



# CASE STUDY AQUARIUM SYSTEMS



Client's Field of Activity	Aquarium products manufacturing
Business Challenges	<ul> <li>Control hygrometric conditions (20%) to maintain the same quality production for hygroscopic substances</li> <li>Insure a comfortable environment for employees</li> </ul>
Technical Challenges	<ul> <li>Control low hygrometric &lt; 20% HR whatever the season</li> <li>Maximize the air dryer in managing temperature (coil change-over)</li> <li>Limit the volume thanks to an all inclusive solution</li> </ul>

## Products – Solutions And Services brought by DESSiCA



### Products

- Supply of a set of air desiccants dryers with silica gel adsorption rotor equipped with pre-dehumidification battery and a change-over battery
- The air dryers proposed with an integrated purge sector: the reactivation air flow have the role of evacuate moisture retained by the silica gel of the wheel. A part of the regeneration air flow passes through the wheel by a 25 degree angle (purge area) to cool the dehydrating medium heated by its passage in the regeneration area
- The silica gel adsorption rotor 3<sup>rd</sup> generation insure a air dryer high performance and a reduction of energy consumption

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#### Installation

• The devices and units have been installed inside to treat fresh air  $(2400m^3/h)$  and to maintain a stable temperature (68°F)

• Dry air duct network made with steel galvanized and insulate was installed for guarantee the total flow confinement

#### Support and services

- Technical solution with low maintenance requirements apart from changing air filters 1 to 2 times a year
- Desiccant wheel life : 80% minimum yield after 10 years

Key benefits and return on Investment (ROI) for AQUARIUM SYSTEMS • AQUARIUM SYSTEMS is fully satisfied with the installation and operation of DESSICA' dryer units

• The installation of a air dryer system permit AQUARIUM SYSTEMS to certified identical quality product, to improve the working conditions and to energy consumption

• The units are now in operation since May 2017, so far, no product loss or negative feedback from the customer has been reported.





