# Annex no. 1 tender documentation to the public contract of small scale ‘A device for thin layer chromatography with flame-ionization detector – TLC/FID’

**System description:**

A device designed for the group analysis of heavy oil fraction and distillation residues.

1. **Minimum technical requirements for the machine:**

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| **Requirements - machine** | **Statement of the bidder**  **(YES/NO, description)** |
| The system enabling group analysis of the distillation residues in the atmospheric and vacuum oil and heating oils distillation; further applicable for the separation of triglycerides. Individual parts are defined below. |  |
| The development device for the thin layer chromatography enabling the separation of at least 5 samples concurrently including the respective holder of the separation bars |  |
| The device for semi-automatic application of the defined sample amount |  |
| The drying device for the evaporation of solvents from the separation plates (bars) and their drying |  |
| Detection unit (FID) for the quantity evaluation of the separated groups of substances |  |
| Measured signal transducer |  |
| Computer with the operation system and software for processing the measured data |  |
| Material required for the connection of FID detector to the pressure bottles including the respective reduction valves on pressure bottles |  |
| 50 separation bars with SiO2 additionally to the number supplied commonly with the machine |  |
| 20 separation bars with Al2O3 additionally to the number supplied commonly with the machine |  |
| 2 separation bar holders additionally to the number supplied commonly with the machine |  |
| Operation manual in English or Czech language. |  |
| The completion of all required installation tests and the achievement of required parameters if defined |  |
| The display of the device function for SARA analysis on the sample (at least 5 parallel measurements) selected by the contracting authority and the achievement of results’ repetition (RSD) defined by the manufacturer in the machine technical specification |  |