



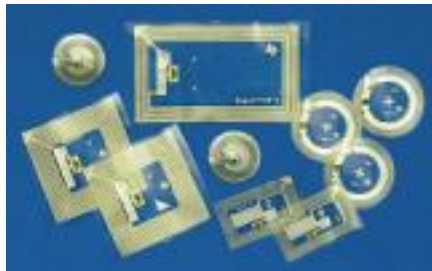
MediTEX RFID Connector

With **MediTEX RFID Connector** we offer a turnkey solution for the use of RFID (Radio Frequency Identification) in clinics, laboratories and hospitals. The name RFID stands for one sub-group in the identification technology. It refers to contactless identification of materials, using radio frequencies.

One RFID system includes an RFID data carrier, also known as "transponder" or "tag", and an RFID identification system consisting of an electronics unit and an antenna. Transponders can be used in different versions, as centrifuge tubes, petri dishes, patient cards (check cards), employee cards, and adhesive labels.



MediTEX RFID Identysystem





MediTEX RFID Transponder



MediTEX RFID Items

Advantage of RFID compared to barcode identification is that the communication between the transponder and the read/write system is possible without visual contact with the transponder. Impurities on the transponder do not interfere with the data transfer.

Comparison of barcode and RFID technology

| |  Barcode |  RFID |
|---|---|---|
| Machine readability | good | good |
| Influence of dirt / moisture | high | no influence |
| Influence of optical coverage (line of sight) | reading not possible | no influence (exception: metal) |
| Wear and tear | high | no influence |
| Expense | very low | average |
| Amount of available data | low | high |
| Bulk reading | not possible | possible |
| Unauthorized copying | easy | difficult / not possible |



Health care requirements:

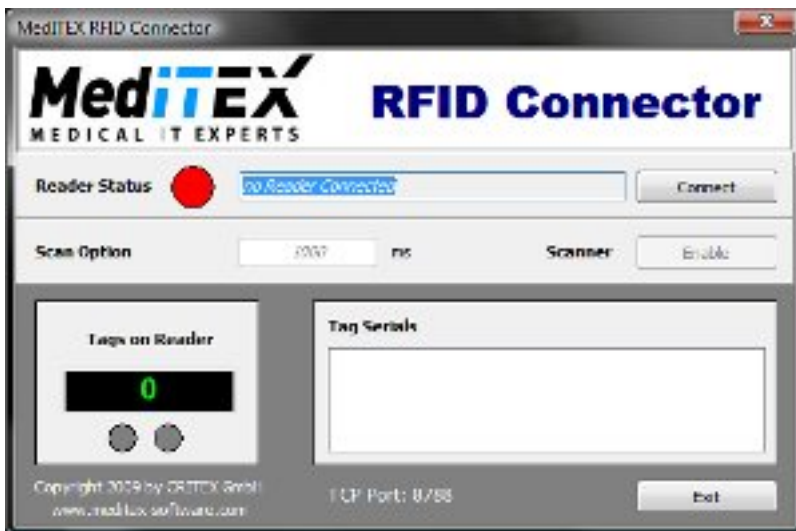
- Automation of processes facilitates medical and business documentation
- Processes for health care providers and patients must be more effective
- Confusion of patients, or errors in medical treatment and medication should be prevented
- Improvement of treatment quality

Application spectrum:

- Resource management: logical and physical link between the transponder ID and the item or object
- Security: Unambiguous assignment of personalized key for user authentication (eg IVF software)
- Patient: fast and unambiguous identification of patients (patient tracking)
- Process: doctors and health care workers can quickly and easily access different data such as patient number, name, or medical finding
- Optimization: simplification of input and transfer of patient data

Interface screen:

The interface of the RFID MediTEX Connector runs as a standalone server application and can thus be easily integrated in an existing software. This results in many other application areas for optimal support of work processes.



MediTEX RFID Connector Interface



RFID pass for unique identification of patients

Benefits and advantages of RFID patient card:

- No confusion - unique identification of patients
- Lessening of treatment and medication error incidence
- Substantial time saving through decrease of the number of typing errors
- Quick access to patient data
- Automatic invocation of assigned treatments and procedures in the program
- Safety for the patient
- Marketing for the doctor & practice

The RFID patient card serves as a particular measure for quality assurance and thus for patient safety. At first visit to your clinic or practice a patient will obtain a so-called smart card with an identification code and all medically relevant patient data. The card can be easily created in "Patient administration" program area and printed with a special printer.



