20-IS-1484

THE SEISMIC BRACING CABLE SET TESTS

INSPECTION REPORT

Inspection Requesting:	DARHAN YAPI END. SAN. TİC. A.Ş. Aydınevler Mah. Kaptan Rıfat Sok. No:5/2 34854, Maltepe / İstanbul
Inspection Address:	İTÜ, Maslak Yerleşkesi Uçak ve Uzay Bilimleri Fakültesi 34469, Maslak / İstanbul
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1 INTRODUCTION

This report was prepared by DARHAN YAPI END. SAN. TİC. A.Ş. was prepared on behalf of 11.11.2019 - 20.08.2020 within the scope of Seismic Rope Sets Test and Analysis study, according to ANSI - ASHRAE 171-2017 standard, upon supervision and witnessing of the tests carried out at the Composites and Construction Laboratory of ITU, Faculty of Aeronautics and Astronautics. The findings of the audit are summarized below.

TITLEANDDOCUMENT REFERENCES	REVISION AND DATE
• ANSI-ASHRAE 171-2017	2017

Participants ;

Ali HACIOĞLU - TUV Avusturya, Inspector
JAKSON CENK MÜBAREK - Darhan İç ve Dış Tic. Ltd. Şti.

2 INSPECTION RESULTS

The safety coefficient of the wire rope is 1.5, which is declared by the manufacturer. In tests, the time-dependent load change is applied to achieve the value obtained by multiplying the recommended load value by the safety factor and it has been observed that the regulation is applied as outlined below.

1- Initially 5% of the maximum rope strenght load values declared by the manufacturer was applied.

2- In the first 5 seconds, 50% of the maximum rope strenght load values declared by the manufacturer was applied.

3- In the second 5 seconds, back to what was 5% of the maximum rope strenght load values.

4- The first and second steps were carried out for 25 cycles, i.e. 250 seconds.

5- It was observed, with the 26th cycles (process 52) that 3.5% of the previous load was applied for 5 seconds and 5% of the maximum wire rope strenght value was returned in 5 seconds again.

6- Step 4 was continued until the maximum rope strenght load values or the maximum elongation value was reached..

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3 MAIN CONCLUSIONS & RESULT & REMARKS

- There are no products that can not provide the targeted load values as a result of the tests.
- There is no product that is too damaged to perform its job as a result of the tests.
- The products to which the tests are applied, the target load values and the process values are in the table below. (Table 1)
- As test results, 3 tensile tests were applied from each product.

Table-1

Desk	Product name	Test Nr.	Test Position	Reached Load (N)	Reached Load (kgf)	Result
1	SAS 2.0 Seismic Bracing Cable Set, 2.0 mm	1	0°	3706	377	OK
		2	0°	3780	385	OK
		3	0°	3897	397	OK
2	SAS 2.4 Seismic Bracing Cable Set, 2.4 mm	1	0°	4741	483	OK
		2	0°	5079	517	OK
		3	0°	4753	484	OK
3	SAS 3.0 Seismic Bracing Cable Set, 3.0 mm	1	0°	7383	752	OK
		2	0°	7322	746	OK
		3	0°	7288	743	OK
4	SAS 4.0 Seismic Bracing Cable Set, 4.0 mm	1	0°	11093	1130	OK
		2	0°	11188	1140	OK
		3	0°	11144	1136	OK
5	SAS 5.0 Seismic Bracing Cable Set, 5.0 mm	1	0°	18894	1926	OK
		2	0°	18724	1908	OK
		3	0°	18851	1922	OK
6	SAS 6.0 Seismic Bracing Cable Set, 6.0 mm	1	0°	25743	2624	OK
		2	0°	24547	2502	OK
		3	0°	26694	2721	OK

4 ANNEXES

- ANSI – ASHRAE 171-2017
- İTÜ Tensile Test Report

5 APPROVAL & LEGAL RESPONSIBILITY

As the signatories below, we undertake that we have reviewed and agreed to this report and that we are aware of all the requirements herein and comply with its provisions.

This surveillance report has been prepared on the basis of high level of knowledge and effort and is for informational purposes only. With this report, TÜV AUSTRIA TURK does not bear any legal or financial obligations.

