



# Dunham-Bush Overview & Product Presentation



## DB History - USA

120 years...



1894  
C.A. Dunham  
Company

The pioneer of flooded  
heat exchanger  
technology

Produced the  
first reciprocating  
compressor for  
the A/C

1906  
Bush  
Manufacturing  
Company

1906  
Brunner  
Manufacturing  
Company

The first group  
of A/C  
manufacturers  
in the world



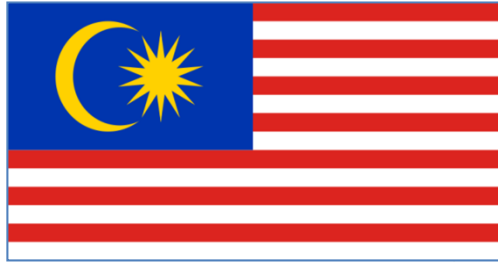
**DUNHAM-BUSH**

Products that perform. By people who care.



## *Berjaya Group, Malaysia Acquisition*

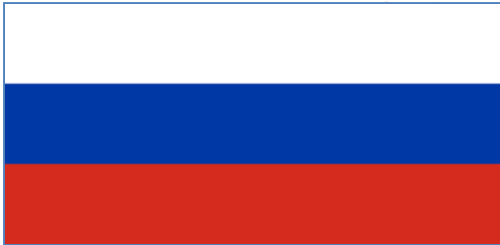
1995...



In 1995, Berjaya Group Malaysia has become a controlling shareholder of Dunham-Bush Group.

## *Agromash Holding, Russia Acquisition*

2007...



Dunham-Bush was purchased by Agromash Holding in 2007, one of the Russia largest engineering company specialized in machinery and engine production.

**DUNHAM-BUSH**

Products that perform. By people who care.



## *Yantai Moon Group, China Acquisition*

*Sep 12, 2012...*



In 2012, Yantai Moon Group company, became a controlling shareholder of Dunham-Bush Group. Yantai Moon Group has been a joint venture partner of Dunham-Bush in China for the past 17 years and provided its valuable support and expertise in building successful operations of the joint venture.

