

	<p style="text-align: center;">LABORATORIO UFFICIALE PER LE ESPERIENZE SUI MATERIALI DA COSTRUZIONE</p> <p style="text-align: center;">CENTRE OF THE DEPARTMENT OF CIVIL AND INDUSTRIAL ENGINEERING AT THE UNIVERSITY OF PISA</p>	<p><i>Test Report</i> N° 87/22</p> <hr/> <p><i>Pp. N° 58037</i> <i>Pisa, 16/11/2022</i> <i>Page 1/2</i></p>
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Integrazione al Rapporto di prova N. 104/11 del 04/03/2011, del quale si fornisce traduzione integrale in lingua inglese. Il presente documento ha valore legale se fornito in aggiunta al rapporto originale.

Addition to Test Report No. 104/11, dated 04/03/2011. In the following, full translation in English of Test Report No. 51/06 is provided. This document has legal value if presented in addition to the original Report.

Results of the tensile tests carried out on nine specimens declared by the Applicant as:

Security seals for freight transport - type "ADJUSTEAL 315".

Applicant: LEGHORN s.r.l, via degli Arrotini, 34 –Livorno (Italy)

Order letter received on: 25/02/2011.

Material received in the Laboratory on: 25/02/2011.

On dates reported in the table 1, the tensile tests referred in the heading were conducted at this Laboratory.

The tensile tests were carried out according to the following indications provided by the Applicant:

- tensile test on three specimens without any thermal treatment;
- tensile test on three specimens previously maintained for 24 hours at a temperature of +60°C;
- tensile test on three specimens previously maintained for 24 hours at a temperature of -30°C.

The load was applied to the specimen by means of a universal testing machine INSTRON 1186, with maximum load capability of 200 kN, and full-scale of 0.5 kN.

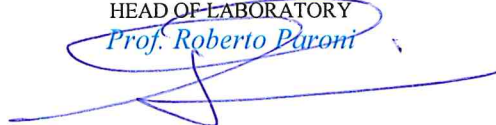
Figure 1 shows the specimen before the execution of the experimental test. Figure 2 was taken during the test execution and shows the load application set-up.

For each specimen, the following table presents the marking, the maximum load in N, the room temperature at which the test was run, the test date, and the thermal treatment to which the specimen was subjected before the test.

TRANSLATOR
Dr. Giuseppe Chellini



HEAD OF LABORATORY
Prof. Roberto Paroni



TECHNICAL MANAGER
Dr. Francesco Morelli



Table 1. Seals type “ADJUSTEAL 315”.

Specimen #	Mark	Ultimate load [N]	Mean value [N]	Air Temperature [°C]	Test Date	Thermal treatment
1	SEALED A - N° 0560690	161.1	164.0	15.5	2011/03/01	no thermal treatment
2	SEALED A - N° 0560675	178.0		15.5	"	
3	SEALED A - N° 0560674	153.0		15.5	"	
4	SEALED A - N° 0560671	180.9	158.0	15.5	2011/03/03	specimens previously maintained for 24 hours at a temperature of +60°C
5	SEALED A - N° 0560672	165.6		15.5	"	
6	SEALED A - N° 0560673	127.6		15.5	"	
7	SEALED A - N° 0560686	178.7	158.9	15.5	"	specimens previously maintained for 24 hours at a temperature of -30°C.
8	SEALED A - N° 0560687	135.2		15.5	"	
9	SEALED A - N° 0560688	162.7		15.5	"	

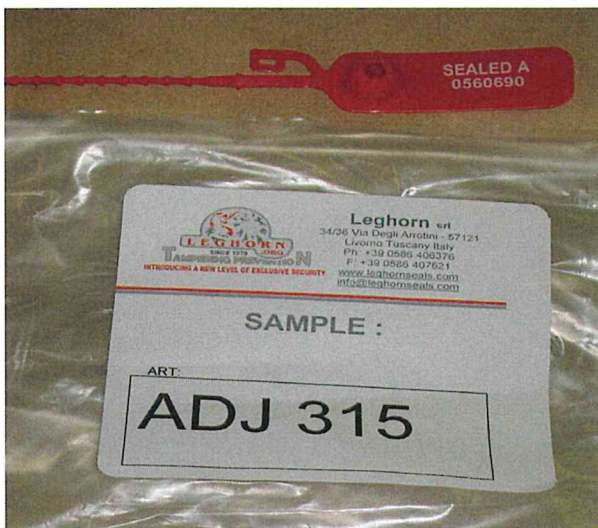


Figure 1. A specimen before the execution of the experimental tests.

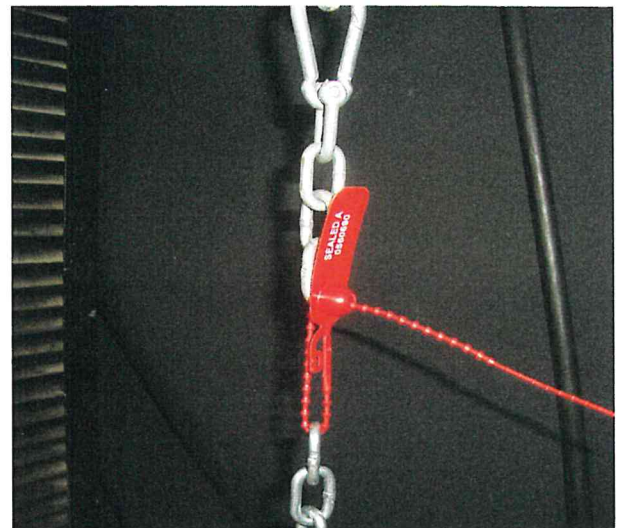


Figure 2. A specimen undergoing tensile test.

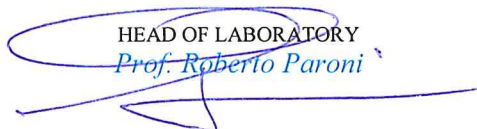
Experimental tests were carried out by: Mr. Luciano Pagni.

The original Test Report was signed by Dr. Walter Salvatore as Technical Manager, Prof. Maurizio Froli as Scientific Manager, and Prof. Mariano Lupi as Director of the Laboratory.

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