	Name Surname	Signature	Task	Date
Prepared	Ali HACIOĞLU	Dijital İmzalıdır	Industrial Inspector	18.09.2020

6 PHOTOS

You can see the details about the controls from the photos below:

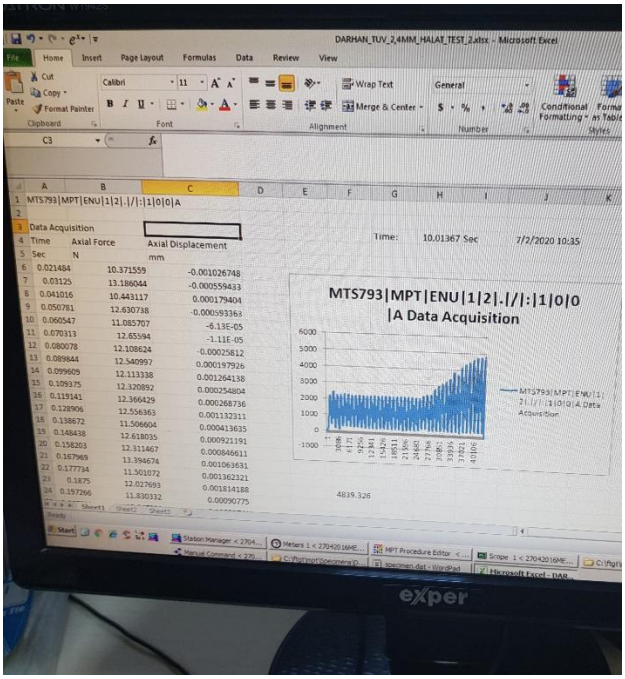
Photo 1 :	Photo 2 :
	
Photo 3:	**Photo 4:**
	

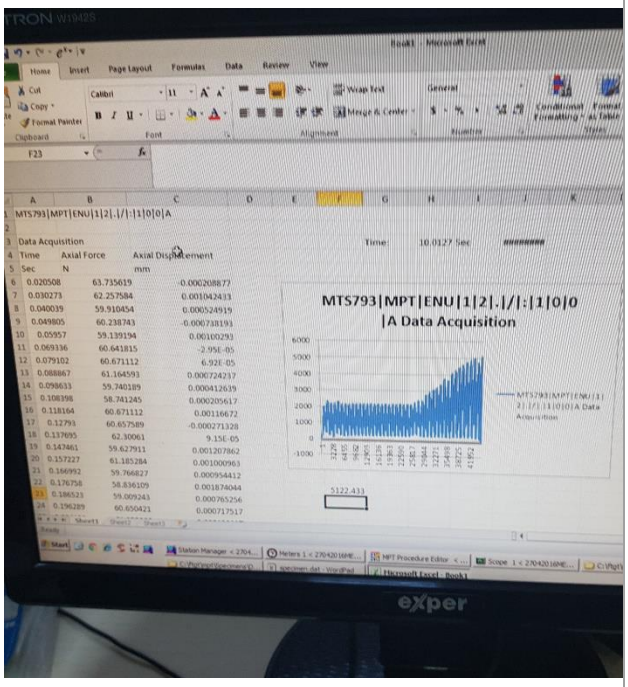
Photo 5 :	Photo 6 :
	
Photo 7:	**Photo 8:**
	

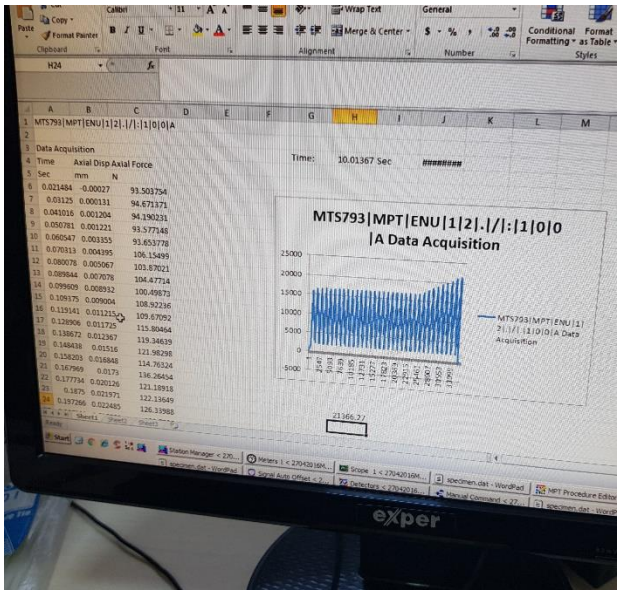
Photo 9 :	Photo 10 :
	
Photo 11:	**Photo 12:**
	

Photo 13 :	Photo 14 :

