



Business Case for
Natural Refrigerants

11-12/04/2018 – Beijing



SPAR Beijing:R290 Island Freezer Experience

SPAR 北京华冠:R290 一体岛柜使用体验

Beijing Huaguang Group 北京华冠商贸集团

- A partner of SPAR Group
SPAR 自愿零售组织成员之一
- Operations in Beijing City and partial of Hebei Province
运营北京市及河北省部分区域
- Core business is grocery retail
核心业务是零售业发展
- 72 whole owned stores and 300 franchising stores
已经发展72家直营门店和300多家加盟门店
- Top 4 in Beijing retail industry and Top40 in China retail industry
在北京排名第四，全国零售百强排名40



History of Green store of Hua Gang 华冠的绿色门店之路

- 1995 to 2005, Remote system with R22 refrigeration
1995年至2005年，采用分离式R22制冷系统
- 2005 to 2010, Remote system with R404a refrigeration
2006年至2010年，采用分离式R404a制冷系统
- 2011 to 2014, Took AHT plug-in cabinet as island freezer, while remote system for upright chiller and cold room, R404a refrigeration .
2011年至2014年, 岛柜采用AHT自携式整机柜，立柜及冷库采用分离式系统，R404a制冷剂
- From 2015 till today, Took AHT R290 Variable speed cabinet as island freezer, while R404A remote system for upright chiller and cold room
2015年至今，岛柜采用AHT-R290变频自携式整机柜，立柜及冷库仍然采用R404a分立式系统

目前状况

Statues -2017

- Island freezer : from Y2015, All the new store were taken R290 Cabinets ,and plan to replace 300pcs with R404a in old stores step by step
岛柜：2015年至今，所有新开门店的岛柜均采用R290整机柜，同时逐步替换300余台404a冷媒的整机柜
- Finding green solution for upright chiller and cold room (technical , cost)
- 致力于寻找立风柜及冷库等设备的绿色解决方案（技术，成本）

Experience & Benefits from R290 Shelf contained cabinet R290变频自卸式岛柜的体验与收益

- Lower heat releasing and lower noise –the system is very reliable (Ex. 30pcs in our 35# stores installed in Y2015, till today ,no service and maintenance request)
低排热，低噪音—系统稳定性高（例如：2015年35号店采用30台AHTR290整机柜，三年未做任何维护，至今运行良好）
- Energy consumption: we tested in our store : the actual energy consumption is 6.8KWH/24Hs for 1 pcs. Which is lower 24% than same AHT cabinet with R404A
实测平均能耗低至6.8度/台/天，比AHT-404a同规格节能24%
- Easy to re-layout the store based on the seasonal change
便于依据商品淡旺季进行卖场布局调整



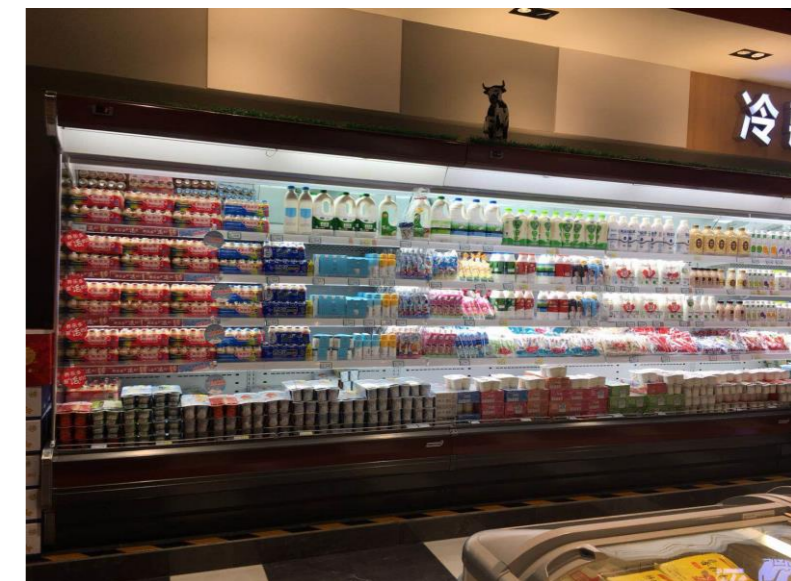
**Our Challenge on the way to green store
我们绿色门店之路的挑战**

Our experience shows R290 is a very good green store solution , but when we can take it on the others equipment (upright chiller, promotion showcase, etc.)

我们的经验：R290作为自然冷媒，是非常好的绿色门店解决方案，何时才能运用到门店的立柜及其他设备上？

We need green solution for these equipment ,Best self contained system with natural refrigeration to reduce installation engineering !

我们需要解决以下这些设备的绿色问题。最好是自然冷媒+自携式制冷系统，以减少工程安装！





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Thank you very much!

