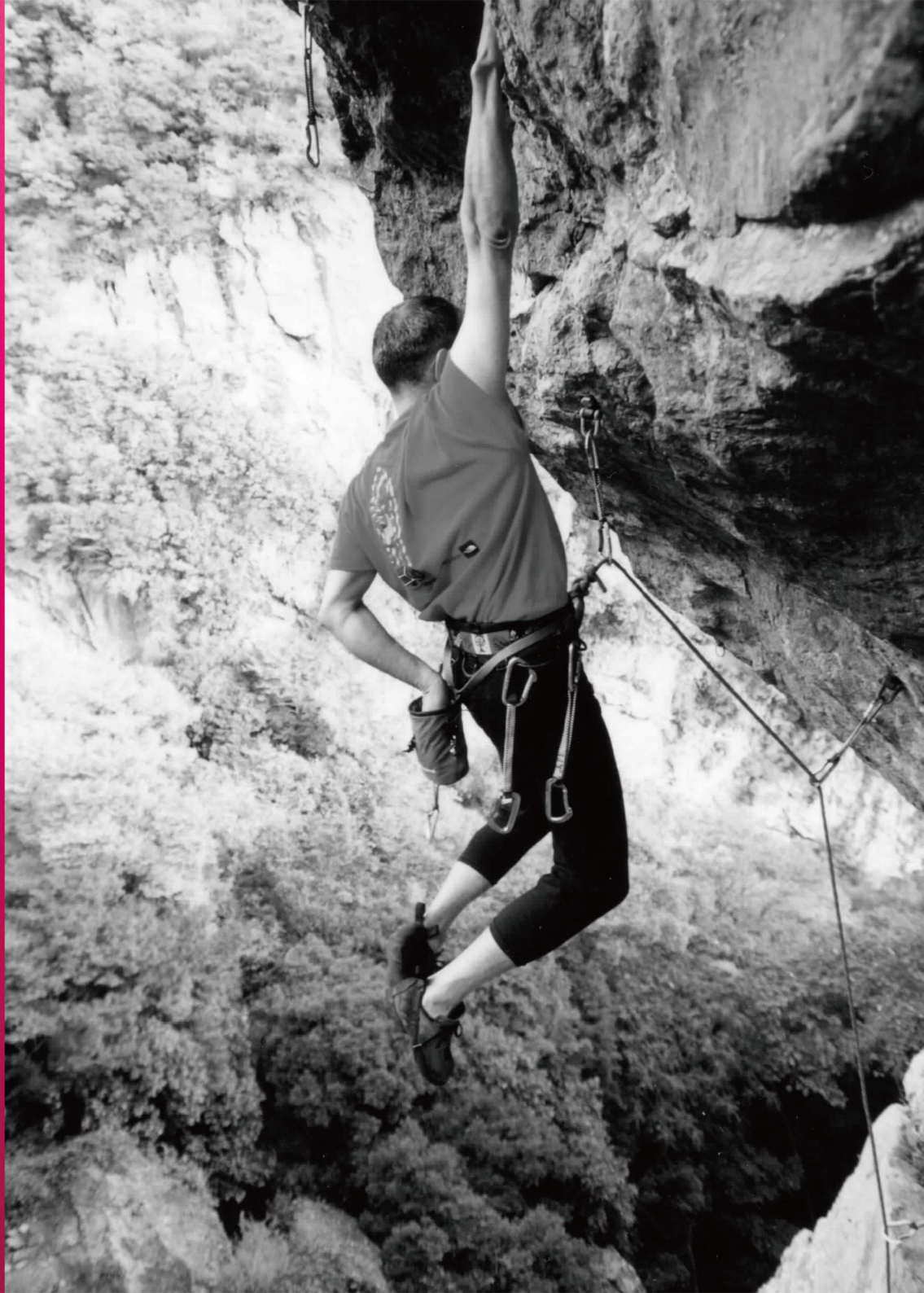
Mat of 96 caps External

Tube Range Summary

					
KBR Name	JT-0.3-EX	JT-W0.5-EX	JT-W0.5-IN	JT-W0.7-IN	JT-W1.0-EX
Type	co-mold	co-mold	co-mold	co-mold	co-mold
Volume (ml)	0.38	0.73	0.78	1.06	1.28
Max Working Volume (ml) Septum / Screw	0.25	0.45 / 0.55	0.45 / 0.50	0.70 / 0.75	0.85 / 1.05
Tube Height (mm)	15.2	26.4	25.63	36.8	46.2
Tube Height with Cap (mm) Septum / Screw	18.6	27.6 / 29.8	26.8 / 33.88	38.0 / 45.0	47.4 / 49.6
Inner Diameter (mm)	6.5	6.5	6.8	6.8	6.5
Outer Diameter (mm)	8.5	8.7	8.3	8.4	8.7
Center to Center (mm)	9.0	9.0	9.0	9.0	9.0
Min Temperature (°C)	-196	-196	-196	-196	-196
2D Coded	○	○	○	○	○
2D Code Color	White/Black	White/Black	White/Black	White/Black	White/Black
Linear Barcode	×(2D)	○	○	○	○
Human readable	○	○	○	○	○
Non-Coded Option	×	×	×	×	×
Capping type	Screw	Septum + Screw	Septum + Screw	Septum + Screw	Septum + Screw
Thread type	External	External	Internal	Internal	External
Quantity in Rack	96	96 / 196	96 / 196	96 / 196	96 / 196

