

### THAILAND INSTITUTE OF SCIENTIFIC AND TECHNOLOGICAL RESEARCH (TISTR) RAILWAY TRANSPORTATION SYSTEM TESTING CENTER (RTTC)

Request No.: 119/61

Date: 2 February 2018

Date of request: 25 January 2018

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#### REPORT ON ANALYSIS / TESTING

For

### SCHIMMER METAL STANDARD CO., LTD.

1/4 Moo 7, T. Bantheaw, A. Sena, Ayutthaya 13110

Testing/analysis/investigation of

Aluminum 6063-T5

Method of testing/analysis/investigation: Tensile test according to JIS Z 2241-2011

Result of testing/analysis/investigation :-

The test results are attached.

Tested/analysed/investigated by

3. .....

Approved by



Director of

Railway and Transportation Technology Testing and **Development Laboratory** 

Examined by

3. Nalithus

(Ms. Nalinthorn Suwaporncharuwach)

This report contains 3 pages, all pages must be signed by the authorized person for report approval.

FS-RTTC-GEN-510-1-23/01/60

Remark: The above results are valid exclusively for tested/analysed samples as mentioned in this report. Publication of the results on testing and analysis is prohibited unless written permission is obtained from the governor of TISTR.



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SCHIMMER METAL STANDARD CO., LTD. has commissioned the Railway Transportation System Testing Centre, Thailand Institute of Scientific and Technological Research (RTTC/TISTR) to carry out tensile test of the Aluminum 6063-T5.

The specimens for tensile test were prepared by RTTC. The results are as follow:





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RAILWAY AND TRANSPORTATION TECHNOLOGY TESTING AND DEVELOPMENT LABORATORY (RTDL)

Request No.: 119/61

Date: 2 February 2018

REPORT

Customer: SCHIMMER METAL STANDARD CO., LTD.

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Test date: 31 January 2018 Test temperature: 23 °C

Testing machine: Universal Testing Machine INSTRON 5985

### The results of tensile test of Aluminum 6063-T5

Specimen	Т1	Т2
Thickness (mm)	3.14	3.14
Width (mm)	25.10	25.09
Cross sectional area (mm²)	78.81	78.78
Load at 0.2% offset yield strength (N)	13,181	13,441
Maximum tensile load (kN)	15.367	15.522
0.2% Offset yield strength (N/mm²)	167.25	170.61
Tensile strength (N/mm²)	194.99	197.03
Tensile strength (Pound/inch²)	28,281.35	28,577.23
Elongation (%)	12.64	12.70
Location of fracture	In the length	In the length

Remark: 1 N/mm<sup>2</sup> = 145.04 Pound/inch<sup>2</sup>

Cartan de la carta

FS-RTTC-RTDL-510-1-23/01/60