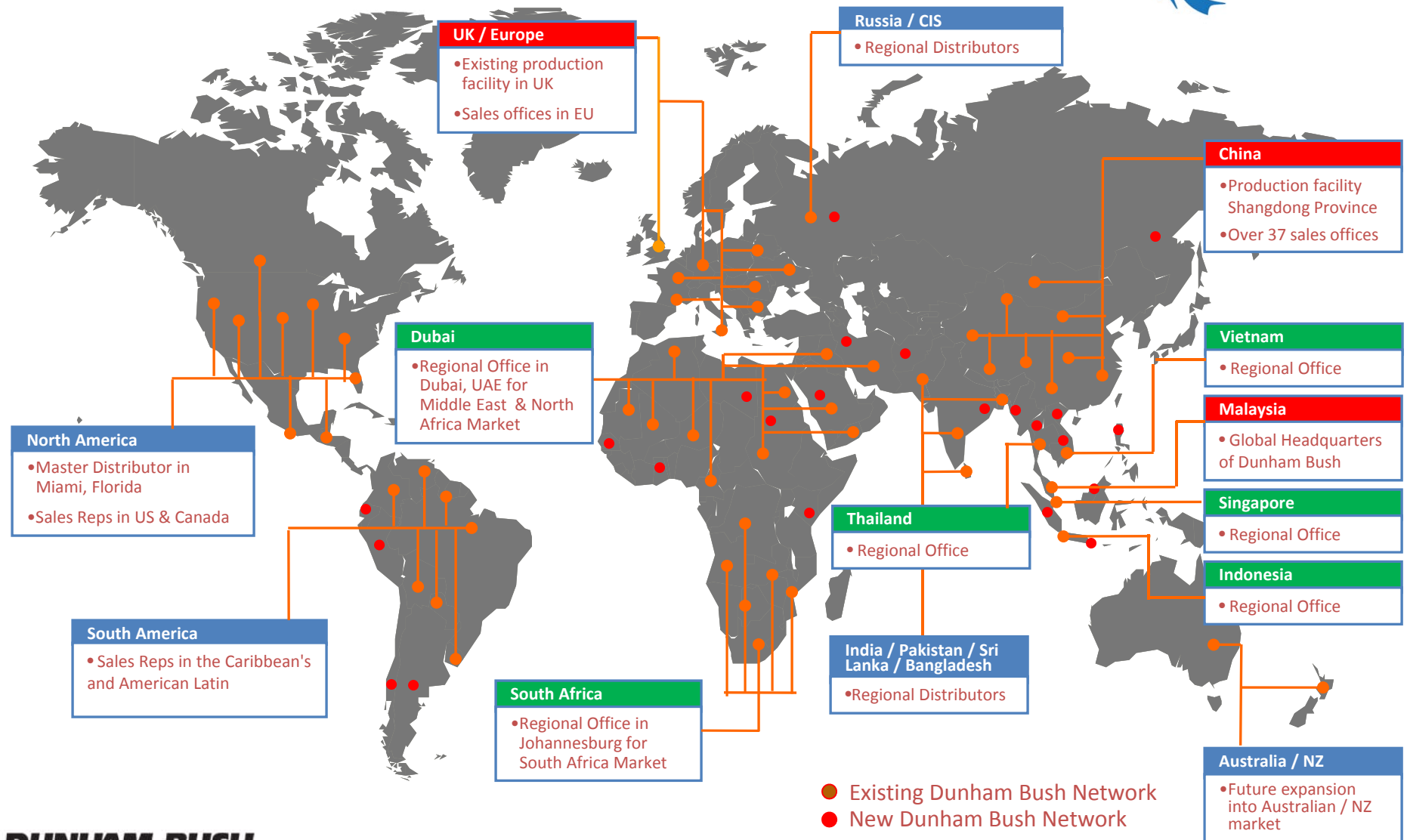
Main products of Yantai Moon Group are low temperature industrial units, cold storage and freezers. The acquisition will create new synergies between Yantai Moon Group and Dunham-Bush and will bring about benefits to customers on both domestic and international levels.

**DUNHAM-BUSH**

Products that perform. By people who care.



# Global Network



**DUNHAM-BUSH**



# Manufacturing Facilities-Malaysia



- DB Malaysia is located in Kajang, Selangor MALAYSIA
- Operations mainly revolves around
  - **Manufacturing**
  - **Engineering**
  - **Distribution**
  - **Sales & Services**of complete range of HVAC products



Products that perform. By people who care.

**DUNHAM-BUSH**





# Manufacturing Facilities-Malaysia



A- Office

B- Factory

➤Chiller

➤Packaged

C- Factory

➤Heat Exchanger

D- Factory

➤Sheet Metal

➤Paint Shop

E- Factory

➤AHU & FCU

➤Coil

F1- Office

F2- Store

**DUNHAM-BUSH**

Products that perform. By people who care.

# Manufacturing Facilities-China



- DB China is located in Yantai, People Republic of CHINA
- Operations mainly revolves around
  - **Manufacturing**
  - **Engineering**
  - **Distribution**
  - **Sales & Services**of complete range of HVAC products



Products that perform. By people who care.

