



资料内容

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AEPCO 公司介绍

About AEPCO

自动化电器产品公司（AEPCO）是 1987 年始建于印度的一家高科技公司，主要为炼钢，石墨，炼铝以及换热器等工业行业提供节能解决方案，并提供解决操作运行过程中发生的实际问题的方案措施。

Auto Electric products Co. or AEPCO is a technical consultancy established in 1987 to provide be-spoke energy saving solutions and resolve operational problems for Steel, Graphite, Aluminum and Heat Exchanger Industries

AEPCO 公司开发的节能产品已经在许多工业行业的关键领域得以成功应用，为客户实现了生产成本的降低，主要体现在如下几个方面：

Coatings developed by AEPCO are widely used in various critical applications to deliver cost savings by

- ✧ 减少生产过程中的电能损耗
Reducing power losses in the production process
- ✧ 提高设备使用寿命
Enhancing equipment service life
- ✧ 提高生产过程中的安全性
Increasing safety during production process
- ✧ 改善最终产品的质量
Improving quality of the end product

我们的客户遍及印度，德国，英国，新加坡以及中东地区

Our client base is spread across India, Germany, United Kingdom, Singapore and Middle East



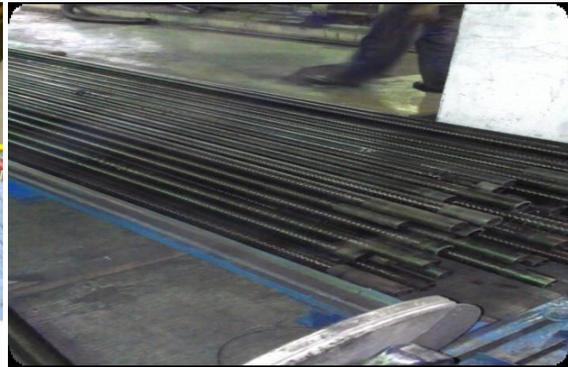
Auto Electric Products Co.

Manufacturer of New Generation High Temperature Industrial Coatings

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炼钢及铸造行业
(感应电炉, 电弧炉)



石墨工业
(石墨管及各种异型件)



热交换器
(翅式或板式)



铝工业
(阳极和汇流排结点)

AEPCO 中国

AEPCO China

AEPCO 旨在将其产品在海外的成功运行经验带到国内，帮助中国客户节能产品成本，提高产品质量，增强企业综合竞争能力。

AEPCO aims to bring its overseas successful experience of product application to China, and help domestic customers in saving cost, improving product quality and increase the comprehensive competitiveness.

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AEPCO 公司节能涂料产品介绍

Coatings Developed by AEPCO

1. Thermoplast (PB)

直接涂刷在铜线圈, 支架, 定位体, 磁轭, 石棉布, 汇流排以及分隔体的表面

Coated directly on Copper Coil, Retainers, Spacers, Yoke, Mica sheets, Bus Bar, separators

主要特征

Key Features:

- a) 在超过 1000 °C 的高温下保持良好的绝缘性能
Electrically Insulating at high temperatures 1000 degrees C
- b) 高温下不会碳化, 防止打火与线圈短路
Doesn't carbonize at high temperatures prevents sparking and turn-2-turn shorting
- c) 使线圈防潮, 抗酸/碱性气氛
Prevents coil against moisture, acidic/alkaline atmosphere
- d) 抗氧化, 抗腐蚀
Anti-oxidant and anti-corrosive

2. Themoplast-1800 与 Thermal Powder

涂在线圈与保温层之间形成炉衬, 以及涂在线圈与炉顶及炉底的缝隙内

Coated as lining between copper, coil & White Heat A/K, air-gap between coils and Top and Bottom of furnace

主要特征

Key Features:

- a) 在超过 2750 °C 的高温下保持良好的绝缘性能
Electrically Insulating at very high temperatures 2750 degrees C
- b) 高温下不会碳化, 防止打火与线圈短路
Doesn't carbonize at high temperatures therefore prevents sparking and turn-2-turn shorting
- c) 防止线圈被渗漏的高温金属溶液烧损
Wet-able in nature - prevents coil against molten metal attack
- d) 耐热冲击性, 热惰性以及热发射率都非常好
Thermal shock, Thermal inertia and emissivity is very high

AEPCO 节能涂料的使用效果

Key Benefits of AEPCO's Coatings

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- 平均节省电耗超过 6-7%
Saving power more than 6-7% in average
- 炉子效率至少提高 10%
Improve furnace efficiency by at-least 10%
- 显著减少泄漏电流，提升炉子热效率
Increase “Rate of heat” by significantly reducing leakage current
- 减少炉子停工次数，节省维护成本
Reduce frequency of furnace shut downs saving maintenance cost
- 显著改善操作安全性
Significantly improves operational safety by:
 - 防止线圈之间短路与打火
Prevent turn-turn shorting and sparking
 - 防止熔融金属烧损线圈
Prevents molten metal attack on coil

