

Goals ██████████ 7

Ø Throwing Speed ██████████ 96,2 km/h

**FASTEST GOAL**

**110**

km/h

Ø Goal Distance ██████████ 7,9 m

Furthest Goal Distance ██████████ 9,5 m

Photo: Binder

KINEXON



CASE STUDY

# Handball Of The Future

How the world's strongest league shapes the future with real-time performance data.

“ Years ago we asked ourselves in sports why we need slow motion cameras. We are convinced that data acquisition in real time, as we are doing it, will also become a new standard! ”

Frank Bohmann  
Managing Director of the LIQUI MOLY Handball-Bundesliga GmbH

# Introduction

The fastest player tracking, the first chip in the ball and 360-degree data usage: welcome to the most advanced handball league in the world!

**Real-time performance data as a 360-degree service for clubs, media, partners and fans**

The LIQUI MOLY Handball-Bundesliga (HBL) is considered the strongest handball league in the world. It aims to live up to this reputation year after year. But how can such a traditional sport continue to be developed through a Bundesliga that recently celebrated its 100th birthday? Together with KINEXON Sports, the LIQUI MOLY HBL has found a hitherto unique concept.

**As the preeminent professional ball sports league in the world, the LIQUI MOLY HBL uses KINEXON Sports to determine real-time movement data from players and balls in play and makes them fully automatically available to its clubs, partners and fans.**

Discover on the following pages how the league, clubs, sponsors, media, agencies and above all, fans benefit. All of them will have access to previously inaccessible information such as ball speed, jump height or movement patterns. They will all experience handball from a completely new perspective.



# About The Project

The strongest league in the world strives for more.



## The Goal

As handball is the most popular “ball sport” aside from soccer, LIQUI MOLY HBL aims to reach, interest and inspire new and younger target groups. Our goal here is to provide the sport with a new quality of experience. LIQUI MOLY HBL’s investment in handball should not only benefit fans, but also clubs, sponsors and the media. After all, it is they who make the league what it is: the strongest handball league in the world.