**DUNHAM-BUSH**





# Manufacturing Facilities-UK



- DB UK is located in Havant, United Kingdom
  - Operations mainly revolves around
    - **Manufacturing**
    - **Engineering**
    - **Distribution**
    - **Sales & Services**
- of complete range of heating products

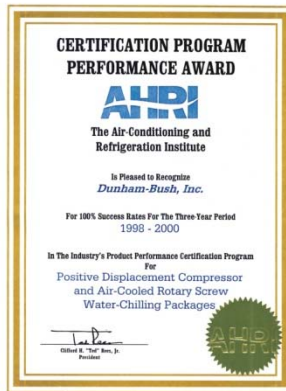


**DUNHAM-BUSH**

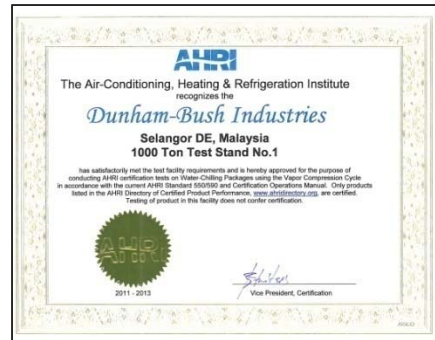
Products that perform. By people who care.



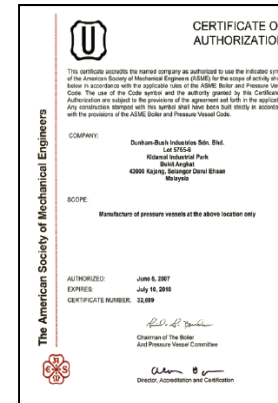
# International Certifications



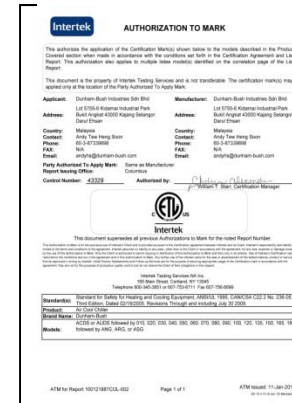
AHRI Certification



AHRI Testing Facility



ASME



ETL



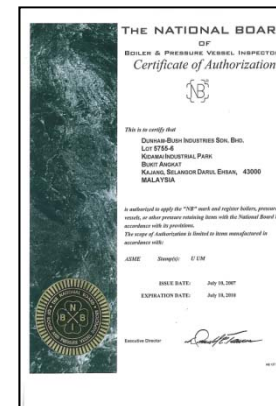
ISO 9001:2000



JKKP



EC



NB



PRC

**DUNHAM-BUSH**



# Product Ranges



*Product That Perform ... By People Who Care*

**DUNHAM-BUSH**





# Type of Compressors



## Compressor

Rotary

Scroll

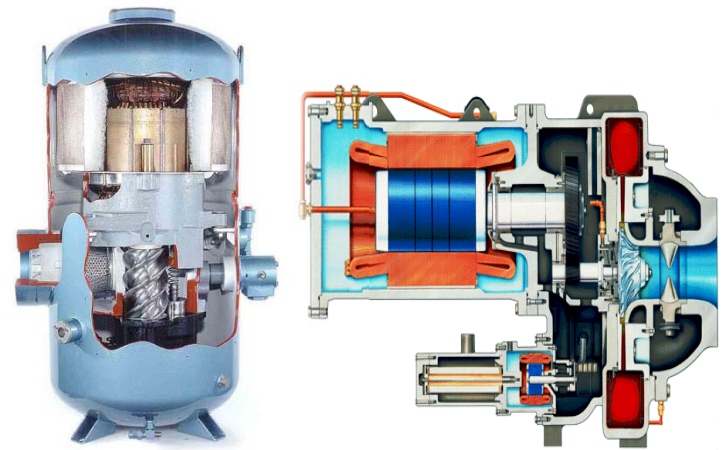
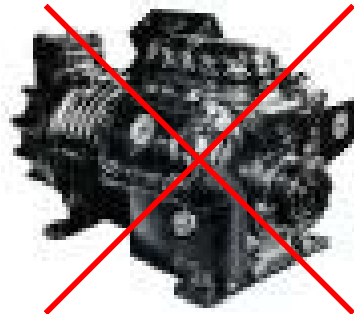
Reciprocating

Screw

Centrifugal



External Compressor



DB Compressor





# Water Cooled Chiller



300 ~ 4000TR  
(1055 ~ 10548 kW)



