Test Date: From Mar.10,2023



AIGI Environmental Incorporated Inspection Lab

Inspection Report

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Inspection items: Run-in test of Cyclone seal in sugar syrup

(max. Concentration in general meaning and adding run-out)

To: Mar.30,2023

Inspection results

| Inspection item | | Unit | Nameplate parameter | Technical requirements | Inspected data | | | Result | |
|----------------------|-------------|------|------------------------|------------------------|-------------------|--------|--------|--------|--------|
| Performa nce Test | Leakag e | mL/h | | ≤5.0 | 0* | | 0** | | Pass |
| Wear Loss | | mm | | ≤0.02 | SIC Rotary | Before | After | Loss | _ |
| | | | | | Face Thickness | 15.60 | 15.60 | 0 | Pass |
| | | | | | SIC Stationary | Before | After | Loss | - Pass |
| | | | | | Thickness | 16.280 | 16.280 | 0 | |

Remarks: * It is the average leakage volume during the whole test time.

Running condition:

| | Media | Pressure (MPa) | Temperature (°C) | Test Time | Speed (r/min) | Shaft (mm) | Flush or Quench |
|---------------------|------------------------|-------------------|---------------------|---|------------------|---------------|------------------------|
| Performance Test | Sugar syrup ≤40% | 1.0 | 14-46 | 8hours per day, running 15days. 120hours in total | 1501-150 8 | 60 | No Flush, No Quench |

Remarks: * Sugar syrup concentration definition means, for every 1000 grams of sugar syrup, the percentage of the mass of hard solid particles obtained by removing water to the mass of the sugar syrup. Test measured sugar syrup concentration is 38% to 40% Flush or Quench: This test was done without any flush or quench.

Shaft runout: In order to simulate the field conditions, the radial runout of 0.1mm is deliberately added to the standard testing.

^{**} It is the maximum average leakage volume in each measurement time unit



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Test Result:

| | | Model | 318СYC Ф60mm | | | | |
|---------------------|---|------------------|------------------|--|--|--|--|
| Product | Mechanical Seal | Trademark | AIGI | | | | |
| | | Inspection type | Performance Test | | | | |
| Manufacturer | AIGI Environmental Inc. | Grade of sample | Qualified | | | | |
| Address | 81Suyuan Ave., Nanjing, China 211100 Starting date Mar.C | | Mar.09, 2023 | | | | |
| Quantity of samples | 1 set | Sample number | WT202211086 | | | | |
| Standard | JB/T 4127.1-2013 "Mechanical Seal - Part1: Specification" GB/T 33509-2017 "General specification for mechanical seals" GB/T 14211-2019 "Test method of mechanical seal" | | | | | | |
| Test items | Performance test, wear loss | | | | | | |
| Result | The results of the items tested by the sample meet the requirements according to JB/T 4127.1-2013 "Mechanical Seal - Part1: Specification" and GB/T 33509-2017 "General Specification for Mechanical Seals".。 Date of issue: Mar.31,2023 | | | | | | |
| Remarks | | | | | | | |

Reviewer: 刘昊

Chief inspector:



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Mechanical seal photos, before and after the test:

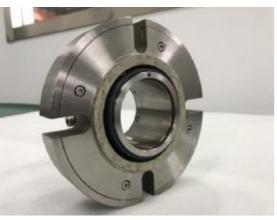






Mechanical seal entering the chamber photos, before and after the test









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Mechanical seal parts disassembled photos, before and after the test:

Before the test





After the test



Mechanical seal sealing surface, before and after the test:

Before the test



After the test