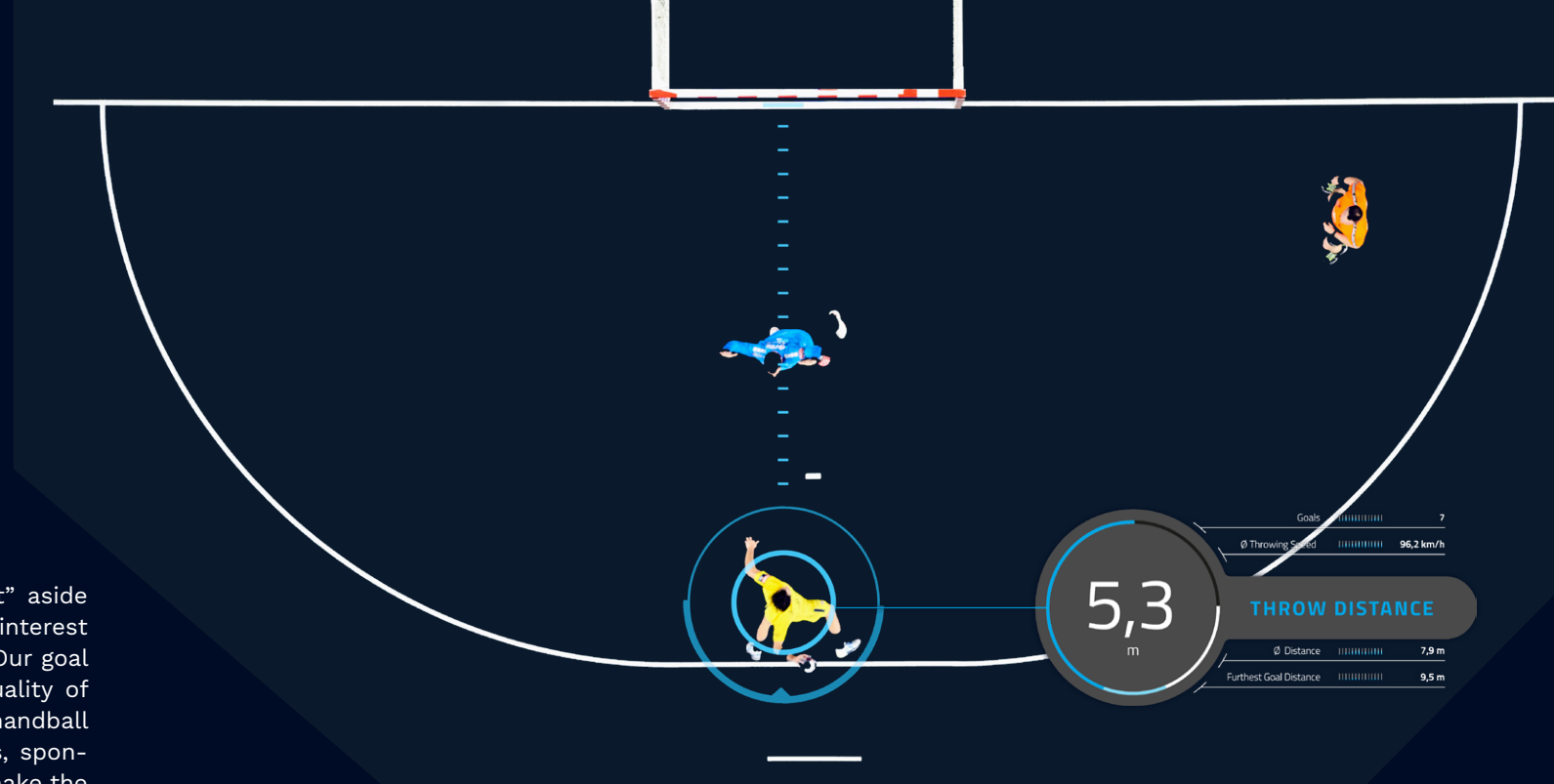
## The Solution

In all official games of the LIQUI MOLY HBL, all of the movement and performance data of almost 400 players are recorded, and, in some games, the ball is as well. The coach and the league have complete access to the data. Selected performance data is automatically provided to sponsors, media and fans and adds a new dimension to the sports experience.



## The Result

LIQUI MOLY HBL plays a pioneering role in providing valid live data. In cooperation with KINEXON Sports, it is the first professional league to create a new scope for all participating parties for more precise and effective training (clubs), live reporting (media), fan mobilization (sponsors) and game viewing (fans).



## KINEXON

ABOUT  
INEXON SPORTS & MEDIA GMBH

KINEXON Sports & Media GmbH develops solutions for highly accurate performance analysis in sports. In order to do this, the system consists of two core elements: a radio-based sensor technology and analysis software for the intelligent evaluation and visualization of the data. Together with KINEXON Industries GmbH, it is part of KINEXON – a company founded in 2012 by scientists of the Technical University of Munich, which has been developing innovative solutions for real-time localization, transmission and analysis of data since then. The company has received numerous awards for its products and services, including the ISPO ‘Product of the Year 2019’ Award.