66 ~ 930TR  
(232 ~ 3271kW)



WCFX-E Series



DCLC Series

12 ~ 62TR  
(42 ~ 218 kW)



WCS Series

0 500 1000 1500 2000 3000 4000  
TR

**DUNHAM-BUSH**



# Air Cooled Chiller



77 ~ 329TR  
(270 ~ 1156 kW)



R<sub>407C</sub>

ACDX Series



100 ~ 520TR  
(352 ~ 1830kW)

R<sub>134a</sub>



AFVX-B Series

10 ~ 180TR  
(35 ~ 633 kW)



R<sub>410A</sub>



ACDS Series

0 100 200 300 400 500 600

TR

**DUNHAM-BUSH**



# Heat Pump Series



**R134a**

55 ~ 586TR  
(194 ~ 2061 kW)



**WCFXE-HP Series**

**R407C**  
**R134a**

10 ~ 70TR  
(35 ~ 246kW)



**WCS-HP Series**

65 ~ 506TR  
(230 ~ 1780 kW)

**R134a**



**ACDX-HP Series**

**R407C**

10 ~ 70TR  
(35 ~ 246kW)



**ACS-HP Series**



0 75 150 225 300 375 450 525 600

TR

**DUNHAM-BUSH**



# Air Side Series



4 ~ 200TR  
(1600 ~ 57000 CFM)



2 ~ 52TR  
(750 ~ 19000 CFM)



HCB Series



VCB Series



CS3 Series

0.5 ~ 3TR  
(200 ~ 1400 CFM)



CR CD Series

0.5 ~ 15TR  
(200 ~ 4000 CFM)



