OVERVIEW

GOLD NA







Revolutionizing system design







Whether it is a school, healthcare, office, or institutional building, design influencers of buildings generally share the same needs.









Building owners care about maximizing the useable area of the building, lowering operating cost, improving occupant comfort, and interoperability. Unfortunately, most air handling units on the market can only help to meet one or two of these needs.

To reach new levels of system optimization, the air handling unit, which is the centerpiece, needs to enable flexibility in system design, allowing the designer to rethink conventional HVAC layouts.









Air handling units with unbeatable advantages



GOLD NA is no ordinary air handling unit. In fact, there's nothing else like it.

GOLD North America enables designers to re-think system design to significantly improve comfort, reduce operating costs, and maximize usable space. Its extra small footprint and ultralow sound levels make it possible to place air handling units in non-traditional spaces such as in close proximity to occupied rooms. With GOLD, designers can reap the full benefits of decentralized system design. In addition to maximizing usable space, decentralized design also allows smaller plenums and shafts (smaller ducts), individual tenant metering, flexible tenant time scheduling and reduced sound and energy consumption. Combining both unit and controls optimization, GOLD provides unparalleled energy efficiency levels, reliable operation, and fast commissioning.

This state-of-the-art technology is widely recognized in Europe and is now here in North America.

*GOLD RX is now Passive House certified. To learn more about Passive House, visit our website at www.swegon.com/en-us/

RX Model: The GOLD RX (above) is Swegon's standard all-in-one air handling unit with direct-driven supply air and return air fans, supply air and return air filters and a rotary heat exchanger.

PX Model: The GOLD PX model has all the same features found in our RX model but utilizes a plate type heat exchanger for a more complete separation of supply and exhaust airstreams. Swegon's advanced controls optimize heat recovery while avoiding frost issues.

SD Model: The GOLD SD model includes a run around coil option for heat recovery. It allows the designer to ensure complete separation of supply and return airflows. It also allows multiple supply and exhaust airstreams to be connected with the AHUs in different locations in the building.





GOLD PX

GOLD SD



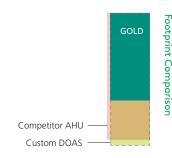


Smallest Footprint

The GOLD Dedicated Outdoor Air System (DOAS) unit has the smallest footprint in the market. Up to 40 ft² per unit can be saved and converted to leasable or occupiable area. There will be no problem getting GOLD to fit.

Туре	L (in)	W (in)
GOLD RX30	139	63.0
Competitor AHU	201	66.5
Custom DOAS	210	62.0

For a building with 5 × 6000 CFM AHUs, \$10,000 in additional rent can be realized at \$50/ft²/year using GOLD vs. a competitor.





Lowest Maintenance Cost

- Quick release filters replacement in seconds
- Ease of servicing (replacements and fan pullout)
- Programmable maintenance schedule and alarms provide positive identification of service needs
- L10 40,000 hr bearing life
- EC motor provides longer life than conventional induction/VFD motors and is fully serviceable
- Mechanical seal instead of a brush around the rotary wheel for a better seal and quicker maintenance
- All service can be performed from one side
- Direct drive fans no belts to replace







Rotary heat exchanger

Lowest Operating Cost

- Optimized motor controller with motor, unit-specific fan design, and casing combination for a superb overall fan system efficiency
- EC fan motor 10% more efficient than conventional motor/VFDs
- Industry leading total efficiency of over 81%
- Superior rotor seals reduce leakage. GOLD is Passive House-approved* to 0.3% carry over.
- Low leakage cabinet reduces fan, heating and cooling costs
- Multiple energy saving control sequences to match building needs



Unit optimization



Controls optimization



Integrated & Configurable Controls

GOLD comes with integrated controls which have been installed in thousands of buildings across the globe. The controls are the brains behind the best-in-class efficiencies, providing unbeatable value of ease of specification, reliability, and total project cost.

- Pre-programmed algorithms
- Plug n' Play-no need to program
- BacNet, Johnson MetaSys N2, LON, and Modbus integration
- Swegon controls allow the unit to be fully commissioned in 2 to 3 hours.















Sound Criteria Guaranteed

The GOLD AHU has the lowest overall sound power levels of any unit in its class. Units can be placed closer to the occupied space and your risk of a client complaint due to a sound problem is significantly reduced. This limited risk is eliminated since Swegon can guarantee the noise control (NC) levels in the space.



