



**ELECTROTECHNICAL TESTING INSTITUTE**  
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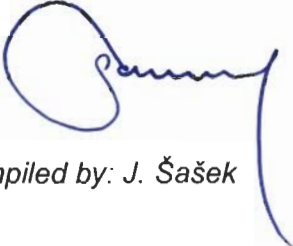


## TEST REPORT


**Name of product:** Intercom  
**Type of product:** 2N® Helios IP Force 9151101CW  
**Ratings:** IP 69K  
**Serial number:** 54-0542-0613  
**Manufacturer:** **2N TELEKOMUNIKACE a. s.**  
Modřanská 621/72, 143 01 Praha 4, Czech Republic  
**Production site:** dtto manufacturer  
**EZÚ product coding system:** 105001  
**Ordering firm:** **2N TELEKOMUNIKACE a. s.**  
Modřanská 621/72, 143 01 Praha 4, Czech Republic  
**Number of tested samples:** 1  
**Samples submitted on:** 7.2.2013  
**Location of testing:** EZÚ  
**Tested from** 7.2.2013 **through** 8.2.2013  
**Other data:** ---  
**The product was tested according to:** EN 60529/A1:2000,  
DIN 40 050-9:1993

The test results contained in this report refer to the tested items only. The values presented in this report were measured with the accuracy specified in the testing regulations. All measuring instruments used are properly traceable.

This Report shall not be reproduced except as a whole.

  
Compiled by: J. Šašek



  
Approved by: J. Bažant  
Testing laboratory technical manager

## 1. Specimen description

Intercom 2N® Helios IP Force 9151101CW was provided for testing.

For purpose of testing, the specimen was fixed to an artificial wall.

