



**MedTec  
Medizintechnik  
GmbH**

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[www.mbst.de](http://www.mbst.de)

- Founded in 1998
- Own Research and Development
- International activities
- Top-Innovator 2014
- Own production, Made in Germany
- Owner-managed





# MedTec Medizintechnik

- **MBST®** - a therapy system with no competitors
- Worldwide patent
- Over 600 machines worldwide
- 400 machines in Germany and Austria
- Represented in over 20 countries

# Therapeutic MagneticResonance

## MBST®Timeline

Development of the MBST® NuclearMagneticResonanceTherapy





# What is MBST®?

**MBST®** is a conservative therapy which is based on MRI technology – the currently best and most precise method of diagnostic analysis.

**MBST®** does not use this technology to create images. Instead **MBST®** uses this technology to **regenerate** damaged **cells** within the body.

Verified, successful treatment of degeneration and damage of

- cartilage cells (e.g. with osteoarthritis)
- bone cells (e.g. with osteoporosis)
- tendons and ligaments
- skin cells

as well as treatment of

- injuries from sports and accidents

# What is MBST®?

## Therapeutic Magnetic Resonance

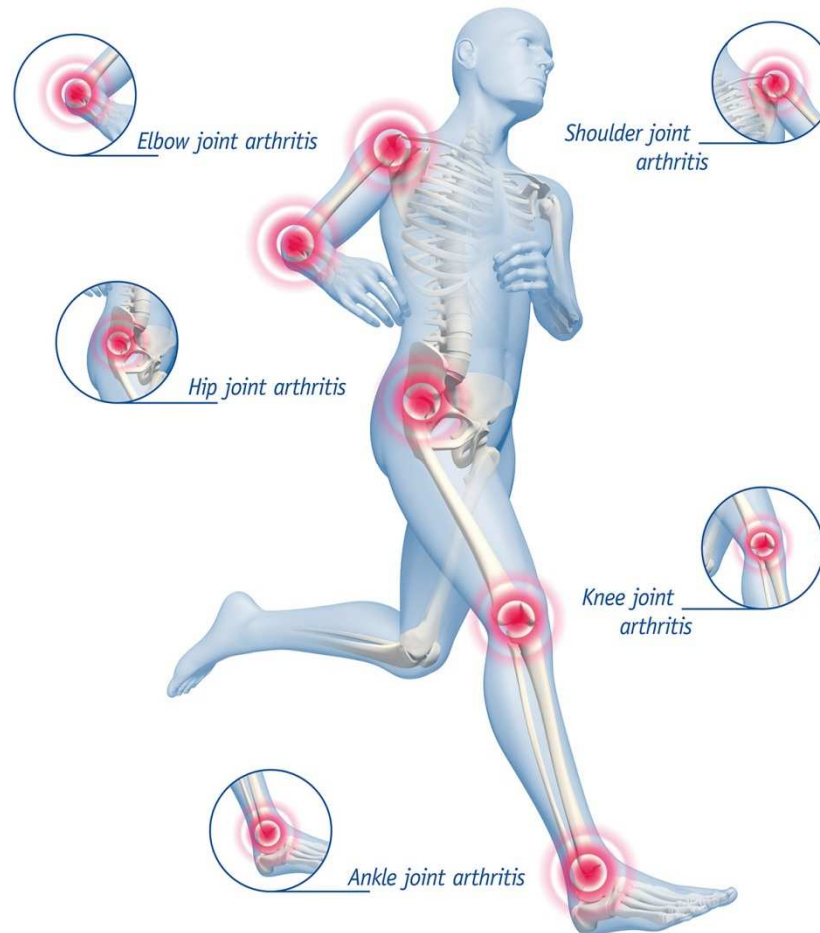
The composition of the therapy machines is very complex: A basic field aligns the nuclear spins, and an alternating field, which is tuned precisely to the resonance frequency of the specific type of tissue enables the protons of the targeted tissue to take up energy.

During the succeeding relaxation, this energy is transferred to the surrounding tissue which is then stimulated by resonance.