On further visits to the clinic the patient has only to provide her/his card to the medical staff. For the patient this means security, because in this way she/he will be uniquely identified and all possibility of confusing the patient with another one will therewith be excluded. The patient data will also automatically be invoked in the program: your personnel can therefore immediately access and edit the data without having to previously search for and manually open it. This saves time and reduces mistakes. In addition, it is also possible to invoke assigned treatments and procedure data in the same way, so the workflow will be simplified enormously.



The smart card offers the patient the possibility to check in on the reception discreetly. The RFID patient identification thus increases not only the quality and safety of your practice, but also the wellbeing of your patients.



Material identification in laboratory with RFID

Benefits and advantages of RFID for material identification Paperless work

- Significant reduction of administrative costs
- Unambiguous designation of samples and materials
- Unambiguous identification of samples and materials
- Faster access to the associated data
- Automatic invocation of associated procedures
- Effective organization of laboratory workflows
- Tracing of individual samples and materials
- Safe and efficient documentation of all treatment steps
- Simultaneous identification of multiple transponders
- Safety through unambiguous matching of corresponding samples
- Preventing of confusion and its consequences

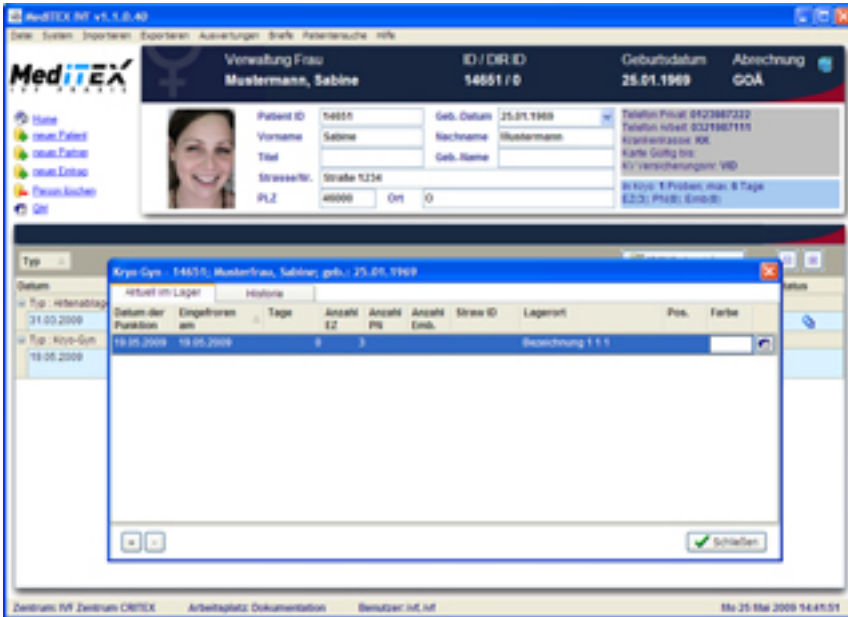
RFID offers professional identification of materials in laboratory with considerable benefits and advantages over barcodes and handwritten labels. Labels with RFID transponders - so-called tags - are available in different shapes and sizes; all of them can easily be printed and programmed with our software and a special RFID printer. For example, when entering a spermogram in MedITEX IVF the laboratory personnel can start the RFID printer directly out of the program and print an RFID tag corresponding to the sample. Without additional typing on the keyboard the sample will be quickly, simply and unambiguously designated with all the necessary information.