							
JT-W1.0-IN	JT-CRYO1.5-EX	JT-CRYO2.0F-EX	JT-CRYO4.0L-EX	TU-JT6.0+JA-6.0-EX	JT-10.0-EXi	2D-384 R/SQ	TU-OS240-EX
co-mold	co-mold	co-mold	co-mold	Jacket	co-mold	Non-Jacket	Non-Jacket
1.33	1.96	2.46	4.7	6.6	9.6	0.11/0.12	0.25
0.90 / 1.00	1.6	2.0	4.1	5.45	8.1	0.06/0.09	0.21
44.2	30.6	38.2	75.0	56.4	77.41	14.0	24.1
45.4 / 52.4	36.3	43.9	80.7	62.6	83.6	16.9	27.5
6.8	9.63	9.63	9.63	13.1	13.11	3.6	3.9
8.4	12.8	12.8	12.7	17.0	17.0	4.4	5.8
9.0	13.5	13.5	13.5	18.0	18.0	4.5	6.0
-196	-196	-196	-196	-196	-196	-100	-100
○	○	○	○	○	○	○	○
White/Black	White/Black	White/Black	White/Black	White/Black	White/Black	White	White/Black
○	○	○	○	○	○	×	×
○	○	○	○	○	○	×	×
×	×	×	×	×	×	×	×
Septum + Screw	Screw	Screw	Screw	Screw	Screw	Septum	Screw
1Internal	External	External	External	External	External	—————	External
96 / 196	48 / 100	48 / 100	48	24	24	384	240

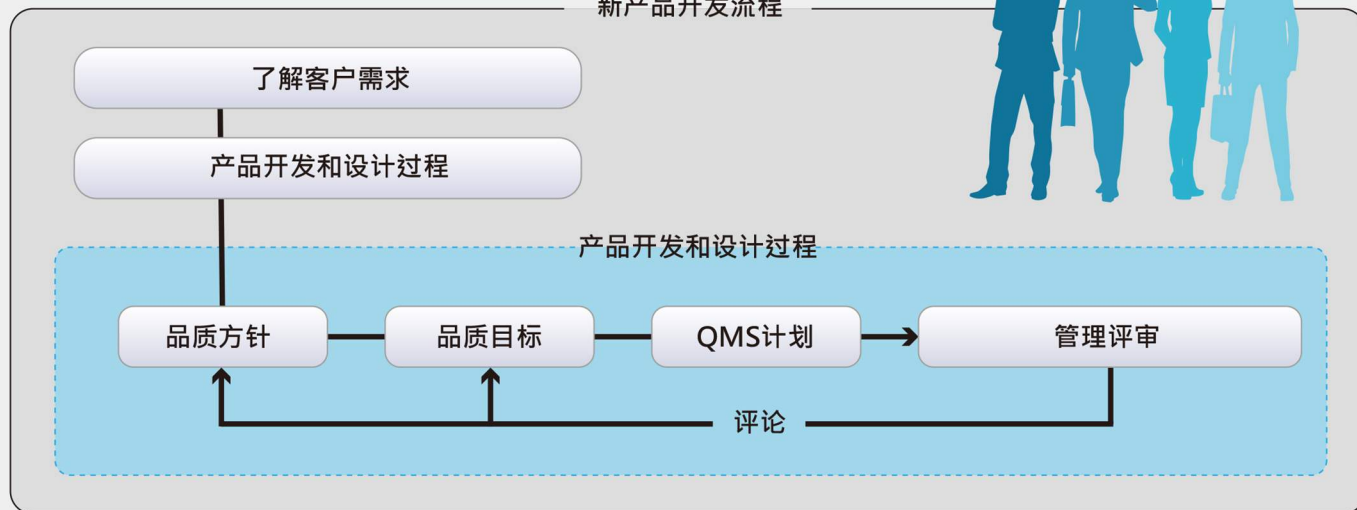
今天就造就明天的标准吧！



New Ideas for 2D Storage Tube



新产品开发流程



在开发的项目



造政策

- 产品使用的变化。品质观念的变化。建立灵活的管理系统，适应任何变化。
- 尽一切努力获取知识，并全力以赴确保“知识”
- 该考虑产品在生产后 它们的用途以及如何达到使用寿命。
- 不需要生产高技术或便利的东西！致力于制造符合并适合需求的产品。
- 客户满意度并不总是首位的。产品和客户的种类有很多，选择也更多！为“Monozukuri (制造业)” 分享我们对未来的希望。



KobeBioRobotix Co.,Ltd.

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URL <http://www.robo-robo.co.jp/>

