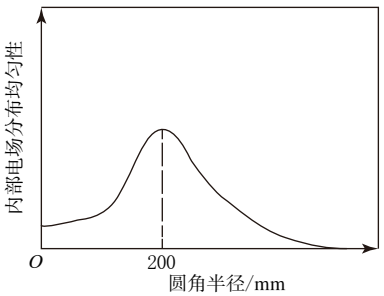

图 6　矩形谐振腔圆角半径对内部电场分布均匀性影响

(2)尖锐棱角不利于谐振腔内部电场均匀性分布,将棱角切成圆角后电场分布均匀性明显改善。

(3)多次模拟试验结果表明,可以在传统方法基础上对矩形谐振腔棱角进行切圆角操作,并且棱长大于 3λ 时,优选圆角半径为 200 mm。

(4)根据多次模拟结果作出的谐振腔所切圆角半径与内部电场分布均匀性的定性图有一定参考意义。

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Design of Box-type Microwave Cavity and Effect of Its Edges and Corners on Distribution of Electric Field

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Abstract: In this study, it was found that the traditional design of box-type microwave cavity was not suitable for the design of large microwave heating device based on the calculation using traditional theory as well as the simulation results on electrical field distribution using Ansys. In a new design, the 8 sharp corners were changed to round corners. The simulation results on the new design showed that the uniformity of electrical field inside the cavity was significantly improved. When the corner radius was 200 mm, the distribution of the electric field was the best.

Key words: microwave cavity, electric field distribution, numerical simulation, round corner, vulcanization

一种改性沥青胶及湿铺防水卷材

中图分类号:TQ336.4;TE626.8+6　　**文献标志码**:D

由北京宇阳泽丽防水材料有限责任公司申请的专利(公开号　CN 103614112A,公开日期 2014-03-05)"一种改性沥青胶及湿铺防水卷材",涉及的湿铺防水卷材包括强力交叉膜层、改性沥青胶层和隔离膜层。其中,改性沥青胶包括沥青、亲水基团官能化橡胶、改性剂、增粘剂、增塑剂、抗氧剂和填充剂。该发明将改性沥青胶、强力交叉膜和隔离膜通过压延、冷却和打卷得到湿铺防水卷材。改性沥青胶中亲水基团官能化橡胶可使沥青具有更优异的性能,同时该成分具有亲水反应活性,制备的改性沥青胶能够渗入混凝土表层中并发生交联反应,产生牢固的化学结合力;改性沥青胶可在渗透、扩散的作用下与混凝土基层形成机械嵌合力,最终在物理和化学的共同作用下,湿铺防水卷材与混凝土之间形成牢固的粘接。

(本刊编辑部　赵　敏)