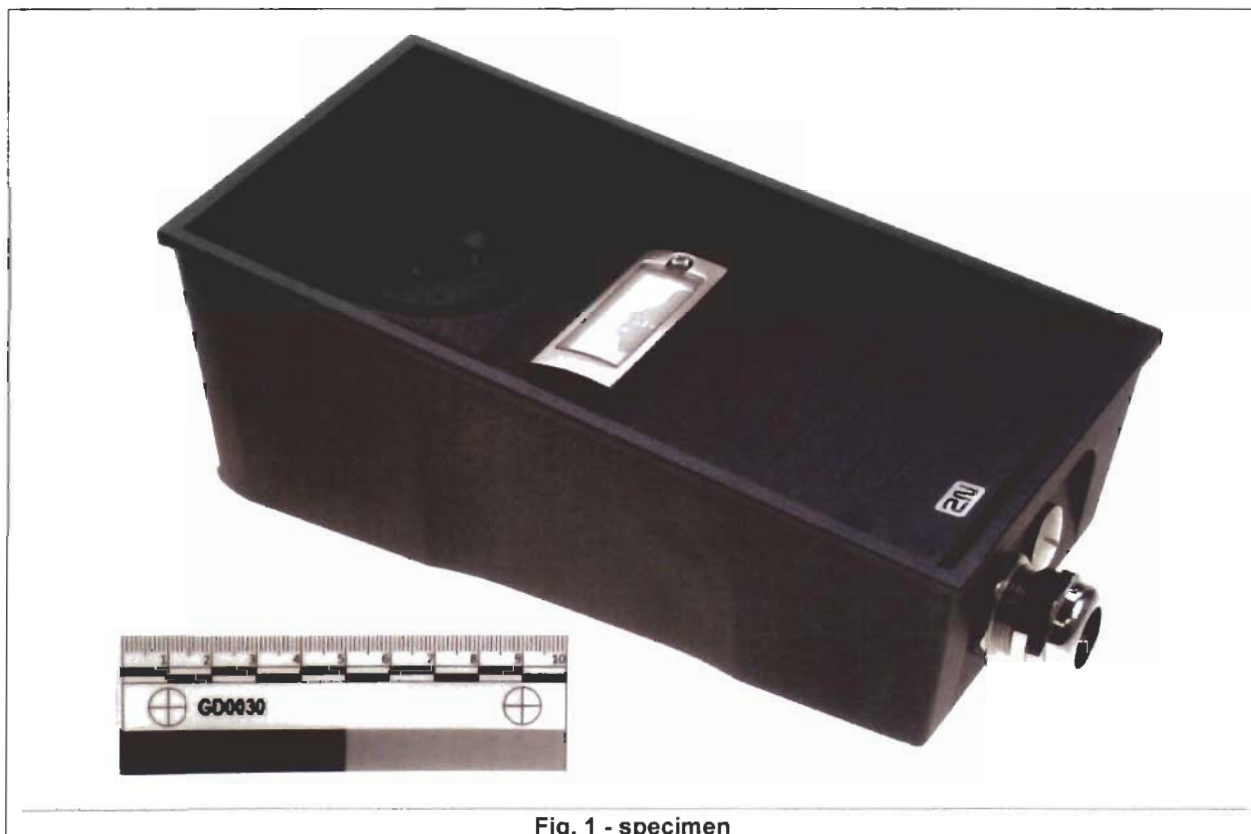


Fig. 1 - specimen



Fig. 2 - label of the specimen

## 2. Testing

### 2.1. Tests of protection provided by enclosures

according to EN 60529/A1:2000

#### 2.1.1. Test of protection against penetration of dust - IP 6X

according to EN 60529/A1:2000, cl. 13.4 and 13.6

##### Test apparatus:

dust chamber VST 1150, inv. No. 834490

##### Test parameters:

The specimen was tested in an operating position.

dust filling of the chamber: talc

temperature / relative humidity during the test: 55 °C / 30 %

underpressure outlet: via bushing

underpressure: 2 kPa

duration of test: 8 h

##### Findings:

During the test, no dust penetrated into the specimen.

*passed*

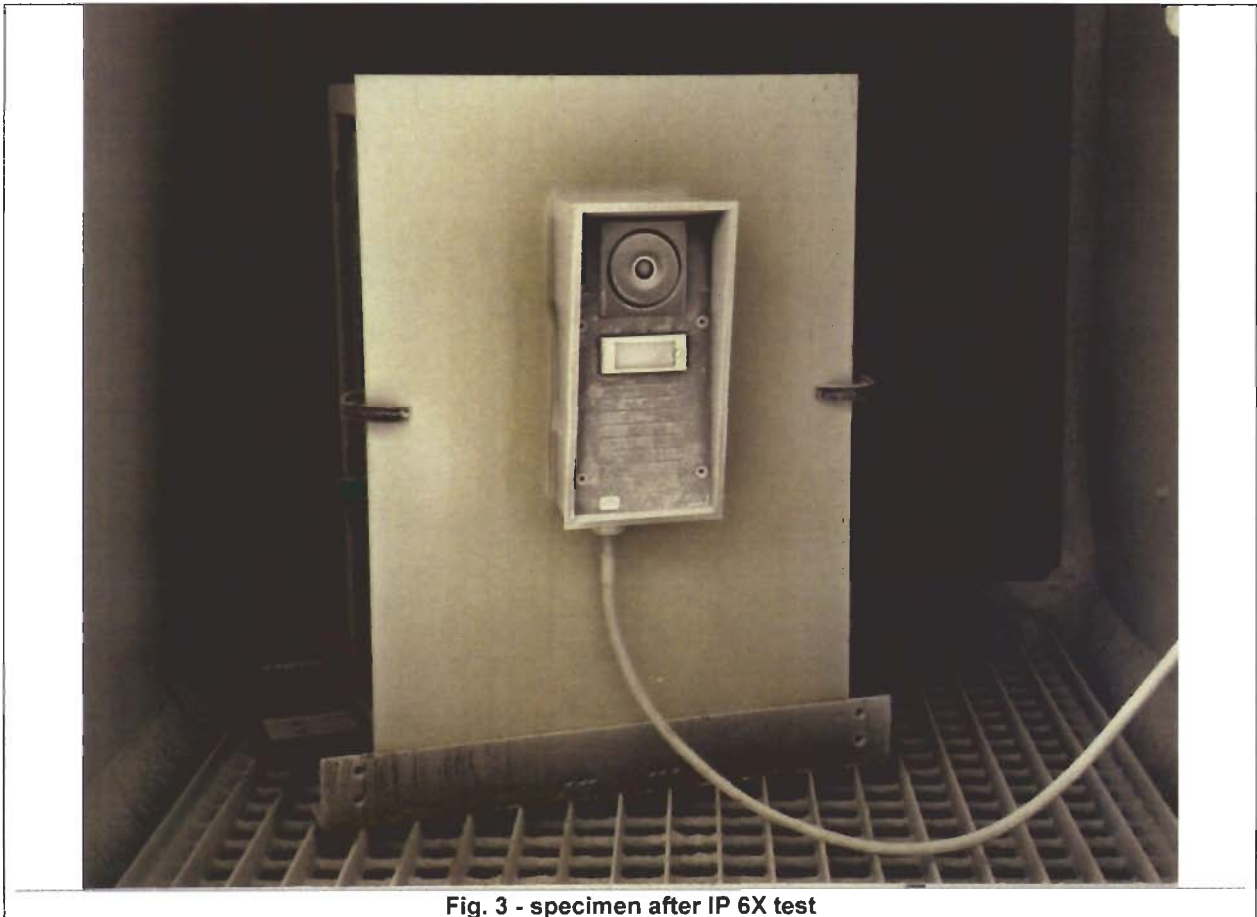


Fig. 3 - specimen after IP 6X test

**2.1.2. Test of protection against high-pressure water cleaning / steam flow - IP X9K**  
according to DIN 40 050-9:1993

The test result was taken from the Test Report No. SW-VZK-13-498 of SWELL, spol. s. r. o. (see Annex No. 1 of this Test Report).