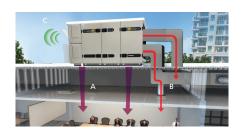
GOLD achieves NC 35 while the average competitor achieves NC 55.

Noise control level in the space without silencing GOLD BX30

35 Average Competitor 55

IAQ & Thermal Comfort

In the healthcare, office, and institutional industries, salaries on average account for more than 50% of the operating expense of a building. The GOLD AHU helps improve employee effectiveness and attendance by improving IAQ and thermal comfort.



A. radiated noise

B. ductborne noise

C. environmental noise

GOLD powers comfort and energy efficiency for thousands of buildings in more than 20 countries. We have been revolutionizing system design since 1992.

Left to Right: Auckland ANZ Center, Copenhagen Opera House



RX									
	RX 05	RX 07/08	RX 11/12	RX 14/20	RX 25/30	RX 35/40	RX 50/60	RX 70/80	
	RX Models include nominal 80% efficient total recovery enthalpy wheel, direct drive plenum fans with EC motors, MERV 13 filtration, factory installed and tested controls with BACnet.								
Width (in)	33	40	47	55	63	78	91	104	
Height (in)	40	47	51	62	70	82	93	108	
Length (in)	59	63	73	82	87	96	105	123	
COOLING COIL	COOLING COIL AIRFLOW *based on 550fpm								
	RX 05	RX 07/08	RX 11/12	RX 14/20	RX 25/30	RX 35/40	RX 50/60	RX 70/80	
Max Airflow (cfm)	1300	1500/2000	2300/2850	3150/4200	4750/5800	7000/8400	9700/13700	15800/16300	
Airflow CWC*	920	1420/1420	2300/2480	3150/3700	4750/5260	7000/8400	9700/10800	15200/15200	
COMBINATION HEAT-COOL COIL SECTION Additional AHU sections are available, see chart below									
Width (in)	33	40	47	55	63	78	91	104	
Height (in)	22	25.3	29.5	30.55	35.67	42.5	44.35	51.97	
Length (in)	45.3	45.3	47.3	54.41	54.41	54.41	65.08	65.08	

SD	COLD SE	50.0							
	SD 05	SD 07/08	SD 11/12	SD 14/20	SD 25/30	SD 35/40	SD 50/60	SD 70/80	
SD Models includ	SD Models include direct drive plenum fans with EC motors, MERV 13 filtration, factory installed and tested controls with BACnet.								
Width (in)	33	39	47	55	63	78	91.3	104	
Height (in)	23	27	29.5	36	44	48	56	56	
Length (in)	43	46	82.4	74	78	78	77	100	
COOLING COIL AIRFLOW *based on 550fpm									
	SD 05	SD 07/08	SD 11/12	SD 14/20	SD 25/30	SD 35/40	SD 50/60	SD 70/80	
Max Airflow (cfm)	1600	1600/2450	2450/3500	3600/5600	5600/8200	8200/10200	11000/16250	16200/23500	
Airflow CWC*	920	1420/1420	2450/2480	3600/3700	5260/5260	8200/8400	10800/10800	15200/15200	

PX									
	PX 05	PX 07/08	PX 11/12	PX 14/20	PX 25/30				
	PX Models include nominal 60% efficient sensible recovery plate heat exchanger with integral bypass dampers, direct drive plenum fans with EC motors, MERV 13 filtration and factory installed and tested controls.								
Width (in)	35	42	50	58	66				
Height (in)	43	50	58	68	75				
Length (in)	92	96	115	132	151				
COOLING COIL AIRFLOW *based on 550fpm									
	PX 05	PX 07/08	RX 11/12	PX 14/20	PX 25/30				
Max Airflow (cfm)	1300	1500/2000	2300/2850	3150/4200	4750/5800				
Airflow CWC*	920	1420/1420	2300/2480	3150/3700	4750/5260				

ADDITIONAL AHU SECTIONS

GOLD units can include a wide variety of additional sections to house heating and cooling coils, humidifiers, silencers, recirculating sections etc. See RX section for the combination heating and cooling coil section with access door dimensions.

Damper Section



Combination Heat-Cool Coil Section