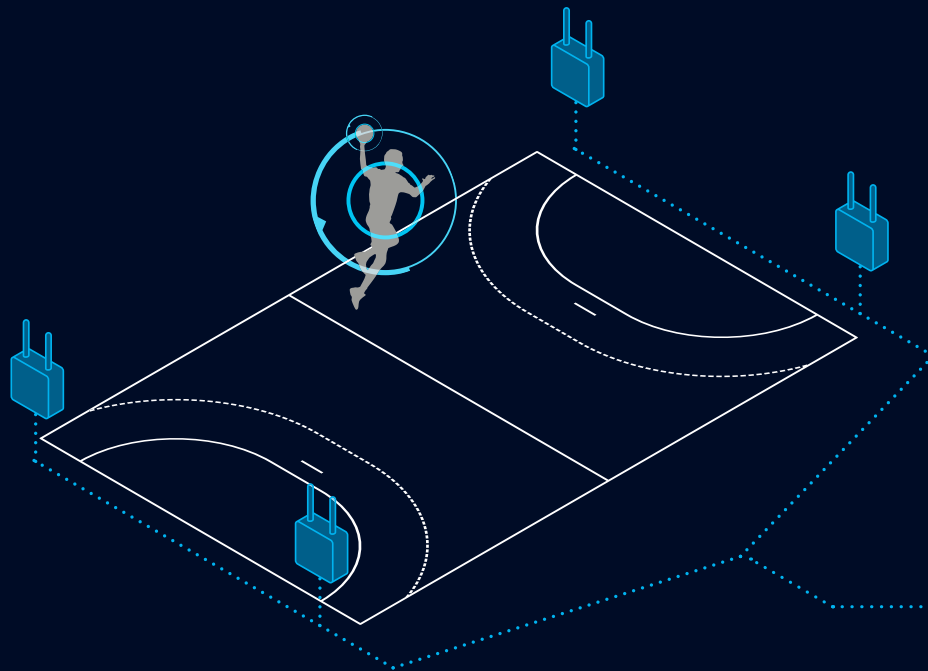
ABOUT  
HANDBALL-BUNDESLIGA

Handball-Bundesliga GmbH, to which the 36 clubs of the LIQUI MOLY Handball-Bundesliga (LIQUI MOLY HBL) and the 2nd Handball-Bundesliga belong, is responsible for, among other things, the organization and central marketing of national professional handball sports at home and abroad. The media partnership with Sky Deutschland, ARD and ZDF guarantees a comprehensive media presence. Sky shows all 306 seasonal games on pay and free TV, and ARD shows selected games live. 102 games are currently shown live on the international market. Further information can be found at [www.liquimoly-hbl.de](http://www.liquimoly-hbl.de).

# One Solution

– Multiple winners.

Handball-Bundesliga GmbH provides a central data infrastructure through installing KINEXON tracking technology in the arenas. In this way, it retains sovereignty over the data, as well as over its use and marketing.



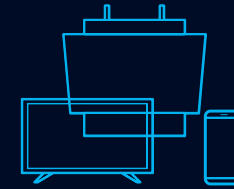
## Live Analysis



Over 180 performance metrics are visualized in real time. Users configure their dashboard according to individual requirements.

- Head Coaches
- Athletic Trainers
- ...

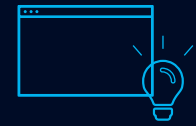
## Live Infotainment



Around 40 game data types important to fans can be clearly viewed in real time throughout the game.

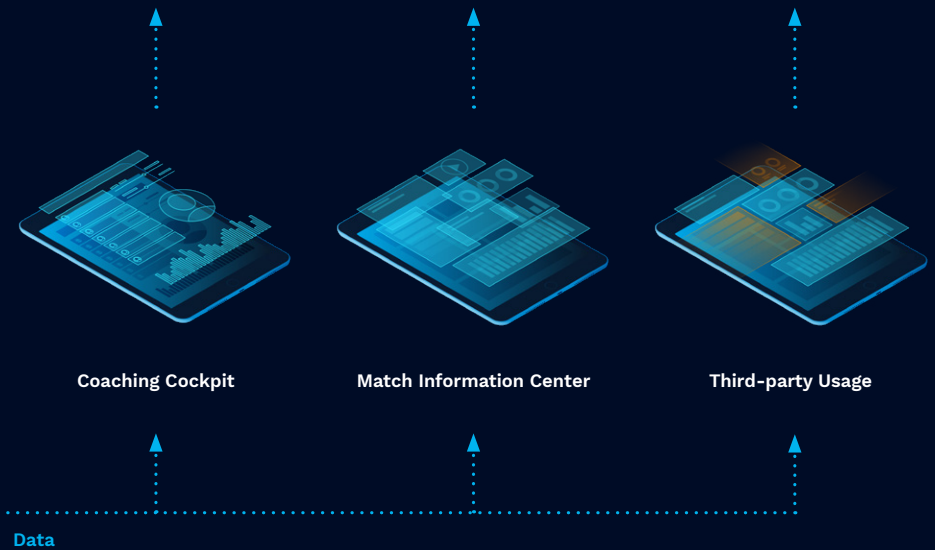
- Editors
- Journalists
- Statisticians
- Reporters
- ...