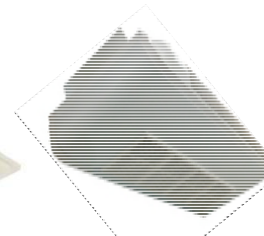
CC Series



CR CB Series



CC Series



CE Series



WM Series



0 7500 15000 22500 30000 37500 45000 52500 60000

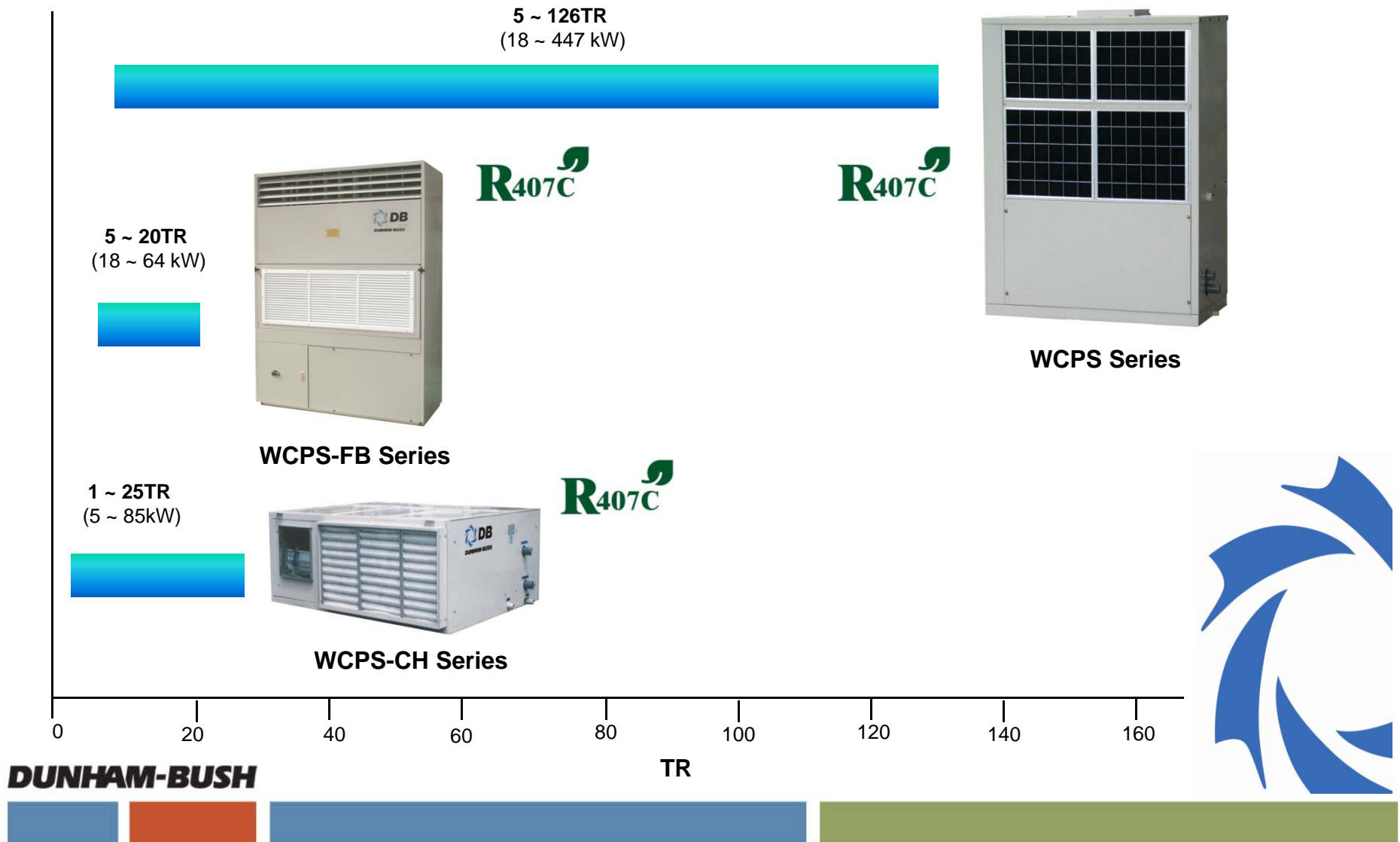
CFM

**DUNHAM-BUSH**





# Water Cooled Packaged



# Specialized Product



## Thermal Energy Storage (TES)



Integrated Ice Cel Series



Modular Ice Cel Series

## Precision Air Conditioning



R407C



DBAIRE II Series



DBRC Series

**DUNHAM-BUSH**

Products that perform. By people who care.



# Manufacturing Facilities

(Malaysia)



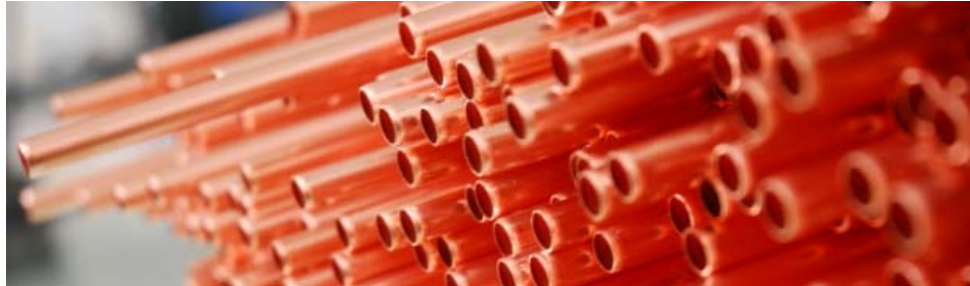
*Product That Perform ... By People Who Care*