案例学习

Case Study

所使用的涂料：Thermplast – 1800, Thermoplast P.B 和 Thermal Powder

Coatings Applied: Thermplast – 1800, Thermoplast P.B and Thermal Powder

客户类型：炼钢厂中频感应炉

Application On: Induction Furnace in Steel Mills

案例：12 吨炉，炉子制造商：Electrotherm

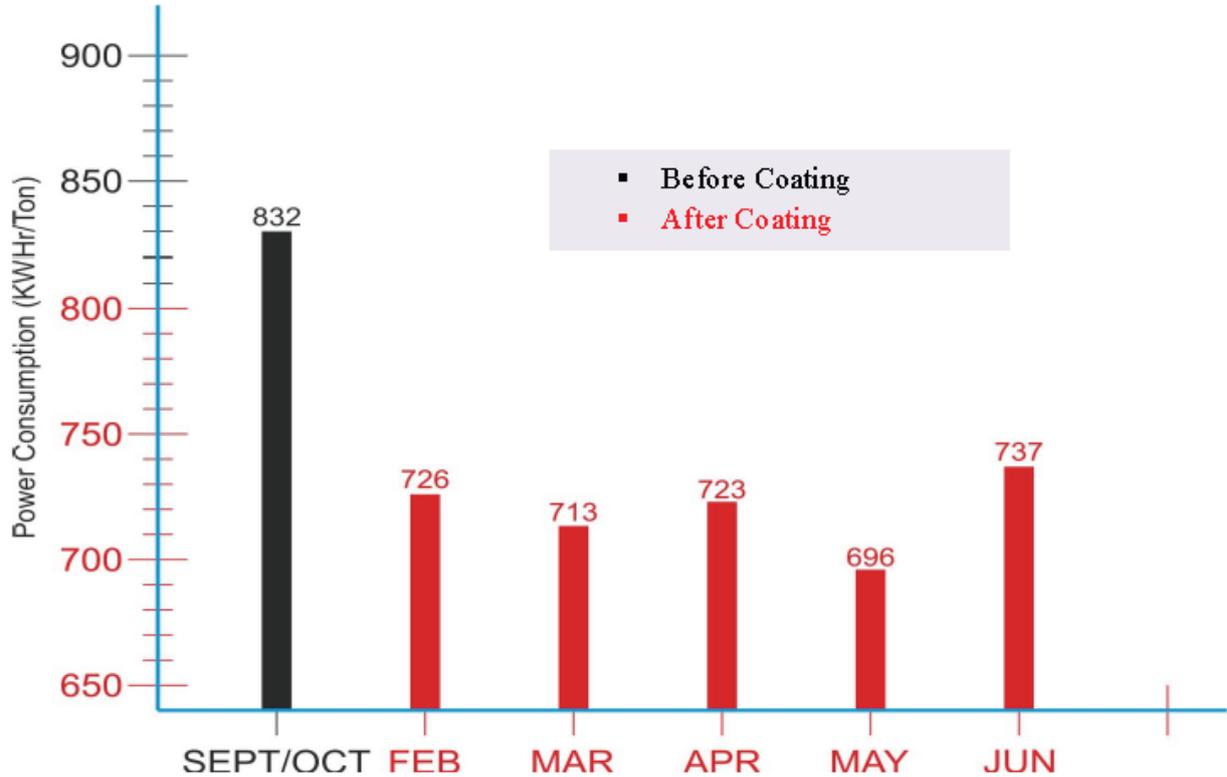
Case Study: 12 MT Furnace, Make: Electrotherm

- 电耗
Power
 - + 使用涂料前平均电耗：832 度/吨（统计两个月）
Average Power Consumption per Ton before coating: 832 KWH per Ton (for 2 months)
 - + 使用涂料后平均电耗：719 度/吨（统计 5 个月）
Average power Consumption per Ton after coating:719 KWH per Ton(for 5 months)
 - + 效果：平均节省电耗 113 度/吨铁，相当于原有电耗的 13%。
Result: Average Power saving of 113 KWH per Ton of metal produced, which is more than 13%
- 化铁率（使用产品后 5 个月）
Molten Metal Produced (After coating in 5 months)
 - + 共计生产铁水：12, 100 吨
Total Metal Produced:12,100 MT
 - + 按照之前的耗电率，总耗电应为：12100*832 = 10067 兆瓦
Power consumed with previous average power would have been:12100*832 = 10067 MWH



+ 使用涂料后的实际电耗为：8700 兆瓦
Power consumed with current average power is: 8700 MWH

+ 实际节省电耗：1367 兆瓦
Total Power Saving of 1367 MWH



- 生产周期缩短

Reduction in Heat Time

+ 使用涂料前平均每炉时间：215 分钟（3 小时 35 分）
Average Heat Time (before coating): 215 minutes or 3 Hr 35 minutes

+ 使用涂料后平均每炉时间：189 分钟（3 小时 9 分）
Average Heat Time (after coating): 189 minutes or 3 Hr 9 minutes

+ 冶炼周期缩短：26 分/炉，相当于减少 12%
Reduction in heat time: 26 minutes per heat cycle, that is 12%

*节省的时间可以用于生产更多的铁水，提高生产效率

Saved time can be effectively used in producing extra molten metal.

	涂料使用前	使用涂料后	变化量	变化率
电耗 (KWH/Ton)	832	719	-113	-13.6%
生产时间 (Min)	215	189	-26	-12.1%



部分成功案例

References

AEPCO 目前已经帮助分布在印度，中东以及新加坡的超过 50 个客户节省电耗，以下列举其中几个作为参考
AEPCO have so far helped more 50 customers in India, Middle East and Singapore in reducing their power consumption.

Here are a few below:

1. Cooper Foundries – 4 个 1 吨炉
Cooper Foundries - 4 – 1 MT Furnaces
2. JSPL – 4 个 20 吨炉
JSPL – 4 – 20 MT furnaces
3. Adhunik Group – 4 个 30 吨炉
Adhunik Group – 4 – 30MT furnaces
4. Vandana Global – 4 个 20 吨炉
Vandana Global – 4 – 20 MT furnaces
5. Raipur Alloys – 2 个 30 吨炉
Raipur Alloys – 2 – 30 MT furnaces
6. Kalifa Steel (Middle East) – 2 个 30 吨炉
Kalifa Steel (Middle East) - 2- 30MT Furnaces

欢迎垂询

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