



Conventional AHU

No controlling on supply air.

Motor protection rating IP 20.

Losses-

- IE2 Motor (Eff. – 75%)
- Drive set loss.(approx-5%)
- Not Easy installation.
- chance of belt failure and breaking.
- Wear & tear.
- Slippage.
- High maintenance cost of drive set.
- Fan section space is high.

Manual control.

Bulky system.

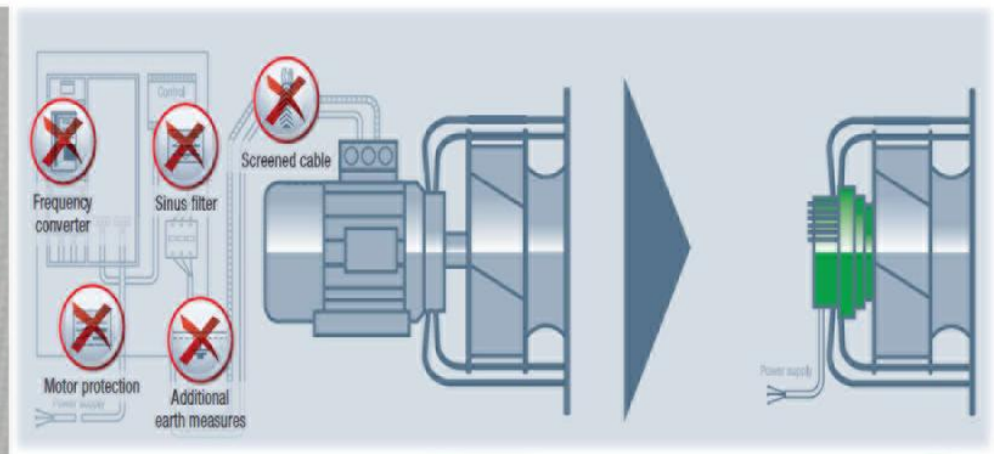
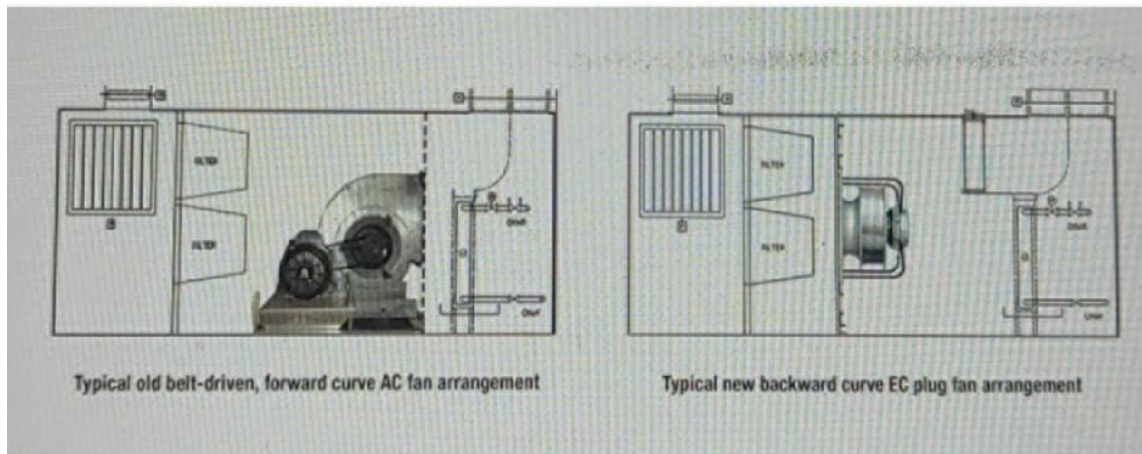
Handling is not easy.

High maintenance cost and time.

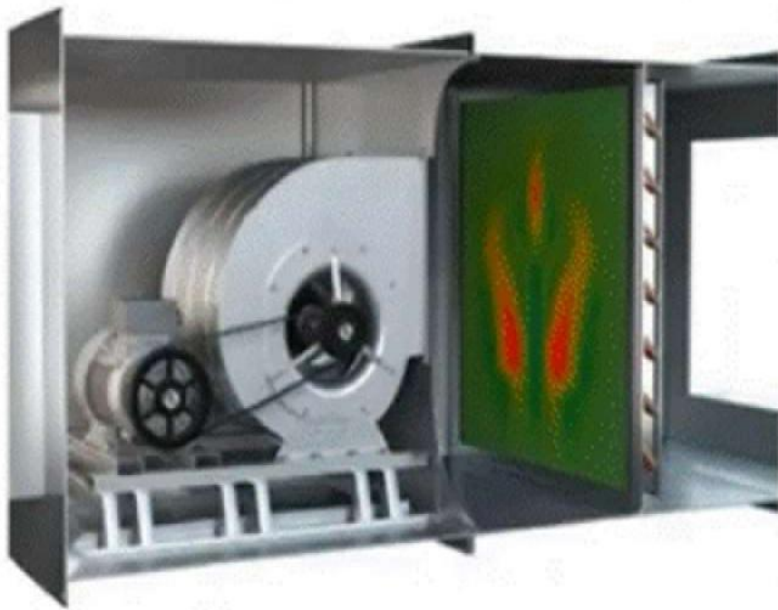
High weight causes more vibration which creates more noise.



