Customer ID	6001241	Account	JIANGSU ACERETECH MACHINERY CO.,LTD
Contact	Ningning Gu	Address	No.18 YUEFENG ROAD, NANFENG TOWN, ZHANGJIAGANG CITY, Suzhou, Jiangsu, China
Project Number	80018722		

Special Inspection/Field Evaluation Report

Work Order	80018722	Usage Decision	Labeled
Work Order Line Item Number	80018722	Label Applied	Yes
Product	Plastic recycling system		
Model	APE-ACS-H	Start Date	2019-12-03
Manufacturer's Name	JIANGSU ACERETECH MACHINERY CO.,LTD	Report Generation Date	2019-12-12

Inspection Address

Address	No.18 YUEFENG ROAD, NANFENG TOWN, ZHANGJIAGANG CITY, Suzhou, Jiangsu, China

Labels Applied

Material	Label Serial Number	Quantity	Unit Serial Number
1002210	C2755692	1	A190527C1

Inspection Method: DQD209WI001
Installation Requirements Reviewed: Yes

Supplementary information on file:
80018722 Illustration 1 - Electrical drawing

80018722 Illustration 2 - User operating Guide
80018722 Illustration 3 - Maintenance manual
80018722 Photo

Electrical Ratings

Voltage values: 600 VAC
Frequency: 60 Hz
Power values: 250 A
Connection type: Permanently connected
No of phases: 3 PH+GND
Enclosure: accepted for indoor use
SCCR: 5 kA

Test Results: Satisfactory

Test Type	Duration of Test	Test Value	Pass/Fail	Cal Due Date	S/N or ID	Number of Units
Dielectric strength test	1 min	2200 V	Pass	2020/07/18	TJ000127	1

Between live parts and metal enclosure.
Note: Test leads were shorted before and after the test for the in-service check.
Environment Test Conditions: Test indoor under 13 C, 54% humidity
Sample size based on SPE-1000: 100%

Test Result Summary

Dielectric strength test: Satisfactory
Leakage: Not applicable for not permanently connected
Flame: Not applicable for metal enclosure
Strain relief: Not applicable for permanently connected

Applicable Standards

Default standard: SPE 1000:2013
C22.1-18.
CSA standards: C22.2 No 0.4

List of Alterations

1. 2019-12-03: According to SPE-1000-13 clause 5.1.1: Equipment shall be plainly marked in a permanent manner, where the details will be readily visible after installation without use of a tool, with the following:
   a) manufacturer's name, trademark, trade name, or other recognized symbol or identification;
   b) catalogue, style, model, or other type designation;
   c) supply voltage or voltage range;
   d) frequency
   e) number of phases, unless intended for single phase use only
   f) input in amperes, watts, or volt-amperes;
   g) SCCR
   2019-12-10: Done. Pls see the CSA engineering file.

2. 2019-12-03: The door of Motor shall be bonded according to SPE-1000-13 clause 4.10.2.
   SPE-1000-13 clause 4.10.2:
   Non-current-carrying metal parts that are exposed during use or general servicing, and that can become energized, shall be bonded to the bonding terminal means of the equipment.
   2019-12-10: Done. Bonded by green with more yellow stripes.

3. 2019-12-03: Critical components – limited switch and heating cable shall be certified.
   2019-12-10: Done. Replaced by cULus listed components.

4. 2019-12-03: It's not allowed to touch AWM high temperature cable.
   2019-12-10: Done. Metal sheet was installed against touching the AWM cable.

List of Safety Critical Components

Critical Components were reviewed for their certification marks and found to be CSA Certified, cUL Listed, cUL Recognized, and used within their mark electrical ratings. Where components were accepted they are recorded in the report. The equipment consists of, but not limited to the following electrical components.

VFD cabinet: approved, CSA SI label no. P60354, check engineering file saved in this project
Control cabinet approved, CSA SI label no. P60353, check engineering file saved in this project
Limited switch: cULus listed, by SCHMERSAL, model ZR 336-11z, A600, Type 1
Limited switch: cULus listed, by OMRON, model D4NS-1AF, A300, Q300, Type 4X
Main motor: CSA certified, by WEG, 600 V, 89.5A, 75 kw, 60 Hz, SF=1
Motor: CSA certified, by WEG, 600 V, 45 kw, 60 Hz, 53.5 A, SF=1
Servo motor: cULus recognized, by DELTA, model ECMA-C20804R7, Input: 110 V, 2.6 A, 3000 N.m, 1.27 KW
Other motors: accepted, based on overload and overload protection and pass the dielectric strength test. Specific motor rating referring to electrical drawing.

