
Element Materials Technology Hamburg GmbH • Lahnstr. 26 • 45478 Mülheim an der Ruhr

Exquip Germany GmbH
Mr. Kroll
Auf dem Knuf 12
59073 Hamm

Date	Report No.	Order No.
2017-10-19/2018-09-18	1709145S – Part 3 / 1710257MH Rev.1	

Inspection of Protector Testing according to API 5CT Ed. 2011 9th Edition Annex I

Components Tested:

- | | | |
|--|--------------|------------|
| • Protector PIN 24" x 0,688" / 0,750" 20164107 | black | (1) |
| • Protector BOX 24" x 0,688" / 0,750" 20164107 | black | (2) |
| • Protector PIN 30" x 0,625" 20174467 | black | (3) |
| • Protector BOX 30" x 0,625" 20174467 | black | (4) |

Tests witnessed:

- **Impact Test at Room Temperature**

Date and Location:

19th October 2017
Exquip Germany GmbH
Auf dem Knuf 12
59073 Hamm

Contact Person:

Mr. Timm Jörgen Kroll, Exquip Germany GmbH
Mr. Jan-Pit Kroll, Exquip Germany GmbH
Mr. Arnd Burghoff, Exquip Germany GmbH

Inspection and Reporting:

Mr. Eric Uhle, Element Materials Hamburg GmbH, Laboratory Mülheim
Operations Manager Laboratory Mülheim
M.Sc., IWE

1. Object of Examination

Pipeconnector protectors were tested according to API 5CT. Therefore, some random protectors were taken from the production batches 20164107 and 20174467 to be tested.

2. Tests

2.1 Axial Impact Test at Room Temperature: passed

The Axial Impact Tests were performed according to API 5CT. The protectors were installed using the manufacturer's common practice. After the impact the threads of the connectors were examined.

Protector PIN 24" x 0,688" / 0,750" 20164107

Value	Requirement	Value	Evaluation
Impact Energy First Run	2034 J	2034 J	passed
Impact Energy Second Run	2034 J	2992 J	passed
Surface inspection of the machined surfaces	No damage	Connector and threads found in good condition No damage to the connector observable	passed

Protector BOX 24" x 0,688" / 0,750" 20164107

Value	Requirement	Value	Evaluation
Impact Energy First Run	2034 J	2034 J	passed
Impact Energy Second Run	2034 J	2945 J	passed
Surface inspection of the machined surfaces	No damage	Connector and threads found in good condition No damage to the connector observable	passed

Protector PIN 30" x 0,625" 20174467

Value	Requirement	Value	Evaluation
Impact Energy First Run	2034 J	2034 J	passed
Impact Energy Second Run	2034 J	2992 J	passed
Surface inspection of the machined surfaces	No damage on the connector	Connector and threads found in good condition No damage to the connector observable	passed

Protector BOX 30" x 0,625" 20174467

Value	Requirement	Value	Evaluation
Impact Energy First Run	2034 J	2034 J	passed
Impact Energy Second Run	2034 J	2945 J	passed
Surface inspection of the machined surfaces	No damage	Connector and threads found in good condition No damage to the connector observable	passed

3. Pictures



Testing device with installed protector (1) and maximum height



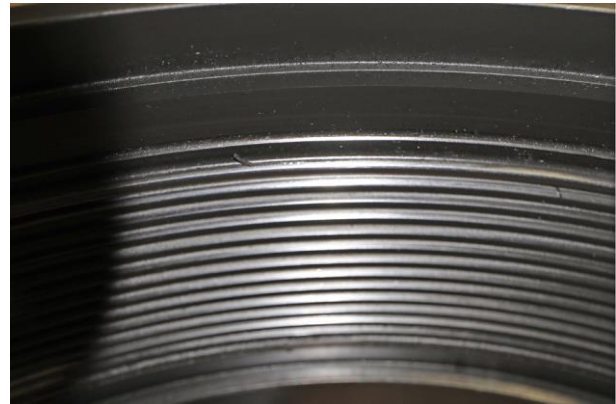
Protector (1) after testing – impact energy 2992 J



Connector threads after testing with 2992 J
Protector (1)



Protector (2) after testing with 2945 J



Connector threads after testing with 2945 J
Protector (2)



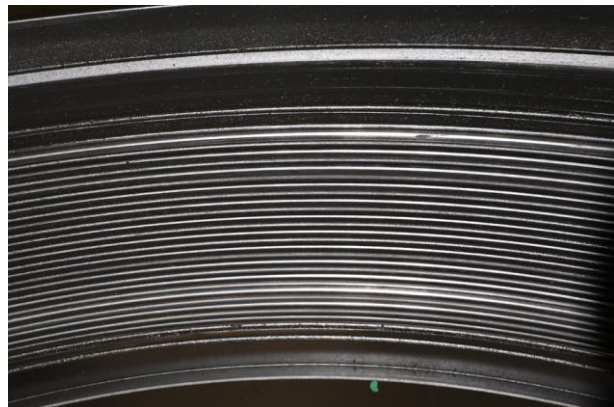
Protector (3) after testing – impact energy 2992 J



Connector threads after testing with 2992 J
Protector (3)



Protector (4) after testing with 2945 J



Connector threads after testing with 2945 J
Protector (4)

4. Summary

All requirements are fulfilled for the tested protectors, so the validation regarding the axial impact test was successful and the protectors meet the requirements according to API 5CT.

Protector PIN 24" x 0,688" / 0,750" 20164107	black	(1)
Protector BOX 24" x 0,688" / 0,750" 20164107	black	(2)
Protector PIN 30" x 0,625" 20174467	black	(3)
Protector BOX 30" x 0,625" 20174467	black	(4)



M.Sc. Eric Uhle
Element Materials Technology Mülheim
+49 (0) 208 58982-27
eric.uhle@element.com