Introduction

• Established in 1992

• Trade in HVAC Equipments, Controls, Allied Parts, Insulation material and Filters

• WSE represents renowned manufacturers, ISO Certified products from various origins

• Business Clients are Manufacturers, Contractors, and HVAC Traders
WSE Product Basket

WORLD STAR ENGINEERING

Insulation - KIMMCO
Flexible Duct - STAR FLEX
Hvac Controls - SAGINOMIYA
Evaporative cooler

Duct Accessories - DURODYNE
Filters - FLECO

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WSE Brands

KIMMCO
means insulation!

Dwyer

Duro

Dyno

Fleco

SaginoMiya

JHCool
Fiber Glass Insulation

- Duct Insulation (KDI)
- Duct Liner (KDL)
- Pipe Covering
- Building Slabs (MB2000)
Duct Insulation (KDI)

- **Description:** Blanket Roll, Semi Rigid and Rigid Slabs
- **Application:** External Insulation for Air Ducting and Air Handling Equipment
- **Density:** 10 - 96 Kg/M3
- **Facing:** Un-faced and Faced with FSK and ASJ
- **Working Temperature:** Fiber: 230°C, Foil face: 100°C
Duct Liner (KDL)

- **Description:** Blanket Roll, Slab
- **Application:** Use for Air Ducting, wall and ceiling for sound Absorption
- **Density:** 16 – 60 Kg/M3
- **Facing:** Faced with non-woven strong, stable Black Glass Tissue
Duct Liner (KCL)

- **Description:** Blanket Roll, Semi Rigid Slabs
- **Application:** Internal Insulation for Air Ducting and Air Handling Equipment for sound Absorption
- **Density:** 24 - 72Kg/M3
- **Facing:** Faced with Black Woven Glass Fabric, Strong, Durable and Dimensionally stable
Rigid Pipe Covering

- **Description:** Preformed sections of glass fibers bounded with heat resistant resin
- **Application:** Thermal Insulation of Steel, Copper and Plastic Pipes
- **Density:** 64 - 120Kg/M3
- **Facing:** Plain or Faced with Glass Reinforced Aluminum FSK and ASJ
Building Slabs (KBS)

- **Description:** Semi-rigid and Rigid Board
- **Application:** For Thermal and Acoustic insulation of Concrete Floor, Single Leaf Wall
- **Density:** 24 - 120Kg/M3
- **Facing:** Un-faced and Faced with bitumen, Kraft Paper, Canvas or Glass Reinforced Aluminum FSK and ASJ, metalized polyester, Black Glass Cloth, Aluglass
**Pre-Insulated Duct (PU)**

**Pipe**

- **Description:** Polyurethane or Polyisocyanurate rigid closed cell foam Insulation
- **Application:** Applicable in Air-Conditioning Systems, Oil, Petrochemical, Process Plant and General Insulation Industries. It can be used for Pipe, Duct, Tank & Vessel Insulation.
- **Density:** 35Kg/m³ to 65Kg/m³
- **Facing:** Un-faced and Faced with reinforced Aluminum foil or Alu-glass foil.

**Board**

- **Description:** Polyurethane or Polyisocyanurate rigid closed cell foam Insulation
- **Application:** Applicable in Air-Conditioning Systems, Oil, Petrochemical, Process Plant and General Insulation Industries. It can be used for Pipe, Duct, Tank & Vessel Insulation.
- **Density:** 80Kg/m³ to 120Kg/m³
- **Facing:** Faced with one side reinforced Aluminum foil and other side Kraft Paper or Alu-glass foil finished.
**Flexible Duct**

- **Description:** Pre-Insulated composed of Polyethylene, Aluminum Foil or Metalized PET.
- **Application:** Supply Air outlets to rigid ductwork
- **Diameter:** 100 – 500 mm (4” – 14”)
- **Temperature Range:** 0 – 100°C
- **Pressure:** 2000 Pa maximum working Pressure
- **Packing:** 25 Yards

**Aluminum Adhesive Tape**

- **Description:** Aluminum Adhesive Tape
- **Characteristics:**
  - Moisture and solvent resistant
  - Heat and light reflective
  - Flame resistant
- **Application:** Conducting, Shielding and Sealing
- **Temperature Range:** -54°C to 149°C
- **Width:** 2” and 3”
- **Packing:** 30 Yards (Roll)
Duct Accessories

**Duct Sealant**

- **Description:** Water based, Non-Flammable when wet
- **Application:** Adhesive for Bonding Insulation Material to Sheet Metal
- **Storage Temperature:** 70° F
- **Viscosity:** 1600 – 1800 CPS

**Duct Connector**

- **Description:** Flexible Duct Connector
- **Application:** To attach Duct and Mechanical Equipment
- **Size:** 6 ½”, 9 ½” and 12”
Duct Accessories

Canvas Cloth

Glass Cloth
HVAC Filters

- Pre-Filtration
- Semi-Finished Media
- Medium Filter
- HEPA/ULPA Filter
- Carbon Activated Filter
Pre-Filtration

Cardboard Synthetic Pre Filter

- **Frame**: Cardboard, Extruded Aluminum, Galvanized Steel
- **Media**: Polyester
- **Efficiency**: G3/G4, 35% (EN779)
- **Pressure drop**: ≤ 200Pa