## Live Engagement



Automated processing of live data for new, creative applications is also possible in real time via open interfaces.

- Marketing
- PR
- ...



# The League

... sets the course for the future.



"The need to make data available in real time is already huge today and will continue to grow. Real-time tracking is therefore a necessary step into the digital future for the Bundesliga. Together with KINEXON we open up additional fascinating perspectives for our fans, media partners and sponsors and create a new world of experience as well as innovative offers."

**Frank Bohmann, Managing Director of Handball-Bundesliga GmbH**

In order to seamlessly track all games in real time, Handball-Bundesliga GmbH has invested in ultra-broadband-based (UWB) tracking from KINEXON.

All facilities of the LIQUI MOLY HBL have been outfitted with this technology. For the first five years, HBL will provide the clubs with the data free of charge. In particular, the coaches of the 18 Bundesliga teams will be enabled by the data from the field to further develop the performance of the players using innovative technology.

In addition, the data supports the marketing of LIQUI MOLY HBL and will enable it to devise new and innovative digital formats. Sponsors and media partners will benefit from these, but also the many millions of spectators who watch the games of LIQUI MOLY HBL on the screen and in the arena.



## 18

Clubs

## 324

Players

## 23

Arenas

## 311

Games

## >210 GB

Data/Season

## 3 MONTHS

from commissioning  
to going live

All venues have been equipped with KINEXON technology. Live data is published on arena screens, social media and websites and is integrated into the TV broadcast.



**The first league with a chip in the ball**

While the players wear a small sensor under the jersey, a small chip is integrated in the SELECT manufacturer's balls. The SELECT/KINEXON iBall collects information such as throwing speed, pass accuracy and goal shot statistics.





Photo: Blnca

# Clubs

... receive sporting and financial support.

The stronger the teams, the more attractive LIQUI MOLY HBL is. Coaches receive from HBL access to the complete player data from their own teams.

The clubs benefit doubly: on the one hand, the game analysis and performance diagnostics of the coaches gain a new quality; on the other hand, the clubs may sell selected live data to sponsors for advertising purposes. This brings fans added value and additional income for the club.

Top teams such as THW Kiel and Rhein-Neckar Löwen are so convinced that they are already using KINEXON for live game analysis.

Furthest Goal Distance		7,2 m
Goals		12
<b>0,74</b>	<b>AIR TIME</b>	
SEC		
Max. Speed		30,2 km/h
Fastest Shot		129,8 km/h



“ With the newly acquired data, we are able to train the players even more effectively and thus control their stresses. We hope that with this we can minimize our risk of injury. The fully automated analysis and real time evaluations of the KINEXON system therefore offer a great foundation.”

**Viktor Szilágyi, Managing Director of THW Kiel**



“ After a game, KINEXON data not only provides us with objective answers as to which players have to train regeneratively, but thanks to the SELECT/KINEXON iBall, we also receive completely new information about the throwing behavior of our athletes. Likewise, we can offer our fans and sponsors added value with the live data, which pays off financially for us.”

**Kristjan Andresson, Head Coach of the Rhein-Neckar Löwen**

## >180

Metrics

are available to coaches.