**DUNHAM-BUSH**

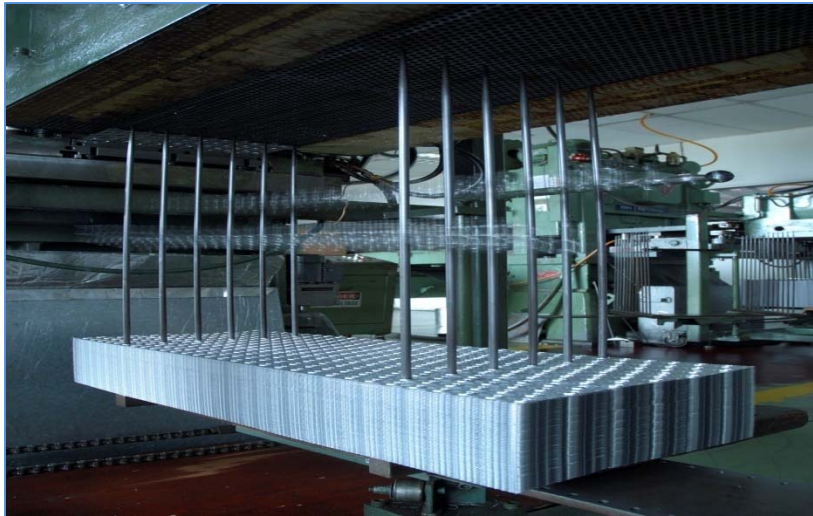


# Manufacturing Facilities

—Coil Product Line from Tridan US.



**Tridan**  
*International, Inc.*



**DUNHAM-BUSH**





# Manufacturing Facilities



—Electrostatic Powder Paint Spraying from Germany.

**EISENMANN**



**DUNHAM-BUSH**



# Manufacturing Facilities

—CNC Punching Machine from AMADA Japan



**DUNHAM-BUSH**

Products that perform. By people who care.



# Manufacturing Facilities

## —Production Line



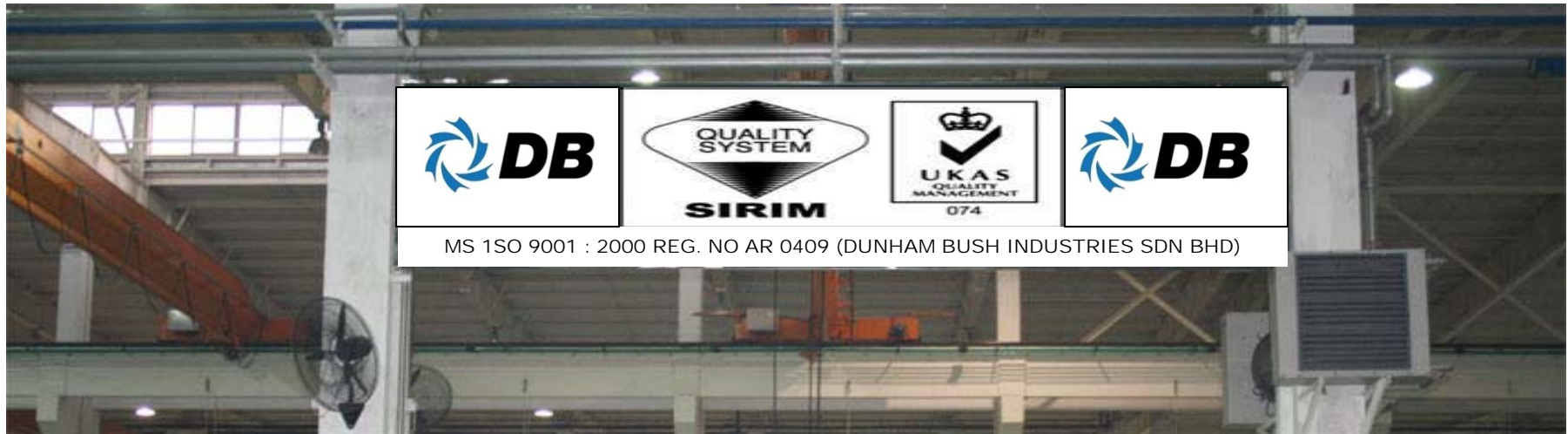
**DUNHAM-BUSH**





# Manufacturing Facilities

—Highest Quality Control



**DUNHAM-BUSH**

Products that perform. By people who care.





# AHRI Certified Testing Facilities



**DUNHAM-BUSH**