Replaceable and Washable Pre-Filter

- **Frame**: Extruded Aluminum Galvanized Steel Sheet
- **Media**: Polyester
- **Efficiency**: G3/G4, 35% (EN779)
- **Pressure drop**: ≤ 250Pa
Pocket Filter

**Frame:** Galvanized Sheet, Extruded Aluminum Plastic

**Media:** Melt blown PP Synthetic Fiber

Ultrasonic Welded Pocket Spacer and Edges

**Efficiency:**
- F5 (EN 779) 40 – 60 % (White)
- F6 (EN 779) 60 – 80 % (Green)
- F7 (EN 779) 80 – 90 % (Pink)
- F8 (EN 779) 90 – 95 % (Yellow)

**Pressure drop:** ≤ 250Pa
HEPA Filter

Box Separator Type HEPA Filter
- **Frame**: Extruded Aluminum Steel, Galvanized Steel sheet, Stainless Steel Sheet
- **Media**: Glass Fiber
- **Efficiency**: 99%, 99.99%, 99.999% at 0.3um
- **Standard**: H11/H13/H14 (EN 1822)
- **Pressure drop**: ≤ 500Pa

V – Bank Type HEPA Filter
- **Frame**: ABS Plastic, Aluminum Steel, Galvanized Steel sheet
- **Media**: Glass Fiber or Synthetic Fiber
- **Efficiency**: 99%, 99.99%, 99.999% at 0.3um
- **Standard**: H11/H13/H14 (EN 1822)
- **Pressure drop**: ≤ 350Pa
Mini Pleat HEPA Filter

- **Frame:** Extruded Aluminum Steel, Galvanized Steel sheet, Stainless Steel Sheet
- **Media:** Glass Fiber
- **Face Net:** Aluminum Mesh, Coated Mesh
- **Sealant:** Polyurethane
- **Efficiency:** 99%, 99.99%, 99.999% at 0.3um
- **Standard:** H11/H13/H14 (EN 1822)
- **Pressure drop:** ≤ 500Pa

Mini Pleat ULPA Filter

- **Frame:** Extruded Aluminum Steel, Galvanized Steel sheet, Stainless Steel Sheet
- **Media:** Ultra Fine Glass Fiber
- **Face Net:** Aluminum Mesh, Coated Mesh
- **Sealant:** Polyurethane
- **Efficiency:** 99%, 99.99%, 99.999% at 0.3um
- **Standard:** H11/H13/H14 (EN 1822)
- **Pressure drop:** ≤ 500Pa
Carbon Activated Filter

Frame: Cardboard Aluminum galvanized steel Stainless steel sheet

Media: Activated carbon, Granular activated carbon

Verities: Different sizes and specifications are available

3 main types of carbon activated media are available:
Type A- VOC and Ozone etc
Type B- Acidic gases SO NO H S HCL HF etc
Type C- Alka line gases NH3 amines etc

Pressure drop: ≤ 250Pa
Filter Media

Pocket Filter Media (Ultra Sonic Seal)

Characteristic:
- Moisture-resistant ultrasonically welded media
- Ultrasonic Seal is available in pockets or rolls
- Dimension of roll: Max 670mm × 180mm or 225 mm
- Dimension of pocket: Max width 670mm with different dept
- Improved Indoor Air Quality

Laminated Roll

Characteristic:
- Semi-finished and subassembly filtration components.
- The air filter media is laminated with expanded metal for structural support.
- The metal is galvanized for prevention against rust damage.
- Roll is available in variety of efficiencies of 25%, 40%, 65%, 85%, 90% and offers a wide range of sizes from 16” to 25” width.
- It also can be used on any pleating machine.
HVAC Controls

- Pressure Control
- Motorized Valve
- Flow Switches
- Temperature control
- Solenoid Valve
- Humidistat
- Room Thermostat
- Expansion Valve
Instruments

Manometer

*Pitot tube senses total and static pressure.*

*Manometer measure velocity pressure (Difference between total and static pressure).* The curved inclined-vertical provides higher ranges with more easily read increments at low readings.

Magnehelic meter

*Magnehelic gage is the industry standard to measure fan and blower pressure, filter resistance, air velocity, furnace draft, pressure drop across orifice plates, liquid level with bubbler system and pressure in fluid and amplifier or fluidic system.*
Evaporative Cooler

**Intelligent Feature:**
- Single & Three Phase
- 16 – Speeds
- Inverter Speed Driver
- LCD Wall Controller
- Wireless Remote Control
- Thermostat & Humidity Control
- Auto Water Drain
- Overload Protection
- Pre-Cooling
- Exhaust Function
- External Net Filter
- Shut-down Clean
- Intelligent Clean

**Specification:**
- Air Flow: 18000 cmh
- Pressure: 180 Pa
- Area Coverage: 100 – 150 M2
- Noise: 70 dB
- Fan Type: Axial
- Power Input: 1.1Kw
- Water Tank: 30 L
- High Quality water pump
- High quality aluminum sealed motor
- 92% evaporative efficiency
- Dimension: 1100*1100*950 mm
- Vent: 642*642 mm
- Operating Weight: 120 kg
Thank You..