## 1.

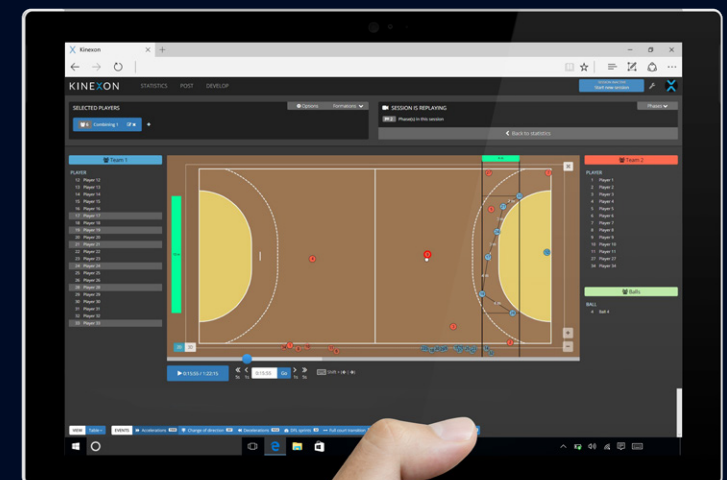
Handball Club

that relies on complete data analysis is THW Kiel.

## 0,2

Seconds

after an action, metrics appear on the tablet.



# Sponsors

... produce relevant infotainment content.

With a constantly growing range of information and entertainment options, it is becoming increasingly difficult for sponsors to generate enthusiasm with relevant content through their sponsorship.

The aim of the DKB is to make the sport more accessible with digital innovations like KINEXON and to improve the experience for handball fans. With live data analysis in the form of infographics, the DKB produces content within minutes that offers the fans tangible added value. And that on the official social media channels of LIQUIMOLY HBL.



“ With a simple dashboard and a direct connection to content tools, KINEXON enables us to offer fans new, live measurements for assessing player and team performance. This form of activation is informative for fans and at the same time entertaining. The lively discussions on social media prove this from game to game. With digital innovations like KINEXON, we are not only developing the sport further, but are also supporting our position as a sports fan ‘tech bank.’ ”

**Marcel Schwarzkopf,**  
Strategic Marketing  
Manager, Deutsche  
Kreditbank AG

## How Club Sponsors Benefit

All clubs can market their player and ball data peripherally via their own communication channels. For example, cp Pharma presents match-day data from TSV Hannover-Burgdorf. This provides more insight for fans, more attention for sponsors and more income for clubs.

> **10.000**

Likes

received by an average statistical post on Instagram.

**10** CM

Precise

is the accuracy of the data – the best value on the market!

**0,5 M**

HBL-fans

reached by the DKB on social media.



