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TESTED®
DEVICE

Taiyo Cabletec Corp.
EXT-CLEAN
Report No. TA 1002-509

Statement of
Qualification

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Statement of Qualification

Customer:

Taiyo Cabletec Corporation
Sonazaki 2-12-7 Kita Wand
530-0057 Osaka
Japan

Component tested:

Cable

Type:

High performance cable EXT-CLEAN

Tests performed:

Random check measurements of particle emission (airborne) at representative points.

Test parameters:

- Energy chain: Igus E6.29.01.150
- Stroke length: 820 mm
- Set of parameters 1: $v_1 = 0.5\,m/s$; $a_1 = 1.0\,m/s^2$
- Set of parameters 2: $v_2 = 1.0\,m/s$; $a_2 = 2.0\,m/s^2$
- Set of parameters 3: $v_3 = 2.0\,m/s$; $a_3 = 4.0\,m/s^2$

Test results / classification:

When the cable is being operated at the above mentioned test parameters, it is suitable for use in cleanrooms fulfilling the Air Cleanliness Class 1 according to ISO 14644-1.

Test parameters	**Air Cleanliness Class** (in accordance to ISO 14644-1)
$v_1 = 0.5\,m/s$; $a_1 = 1.0\,m/s^2$	1
$v_2 = 1.0\,m/s$; $a_2 = 2.0\,m/s^2$	1
$v_3 = 2.0\,m/s$; $a_3 = 4.0\,m/s^2$	1

Standards / guidelines used for the qualification:

VDI 2083 Part 1, 4 and 9.1; ISO 14644-1;

Test parameters of the cleanroom environment:

Cleanroom of Air Cleanliness Class ISO Class 1
(according to ISO 14644-1)

Air flow velocity: 0.45 m/s

Air flow guidance: vertical unidirectional air flow from ceiling to floor. (raised floor)

Temperature: 22 °C ± 0.5 °C (71.6 °F ± 0.9 °F)

Relative humidity: 45 % ± 5 %

The measuring equipment used for the qualification is regularly calibrated and is based on national and international standards. In the case where no national standards exist, the measuring procedure used corresponds with technical regulations and norms valid at the time of the measurement. The documents drawn up for this procedure are available for viewing.

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Stuttgart, March 16, 2010
Place, date

i. A.
Project manager