

## 简述

该圆柱腔是由三层坡莫合金（一种含80%镍、4.5%钼和铁的退火合金）组成的。该装置能使磁力线绕过保护层，令其内部免受外部强磁场干扰。These are cylindrical chambers made of three layers of Mumetal (an annealed alloy of 80% nickel, 4.5% molybdenum and iron as the balance). Lines of magnetic flux are diverted around the layers, protecting their contents from a strong (5mT) external magnetic field.

可提供开口和加盖两种版本。开口式最好让外部场横切屏蔽罩的轴线，如推荐采用东-西方向。加盖式在样品腔两端另加屏蔽，以便其放置不依赖取向。两个版本均可把约50,000nT的地磁场衰减到约1nT，允许用户测量小部件的剩磁或磁场探头的误差。Open- and capped-end versions are available, the capped-ends with two lengths and a choice of diameters. The open-end version is best used with the external field transverse to the axis of the shield, in a recommended east-west orientation. The capped-end versions have additional shielding at either end of the sample chamber and so are less reliant on orientation. Either will typically attenuate the Earth's field of  $\approx 50,000\text{nT}$  to a level of  $\approx 1\text{nT}$ , enabling the user to measure remanent magnetism in small components or errors in magnetic sensors.

哪怕是屏蔽罩上很小的不均一性或压力都可能会导致弱磁在圆柱腔内积累。这可以用巴庭顿消磁棒消除，从而确保在重要的测试之前，圆柱腔内磁场尽可能接近0。Even small inhomogeneities or stresses in the shield can lead to low level magnetism accumulating inside the cylinder. This can be removed with the Bartington Instruments Degaussing Wand, which ensures that the field inside the cylinder is as close as possible to zero before critical measurements are made.



## TLMS-O100 型开口式磁屏蔽箱特点

- 开口式屏蔽箱，容易放置被测物件
- 含导轨，用于支撑安装在圆柱筒里面的测试探头Guide rails to support test probe fitted inside the cylinder

## TLMS-C100 和 TLMS-C200 型加盖式磁屏蔽箱特点

- 加盖式磁屏蔽箱（带可拆卸前三层盖）为所有方向提供额外的屏蔽，内径为100或200mm
- 含4mm测试接地插座
- 两种圆柱筒长度和内径选择

## 典型应用

- 测量磁场探头的零场偏移误差
- 剩磁测量Remanent magnetisation measurements

## TLMS-O100 型开口式磁屏蔽箱--技术规格

屏蔽箱详细参数	
类型	三层
屏蔽材料	高导磁率合金Mumetal
接缝处Seams	6毫米重叠
两端Ends	都开口both open
内孔的直径	100mm
屏蔽层的内部直径	100mm, 120mm, 140mm
圆柱筒的内部长度	300mm

外壳	
材料	阳极氧化铝anodised aluminium
整体尺寸 (大约)	221mm x 221mm x 310mm
内包装材料	泡沫包装packaging foam
重量	6.25kg

## TLMS-C100 和 TLMS-C200 型加盖式磁屏蔽箱 技术规格

磁屏蔽箱详细参数	TLMS-C100	TLMS-C200
类型	三层	
屏蔽材料	高导磁率合金Mumetal	
接缝处Seams	6毫米重叠	
两端Ends	两端加盖(可拆卸前盖)capped ends (removable front lid)	
内孔的直径	100mm	200mm
屏蔽层的内部直径	100mm, 120mm, 140mm	200mm, 220mm, 240mm
圆柱筒的内部长度	250mm	400mm

外壳	TLMS-C100	TLMS-C200
材料	阳极氧化铝/电镀铝	
外形尺寸 (近似值)	167mm x 173mm x 369mm	272mm x 289mm x 519mm
内包装材料	泡沫包装	
重量	6.8kg	15kg