BALL POSSESSION



RUNNING PERFORMANCE



PLAY TIME



THROWING ACCURACY



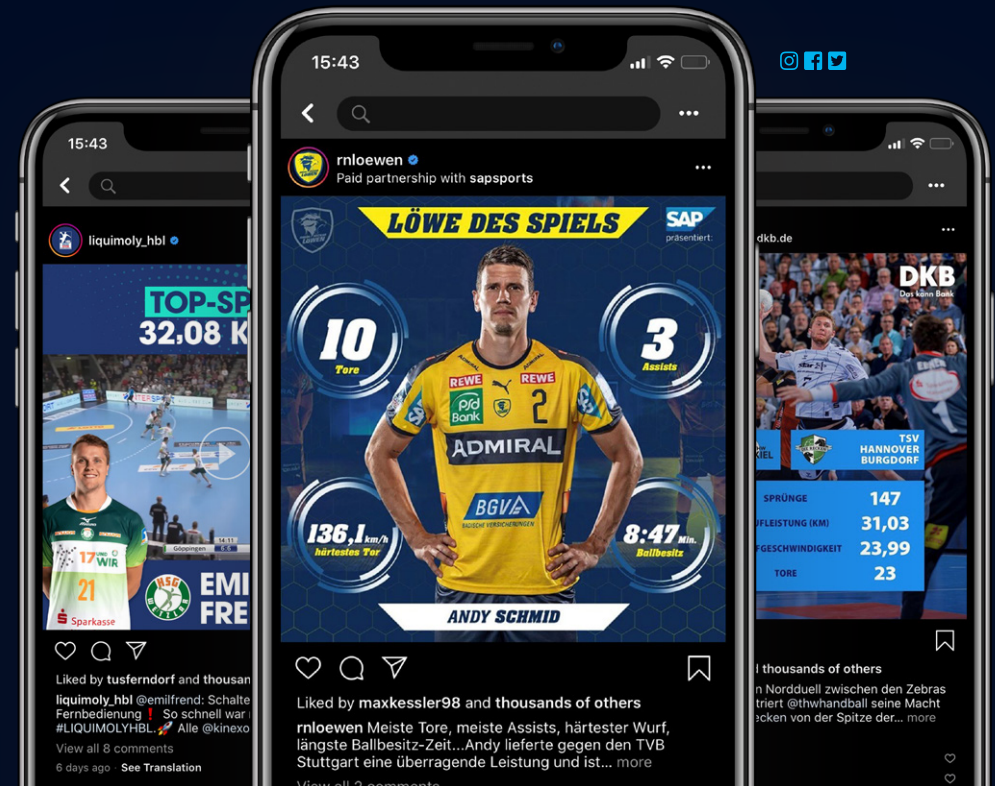
NUMBER OF JUMPS



THROWING SPEED



AIRTIME



# TV Partners and Other Media

... report live with exclusive insights.



sky

TV broadcasts are the big stage for all types of sports. They offer the reach and attention to open up mass markets. Plus, they bring the enthusiasm out of the arena and into the living room.

Sky holds the TV broadcasting rights for LIQUI MOLY HBL and therefore receives live data selected by the league completely automatically over a KINEXON software interface. The TV commentators and editors can decide independently and in live time which metrics to present to make the broadcast both vivid and thrilling.

Sports journalists from Sport Bild, Handball Inside and numerous other online, print and TV media also use the KINEXON Match Information Center as an official data source.

“Data-based infotainment content is an integral part of Sky’s live reporting. With it we offer our viewers exclusive added value that is currently only available in handball. Obtaining this offer directly from HBL makes our cooperation particularly attractive.”

**Karl Valks,**  
Vice President Editor Sports

**266.000**

Spectators

on average watch the HBL match on Sky.

**10** Statistics

from KINEXON are available to Sky.

**100% LIVE**

Since 2017/18 Sky has been broadcasting all 306 HBL games live for the first time.