Interconnecting cable: cULus recognized, 600 V, 105 C, specific size referring to electrical drawing.

Equipment Description and Function

ACS-HTM series compacting and pelletizing system mainly applied for plastic scrap recycling and pelletizing, especially suitable to the low-bulk density materials, such as film, foams, woven bag, ribbon type filaments, etc, can handle the above mentioned materials of PE, PP, EPS, PA, PET, etc., by the steps of material conveying, compacting, plasticizing, extruding, filtering and final making the granules.

Construction Review

Components:
Components were confirmed to be accurately identified on the drawings and bill of material. Critical components were marked with an acceptable approval mark from an accepted NRTL. The components were installed in accordance with the manufacturer's instructions, used for their intended application, and were used within their electrical ratings. Critical safety component that were not approved are identified in the component list of the report.

Mechanical Assembly:
The mechanical assembly was reviewed and found to be smooth and free of shape edges and burrs. The equipment provided with adequate guarding and the structure was mechanically stable and structurally sound. Adequate guarding of dangerous moving parts.

Disconnecting Means:
The equipment disconnect was reviewed and found to be adequately rated for the load and intended application. The operator was not exposed to bare live parts when the equipment was disconnected from the supply source. Line side terminals were designed to prevent accidental contact.

Bonding:
The equipment was provided with an adequately sized bonding terminal and found to be suitable for bonding the equipment to ground in accordance with the requirements of the Canadian Electrical Code, Part I. All exposed non-current-carrying metal parts that could become energized were properly bonded. There was a sufficient number of bonding terminals provided for each incoming and each outgoing circuit.

Enclosure:
The enclosure was found to be constructed and assembled to provide the strength and rigidity necessary to resist the abuses to which it will be subjected in the environment in which the equipment is intended to be used without resulting in a fire or shock hazard. The enclosure was made of suitable material to prevent corrosion. Doors and covers were adequately fastened such that live parts were not

accessible without the use of a tool. Openings were reviewed and found sized to prevent the test probe from contacting bare live parts of hazard voltages.

Terminals:
Conductors were found to be secured in a manner as to obtain good permanent contact. Conductors were firmly gripped in a manner that stray strands cannot cause short-circuits or grounds. Terminals were adequately sized with an ampacity not less than required for application in the device.

Wiring:
Internal conductors were found to be suitable for the service intended with respect to voltage, temperature and grouping. The conductors were supported so that there was no undue mechanical strain on the conductors or their terminals. There were no apparent rough edges, burrs or sharp edges that would likely damage the insulation. The conductors were evaluated for the load ampacity.

Overcurrent Protection:
Overcurrent and overload devices were found to be suitable for the application, approved for the intended use, and adequately sized for the circuit they are protecting.

Supplementary Protectors:
Supplementary Protectors were suitably rated, used for the purpose intended, and not used where branch circuit protection is required by the Canadian Electrical Code Part 1.

Motors:
Each motor nameplate was reviewed and confirmed to have proper protection sized in accordance with Canadian Electrical Code, Part 1. Cable connections were tight and of the correct size and suitable for the intended environment.

Motor Controllers:
Each Motor controller was reviewed to determine it was properly rated for the intended application and sized for the load that it is controlling. Overloads range are within the motors FLA.

Drives:
Drives were reviewed and confirmed to have electronic overload and overcurrent protection. There was adequate space for ventilation, branch circuit overcurrent protection was suitable sized and of an acceptable type and the branch circuit wiring was verified to have the ampacity for the load.

Safety Circuits:
Wiring and components in safety circuits were reviewed for approval marks, application, and electrical ratings.

Conditions of Acceptability

1. The acceptance of the final installation shall be determined by the authority having jurisdiction.

2. The equipment has been evaluated for electrical safety only, for installation and use in ordinary (non hazardous) locations in accordance with National and Local Code; requirements other than electrical safety may be mandated by local/ provincial/federal authorities, and are responsibility of the Submittor.

Markings

Verified bilingual: Yes
Cautions/Warning Markings: Verified, refer to CSA engineering file

Customer Signature

Signature	
Signed By	Candy. Cai
Date	2019. 12. 23
Type	Facility Representative
Prepared By	Roy Chen Roy chen

The Client acknowledges that the equipment described in the related report has not been rejected due to unacceptable results of a previous evaluation conducted by a certification organization through any other existing certification service.

NOTE: EVALUATION BY SPECIAL INSPECTION/FIELD EVALUATION SERVICE SHALL NOT BE CONSIDERED EQUIVALENT OF CSA CERTIFICATION.

The Client agrees to the Conditions of the signed/accepted quote on file, and Alteration(s) listed on the related report.