

**MIRACO - CARRIER  
MANUFACTURING PLANT  
& EQUIPMENTS LAYOUT**

## Factory Introduction

**Built in: 1976**

**Factory Area**

**Site: 969,000 sq.ft**

**Mfg. facility: 315,150 sq.ft**

**Warehouse: 196,751 sq.ft**

**Office:**

**1550 Total Employees**

**391 hourly / 476 salary**

**Production Lines: 12**

**Number of Shifts: 1 to 3**

**Total Production Units: 409,374**

**Total Sales in 2010 : 1.283 Billion EGP**



**ISO 9001 Quality certified, from Dec 1995**

**ISO 14001 Safety certified, from Jan 2007**

**ISO 18001 EH&S certified, from Mar 2009**



**Engineering Building**

**Manufacturing Workshops**

**Warehouses**

**Parking**

**Office Building**



## Miraco Advanced Manufacturing Techniques To Ensure Quality In Tube Manufacturing



## Miraco Advanced Manufacturing Techniques To Ensure Quality In Coil Manufacturing



Miraco will have a New Japan FIN DIE by Oct. 2011, same as China.





## Miraco Advanced Manufacturing Techniques To Ensure Quality In Sheet Metal Manufacturing



CNC



## Miraco Advanced Manufacturing Techniques To Ensure Quality In Painting Manufacturing





## Miraco Advanced Manufacturing Techniques To Ensure Quality In Coils Manufacturing ( 100% Helium Leak Tested )



Vacuum Helium Camber test





## **Miraco Advanced Manufacturing Techniques To Ensure Quality In Assembly Lines of RLC Outdoor Units**



**R410a production line to be available by July. 2011**

## Miraco Advanced Manufacturing Techniques To Ensure Quality In Assembly Lines of High Wall Indoor Units





## Miraco Advanced Manufacturing Techniques To Ensure Quality 100% **End of Line Testing** of Each RLC Outdoor Unit



Invest 10million EGP to establish 5 End line test rooms. 100% test required.

**5minutes operation test**  
**(2min. HP, 3min. CO)**

Performance data check:  
Current, Pressure, Temp.  
difference.

8L Turbo Vacuum pump  
circle operation.



## Miraco Advanced Manufacturing Techniques To Ensure Quality End of Line Testing of High Wall system



## Miraco Advanced Manufacturing Techniques To Ensure Quality End of Line Testing of High Wall system



## Miraco Advanced Manufacturing Techniques To Ensure Quality End of Line Performance Testing of High Wall system





## Miraco Advanced Manufacturing Techniques To Ensure Quality End of Line Testing of High Wall outdoor Units



Safety Test

## Miraco Advanced Manufacturing Techniques To Ensure Quality End of Line Sound Testing of High Wall Indoor Units



## Miraco Advanced Manufacturing Techniques To Ensure Quality In Assembly Lines of Commercial Products





## Miraco Advanced Manufacturing Techniques To Ensure Quality In Assembly Lines of Refrigeration Products

