

Antti Ylinen

14.5.2013

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Orderer: K-Patents Oy
Elannontie 5, Box 77
FI-01511 Vantaa, Finland

Reference: Mr Harri Salo

The subject: Safe-Drive™ Retractor tool with Wash Nozzle

Operational Safety Assessment for Safe-Drive™ Retractor tool of Process Refractometer PR-23-SD Generation 2 sensor

Client: K-Patents Oy

Inspection date: 20.03.2013

Inspector(s): Mr Antti Ylinen

General

The Safe-Drive™ Retractor tool is mandatory equipment for inserting and removing PR-23-SD sensor to or from a pressurized pipe. Removing the sensor without the Retractor tool may cause a life-threatening situation, if there is any pressure in the process pipe.

The Wash Nozzle is essential part of the sensor installation system. It is possible to install or remove the nozzle to or from pressurized process pipe.

Applied laws, standards and documents

The Retractor tool is not a machine such as the Machine Directive 2006/42/EY describes. Because there is not any standard for this kind of tools the assessment has been made applying the standard EN ISO 12100 Appendix B: Examples of hazards, hazardous situations and hazardous events.

Technical specifications for example, the strength calculations are excluded in the assessment.

The Best Practices manual has been assessed applying the standard EN ISO 1200 chapter 6.4.5.1 Accompanying documents (in particular – instruction handbook), Contents.

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Inspections and notes

The tool's operations in practice and operation instructions were inspected on the K-Patents's headquarters in 20.03.2013. Notes of the instruction manuals are written in a document Muistio 21.3.2013 Antti Ylinen, Inspecta Tarkastus Oy.

Corrections to the Instruction manuals of the Retractor tool have been checked and verified with positive results in 30.4.2013.

K-Patents Steam Instructions have been added to the K-Patents Safety Instructions.

The Best Practices manual fulfils the requirements of the standard EN ISO 1200 chapter 6.4.5.1 Accompanying documents (in particular – instruction handbook), Contents.

Summary

It has been assessed that the use of the Safe-Drive™ Retractor tool and installing or removing Wash Nozzle is safe by following instructions of the Safe-Drive™ Retractor tool of Process Refractometer PR-23-SD Generation 2 Best Practices.

Safety Requirements on the chapter 3 of the manual Safe-Drive™ Retractor tool of Process Refractometer PR-23-SD Generation 2 Best Practices and K-Patents Steam Instructions must be followed.

National laws, official regulations, and local instructions must be followed when using this equipment.

Hämeenlinna, 14.5.2013



Juha Alkio

Inspecta Tarkastus Oy