Distance 3,6 km

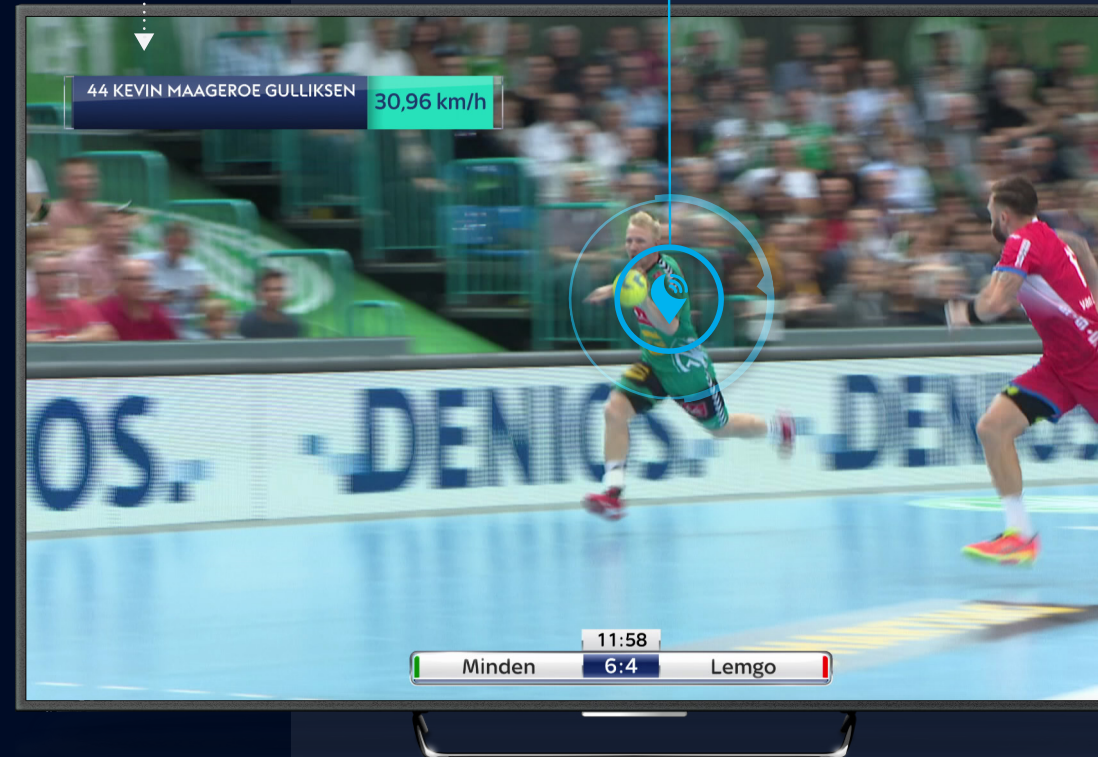
Sprint Speed 27,1 km/h

SPEED

30,96  
km/h

Jump Height 48 cm

Throwing Speed 121,6 km/h



- ✓ Valid, verified data
- ✓ Real-time availability
- ✓ Open interfaces
- ✓ Live data research in the Match Information Center



# Agencies

... open up new ways of sport marketing.

Marketing agencies offer their customers a decisive advantage: the agility or flexibility to quickly pick up on the latest technologies and use them in an eye-catching manner.

The big challenge is a strictly limited access to current, real content. With the provision of selected performance data, the LIQUI MOLY HBL opens up a completely new world of brand showcasing to all involved agencies of its sponsoring partners.

Images, videos and live experiences have so far been the central content with which marketing agencies were able to give their customers creative advice. The provision of live data opens up a completely new scope for them.

For example, agencies of HBL sponsors work in partnership with KINEXON Sports to promote live player and ball tracking among youth, to develop new innovative content formats and metrics, or to design live data-based marketing activities.



# Small Sensors – Big Impact

Why UWB is the MVP of tracking technologies.

Ultra-wide-band (UWB) network technology from KINEXON Sports is the market leader in top-class international sports for real-time recording and processing of player and ball movements. In contrast to other tracking technologies, UWB radio technology is not only more precise, but also offers other game-decisive advantages for use in top-class sport.



“UWB technology is unrivaled in terms of accuracy, reliability and speed. Data alone, however, doesn't add value. Meaningful metrics must be processed in real time and processed into meaningful information. Only then will all league stakeholders – fans, clubs, trainers or sponsors – benefit. This is exactly where we have scored with our partners for years: KINEXON Sports combines technological expertise, enthusiasm for sport and implementation expertise under one roof.”

**Maximilian Schmidt, Co-founder & Managing director of KINEXON Sports & Media GmbH**



**Accurate to 10 cm**  
The best value in sports tracking



**Real Time**  
Immediate availability of all metrics



**100 % Compatibility**  
Interface for direct data processing



**Ball Tracking**  
First official game ball with chip



**Highest Stability**  
No interference with/through WLAN, Bluetooth etc.



**One-time Setup**  
Stable, secure and unobtrusive hardware



**Quick Start**  
Just one click to start the system



**Lightweight Sensors**  
No impairment to the players



**Support**  
Advice from sports & product experts



# Handball On The Next Level

You will experience the LIQUI MOLY HBL as quickly and informatively as never before.



“Several aspects played an important role in the selection of this technology. Of course, the data must be of high quality and reliable. It was, however, at least as important for us that we could automatically provide the data to all of our partners perfectly tailored to their purposes. KINEXON Sports was able to convince us with its many years of experience in top international leagues and different use cases.”

**Frank Bohmann,**  
Managing Director Handball-Bundesliga GmbH

# KINEXON

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