# Areas affected by Osteoarthritis



## Clinical Picture of Osteoarthritis

„X-Ray results prove that **20 to 40 %** of examined patients over 60 show signs of degenerative joint diseases (osteoarthritis or osteoporosis).“

Source: German Federal Statistical Office (2002) „Krankenhausdiagnosestatistik“

## Clinical Picture of Osteoporosis

„Osteoporosis is the most common bone disease at advanced age. 80 % of all osteoporosis affects post-menopausal women. After the menopause, **30% of all women** develop a clinically relevant form of osteoporosis.“

Source: Wikipedia

## Conventional Therapies for Osteoarthritis and Osteoporosis for treating the Symptoms:

- **Pharmaceuticals**
- **Pain killers**
- **Anti-inflammatory drugs**
- **Hyaluronic-acid injections**
- **Surgical cartilage shaving**
- **Implant of cartilage replacement**
- **Total implant surgery**
- **Joint fixation**

**MBST® treats the cause**





# MBST® - Therapy Range

## Treatment of Osteoarthritis

In average 20% of a population

## Treatment of Osteoporosis

About 30% of women aged over 50. Globally increasing

## Injuries from Sports and Accidents

Also affects younger and more active population



# MBST® –Therapy Success

- Treats the cause of **osteoarthritis** and **osteoporosis**  
Unique characteristic worldwide (USP)
- **Pain-free, non-invasive** and **without side-effects**
- Over **180,000 successful treatments** worldwide
- **Treatment success over 80%**  
(acknowledged in several national and international studies  
carried out over several years)

# MBST® - Indications

- Joint degeneration (osteoarthritis), grades I-III (IV)
- Metabolic or circulatory disorder of the bone
- Osteochondrosis dissecans
- Injuries from sports and accidents
- Osteoporosis
- Cracked and bruised bones
- Tendons, ligaments and muscles
- Slipped disc when not obligatory to surgery

# MBST® - Therapy Machines

## MBST®-OpenSystem 700



### INDICATIONS

#### Injuries from sports and accidents

- Acute injuries of ligaments, muscles and tendons
- Chronic complaints in tendons, ligaments and muscles

#### Osteoarthritis treatment of the large and small joints of the limb, the spine and intervertebral discs

- Spine-hip, spine-shoulder and double-knee treatment
- Damage to intervertebral discs not obligatory to surgery

#### Diseases and injuries of the bone

- Osteoporosis treatment of the back



Unique appearance with C-shaped, open design  
 NuclearMagneticResonance  
 Magnetic field force approx. 0.4 Millitesla  
 Complex construction



# MBST® - Therapy Machines

## MBST®-OpenSystem 350



### INDICATIONS

#### **Injuries from sports and accidents**

- Acute injuries of ligaments, muscles and tendons
- Chronic complaints in tendons, ligaments and muscles

#### **Osteoarthritis treatment of the large and small joints of the limb**

- Knee, elbow, foot and hand treatment
- Double-hand and double-foot treatment

#### **Diseases and injuries of the bone**

- Osteoporosis treatment of arm/leg, hand/foot



# MBST<sup>®</sup> - Therapy Machines

## MBST<sup>®</sup>-OsteoSystem



### INDICATIONS

**Diseases and injuries of the bone**  
- Osteoporosis, whole body treatment

NuclearMagneticResonance  
Magnetic field force approx. 0.4 Millitesla







# MBST® - Therapy procedure

Before the therapy: **Medical diagnosis by a doctor**

Therapy length depends on diagnosis

5, 7, 9 or 10 days → 1 hour per day

**7 days** Standard for treatment of **osteoarthritis** and joint diseases

**10 days** Whole body treatment of **osteoporosis**

5 days Refreshment of earlier therapies or for treating minor injuries

9 days Treatment of certain forms of osteoarthritis and joint diseases

# MBST® - Business Plan



1. Partner Company purchases **MBST® machines** from MedTec
2. Partner Company sells **MBST® machines** to doctor / clinic as „Centre“:



3. Patient receives medical diagnosis, e.g. osteoarthritis of the hip
4. Centre orders respective chip card from Partner Company
5. Partner Company sends chip card („OS 700 – Osteoarthritis, hip“) by mail
6. Centre treats patient and adds margin as profit

# MBST® - Capacity



## Example MBST®-OpenSystem 700

Capacity **per machine**: 8 hours per day  
5 days per week  
42 weeks per year = 1,680 hours / year

Therapy length: 7 x 1 hour = 7 hours

Workload **per machine**: **25 %** (of 1,680 h) = **420** hours per year  
( = 60 chip cards)

**50 %** = **840** hours per year  
( = 120 chip cards)

**90 %** = **1,512** hours per year  
( = 216 chip cards)

# Innovation Ace!

Among **three million** medium sized German companies, MedTec Medizintechnik GmbH was awarded **Top-Innovator 2014** by famous host Ranga Yogeshwar.

MedTec, with its patented innovations, is without competition.