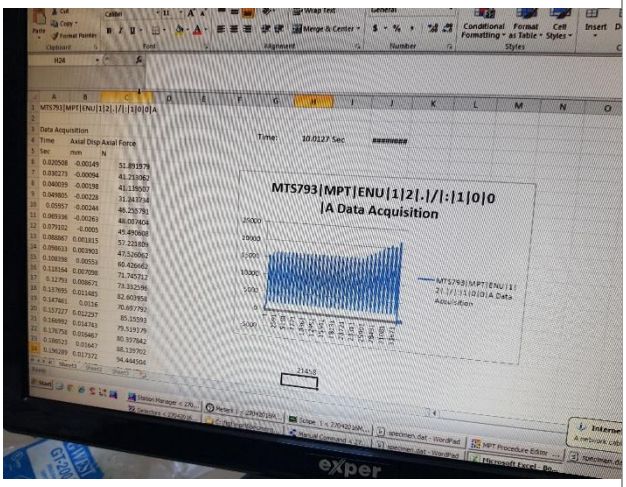
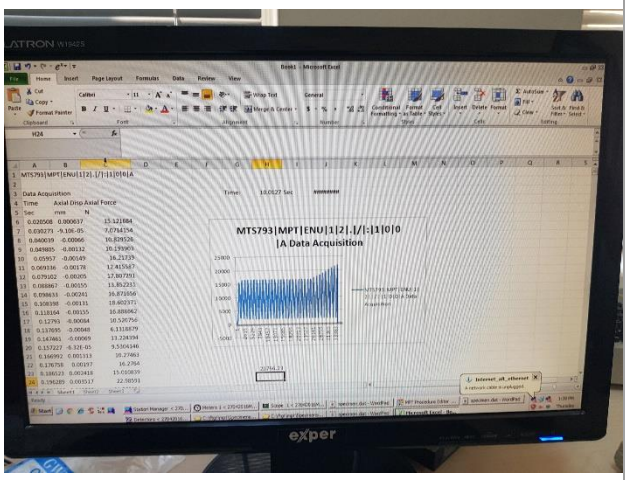

	

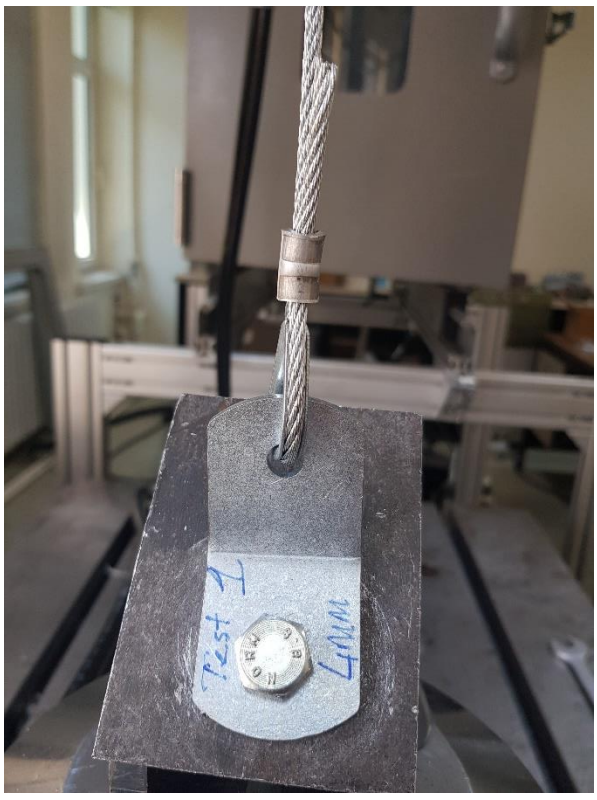
Photo 15:	**Photo 16:**
	

Photo 17 :	Photo 18 :

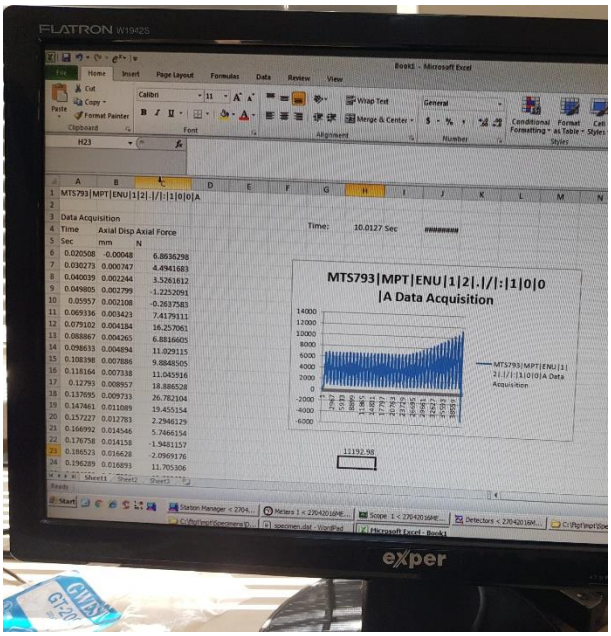



Photo 19:	**Photo 20:**