General Technical Specification and other project implementation requirements for card milling and module implanting system

Technical parameters

The Client requires purchase of a fully automatic device used for milling ID-1 card and implanting of module (from tape)

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| **Equipment specification** | **Operational requirements** | **The declaration of supplier that it meets all the requirements of the Contracting Authority** |
| **Standards** | **ISO for plastic card** | [YES / NO] |
| Materials of cards | PC, PVC, PET-G | [YES / NO] |
| Final product from the equipment | Card with contact chip  Card with dual interface (contact chip with contactless connectivity)  Card with fingerprint sensor with possibility to communication with the chip in the card. | [YES / NO] |
| Capabilities and features of the machine | Card input device (with automatic magazine change)  Optical test of card orientation  Card thickness measurement  minimal 1 milling stations (according required throughput) with the cavity setting tools  minimal 1 cleaning stations  minimal 1 cavity depth measurements  Antenna touch sensor  Resonance Frequency Measurement of Antenna  Pattern recognition system for inspection of the antenna pad  Implanting **standard** and **dual interface** 6-PIN and 8-PIN chip modules:  Module tape handling (Vision system that recognizes and discards faulty modules to special box for defective modules + module punching)  Implanting **standard** fingerprint modules - 2 different size of fingerprint modules.  Tacking station  3 hot press station  cold press station with integrated module height difference measurement  Electrical contact test station (ATR)  Optical module inspection  Resonance Frequency Measurement with ATS  Card output device (output for good cards with automatic magazine change and tray for defective cards) | [YES / NO] |
| Milling station | 3 programmable axis  Adjustable milling path and depth  Securing the supply of cutters  SW for cavity setting | [YES / NO] |
| Type of vision system that recognizes and discards faulty modules | Camera (not laser) | [YES / NO] |
| Module punching | Tools for punching 2 dimensions of module according to the drawing (and other necessary accessories for their processing) | [YES / NO] |
| Pick and place module for contact chip module | Modul for contact chip module extraction and handling from the tape to the card cavity | [YES / NO] |
| Pick and place module for fingerprint sensor module | Modul for fingerprint module extraction and handling from the tape with conductive film (ATF) to the card cavity with all possible tools | [YES / NO] |
| Number of hot press station | min. 3 | [YES / NO] |
| Number of cooling station | min. 1 | [YES / NO] |
| Number of milling station | min. 1 with cleaning | [YES / NO] |
| Temperature of hot press | Adjustable | [YES / NO] |
| Transport system | Central transport system for the card handling through the equipment. Must not damage the transported product | [YES / NO] |
| Magazines | in the amount to use the entire capacity of the device for input and output  delivery of minimal 4 pieces of this magazines  Optional price for next magazines | [YES / NO] |
| Throughput for contact chips | min. 4 000 PPH for standard contact chip modules | [YES / NO] |
| Throughput for dual interface cards | min. 2 000 PPH for card with dual interface (contact and contactless connection) | [YES / NO] |
| Throughput for fingerprint module | min. 200 PPH for standard fingerprint modules | [YES / NO] |
| Control SW and labels around the machine | In Czech language or using international pictograms | [YES / NO] |
| Saving of programs | YES, at least 50 programs | [YES / NO] |
| Contact chip modul tape specification | According to the annexes | [YES / NO] |
| Fingerprint modul tape specification | most commonly used on the market | [YES / NO] |
| Module tape reels for contact chip | outer diameter of the reel 355 mm  inner diameter of the hub 13 mm and 76 mm | [YES / NO] |
| Module tape reels for fingerprint senzor | most commonly used on the market | [YES / NO] |
| Material for testing of dual interface cards during FAT and SAT | * Minimal 600 pieces of dual interface chip moduls with adhesive * Minimal 600 pieces of cards suitable for implementing of dual interface chip moduls (special antenna) | [YES / NO] |
| Material for the pilot production with the functionality for entry application | * Minimal 500 pieces of functional fingerprint modules on the tape reel with 500 cards into which the fingerprint sensors will be applied and which will be then functional for our current entry system which use readers HID iCLASS SE R10 and cards MIFARE DESFIRE EV1 4 KB  56bit * Minimal 1000 pieces of dummy fingerprint modules | [YES / NO] |
| External device for the fingerprint recording and saving | 2 pieces of device for the fingerprint recording and saving into the chip | [YES / NO] |
| Testing module for fingerprint sensor | built-in self-testing of the fingerprint module to verify that they are functional | [YES / NO] |
| Time to adapt the machine from 6-PIN to 8-PIN chip modules production (and vice versa) | Max. 2 hours  Simple enough for operators to handle | [YES / NO] |
| Time to adapt the machine from contact chip modules production to fingerprint sensor production | Max. 4 hours  Simple enough for operators to handle | [YES / NO] |
| Consumables | Minimal for production of 500.000 cards (e.g. millings tools) | [YES / NO] |
| Other | All HW, SW, tools and support equipment’s for trouble-free operation, setting and maintenance of the device for the production of ID1 cards with contacts chips, contactless chips and fingerprint modules. | [YES / NO] |

**The supplier fills the cells marked in yellow**. To fulfil the tender conditions, the supplier must fill “YES” in each item. If “NO” will be filled in any of the items, the tender conditions will not be fulfilled, and the supplier will be excluded.