Conventional Vs. EC Fan



Conventional Vs. EC Fan – Air Flow



EC Fan Motor

Inlet Nozzle

High Performance
Impeller

Electronics &
Connections Area

Support Bracket
Structure



EC Motor

Benefits of EC Fan in Smart AHU

Quick & easy installation.

Low power consumption with 92% efficiency.

MTBF 80000 Hrs

No magnetic hysteresis losses – due to PM motor.

Maintenance free insulated bearing system.

Factory fitted integrated control panel.

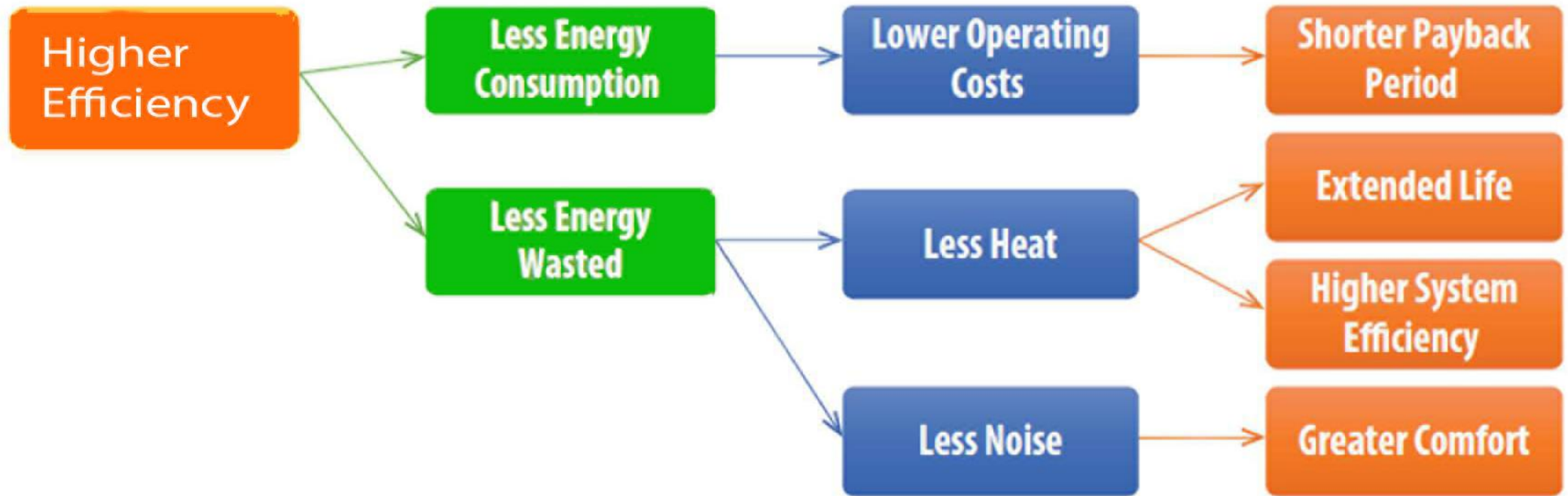
Up to 50% extra energy saving & lowest noise level.

Impeller directly mounted on motor.

Easy control - Modbus communication & control signal 0-10V DC.



After Replacing Of EC Motor



EC FAN RETROFIT SOLUTION							
				CONVENTIONAL AHUs		EC FAN RETROFIT WITH NEW CONTROLLING DEVICE	
LOCATION	FLOOR	NO. OF AHU	CFM	kw/AHU	TOTAL POWER	kw/AHU	TOTAL POWER
Lift Lobby	11	1	8000	5.5	5.5	3.6	3.6
	10	1	8000	5.5	5.5	3.6	3.6
	9	1	8000	5.5	5.5	3.6	3.6
	8	1	8000	5.5	5.5	3.6	3.6
	7	1	8000	5.5	5.5	3.6	3.6
	6	1	8000	5.5	5.5	3.6	3.6
	5	1	8000	5.5	5.5	3.6	3.6
TOTAL (A)		7			38.5		25.2
TOTAL SAVING IN POWER CONSUMPTION WITH EC FAN RETROFIT (Kw/h)							13.3
Lift Lobby - ANNUAL INR WITH EC FAN MOTOR RETROFIT SOLUTION (ASSUMED UNIT RATE @RS 10 FOR 24 HOURS OPERATING PER DAY)							1165080
Lift Lobby - ANNUAL INR WITH EC FAN MOTOR RETROFIT SOLUTION (ASSUMED UNIT RATE @RS 10 FOR 12 HOURS OPERATING PER DAY)							582540
TOTAL SAVING PER ANNUM							

User friendly HMI.

Real time display of unit parameter.

Power consumption

Air inlet outlet temp.

Humidity

Co2/VOC ppm.

Filter differential pressure.

CFM



THANK YOU

Join us with our fight against
Air Pollution