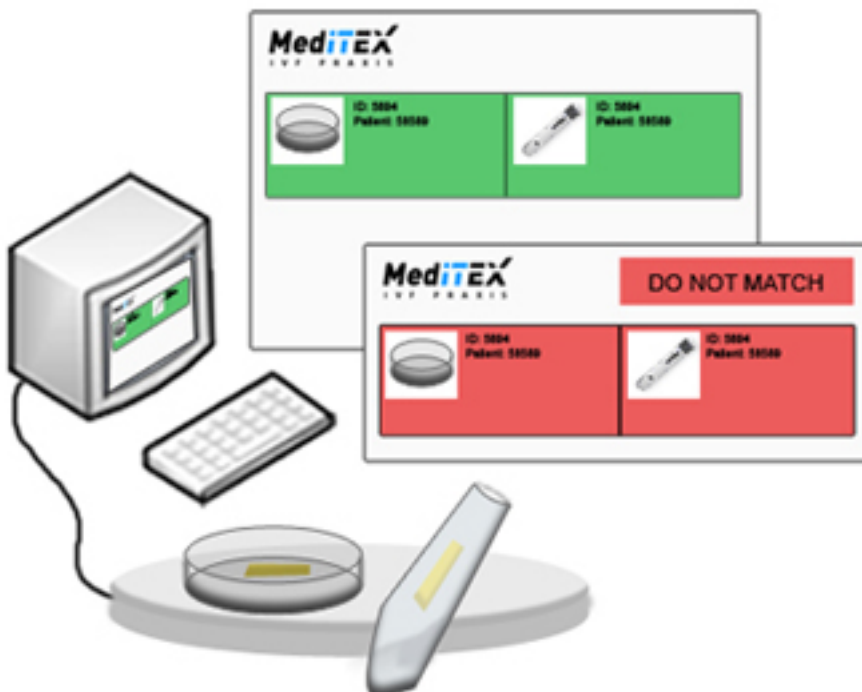
When a material is identified the assigned processes are automatically invoked, so that access to corresponding data and triggering of different action(s) runs quickly and smoothly. If for example a material sample of a patient is detected, this patient and this material will automatically be invoked in the program. Therefore the laboratory personnel must not drudgingly search for and open the patient and the information about the sample itself, but gets the relevant data automatically displayed and can immediately edit it.



RFID Connector



Through the unique identification associated with the modern wireless technology we offer a higher standard of safety, which is especially required in the field of contemporary medicine. Such errors like - for example - a confusion of samples with its drastic consequences can completely be avoided with RFID technology.



The bulk acquisition ability of RFID technology for so-called "Matching systems" also proves to be of great advantage. The simultaneous acquisition and analysis of multiple transponders allows safe and fast working, which is absolute condition in the field of assisted human reproduction. If an egg would be fertilized with wrong sperm it would have serious implications. Our RFID system excludes the possibility of such an error through automatic identification of materials and immediate verification if they correspond to each other. If the materials do not correspond a warning will be issued and the employee will be prevented to document the erroneous process.



Professional document identification with RFID

Benefits and advantages of document identification with RFID

- Quick access to associated electronic data
- Quick access to the electronic patient record in the software (invoking of patient data)
- Simple document tracking and localization
- Simultaneous acquisition of several documents

The identification of documents with RFID improves the processes and procedures in your medical environment. Each document provided with an RFID chip can be acquired on each work station. By logging of user, time, place and further important data the history of the document can at any time be easily retrieved. So is the RFID system an ideal tool for tracking and locating of individual documents. The search for individual documents will be greatly simplified: the content of whole folder with multiple documents can be analysed and evaluated at once.

If for example a paper document is assigned to an electronic document or to a patient, so will these automatically be invoked in the program after detection with RFID and can immediately be edited: if an employee wants to see the data corresponding to a cryo contract she/he must only put this paper document on RFID antenna and the the right patient with the corresponding electronic document will immediately appear in MediTEX IVF. Quick and accurate access to the associated electronic data is thus guaranteed. The workflow and the work quality is faster and more efficient.





Proces optimization with RFID for personnel authentication

Benefits and advantages of personnel authentication with RFID

- Unambiguous assignment of personalized key for user authentication
- Quick log in and easy user switching (no restart of software necessary)
- Fast and reliable admission control

Using RFID for personnel authentication will optimize the processes and the quality of your clinical environment. Each employee will receive a so-called "Token" equipped with an RFID chip. The tokens are available in different forms - as key rings, check cards, wristband, etc. - and are used as a personal key for user authentication.

Using the RFID key each employee can log in quickly and easily in all programs of our system without having to type personal username and password. When switching users the current one does not have to log out first so that the next user can log in. If the RFID system detects the key of another user, the log out of current one and log in of new user will take place automatically.