**Test parameters:**

water spray angles: 0°, 30°, 60° and 90°

water flow rate: 14÷16 l·min<sup>-1</sup>

water pressure: approx. 8000÷10000 kPa

water temperature: (80 ±5) °C

duration of test: 30 seconds by position while the test specimen is rotating (5 ±1 rev/min)

**Findings:**

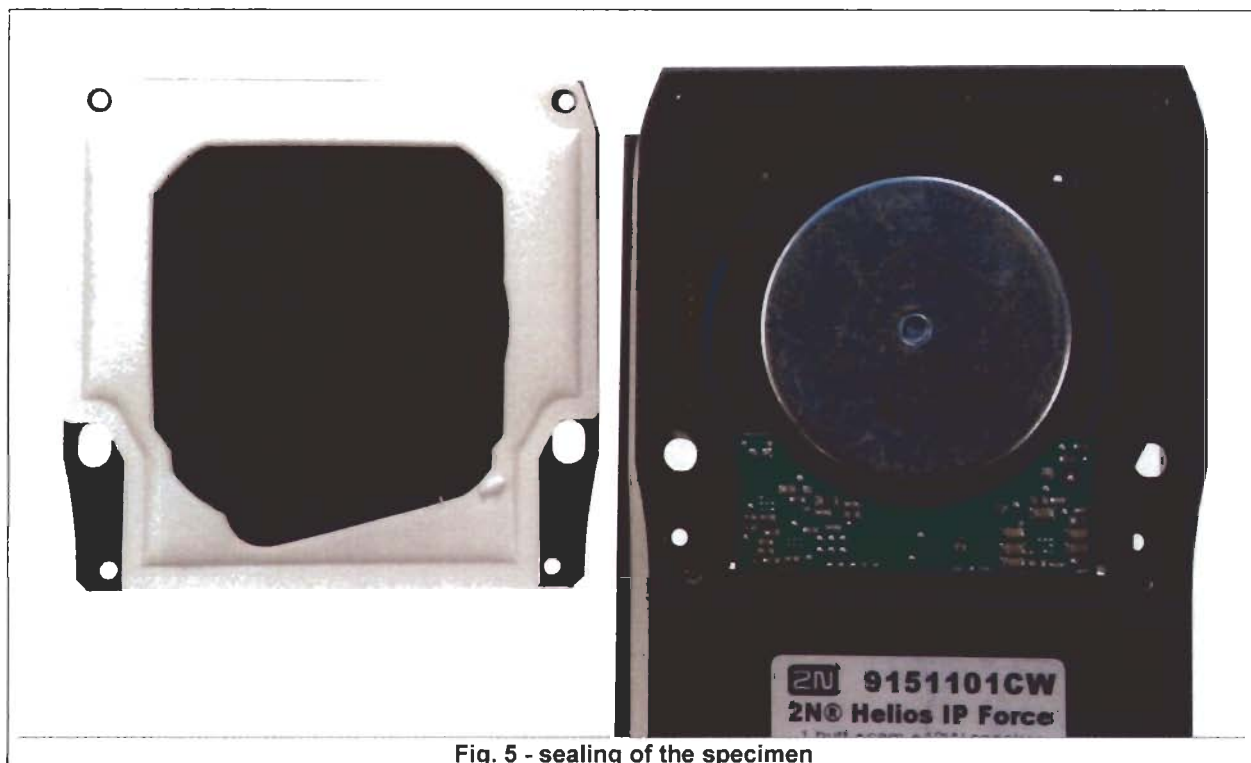
During the test, no harmful amount of water penetrated into the specimen.

*passed*

**3. Photodocumentation - design of the specimen**

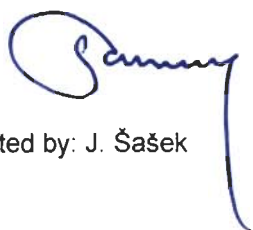


Fig. 4 - sealing of the specimen



#### 4. Test result

The submitted specimen - intercom 2N® Helios IP Force 9151101CW *satisfies* conditions for degree of protection provided by enclosures IP 69K according to EN 60529/A1:2000 and DIN 40 050-9:1993.



Tested by: J. Šašek