

RADWAG BALANCES AND SCALES



Advanced Weighing Technologies
FOR LABORATORY AND INDUSTRIAL APPLICATIONS

ABOUT RADWAG

Management System

Research and Development

Technical And Commercial Trade Offer

Knowledge As A Key To Success

Metrology Center

The Future of RADWAG

RADWAG BALANCES & SCALES

is one of the world's leading manufacturers
of precision and modern weighing equipment.

The company owes its strong position to 30-year-old long
experience and a ceaseless effort put into its image creation,
proving that RADWAG indeed is an innovative firm.

RADWAG
Balances & Scales





Witold Lewandowski – Managing Director RADWAG

Mission

Our mission is designing,
manufacturing and selling
weighing instruments
based on our technologically
advanced concepts.

A handwritten signature in blue ink, which appears to read 'W. Lewandowski'.

ABOUT RADWAG



Sources of success – more than 30 years of activity

**3 in 1:
research, production and sales**

**Implementation of
innovative solutions**

**Relatively low production
cost in Poland**

**Global
sales network**

**Effort of the whole team of
employees put into company's
development**

**Investment into research
and development**

Production structure in 2014

average global production in RADWAG: approximately 3000 balances per month

Laboratory balances
50%

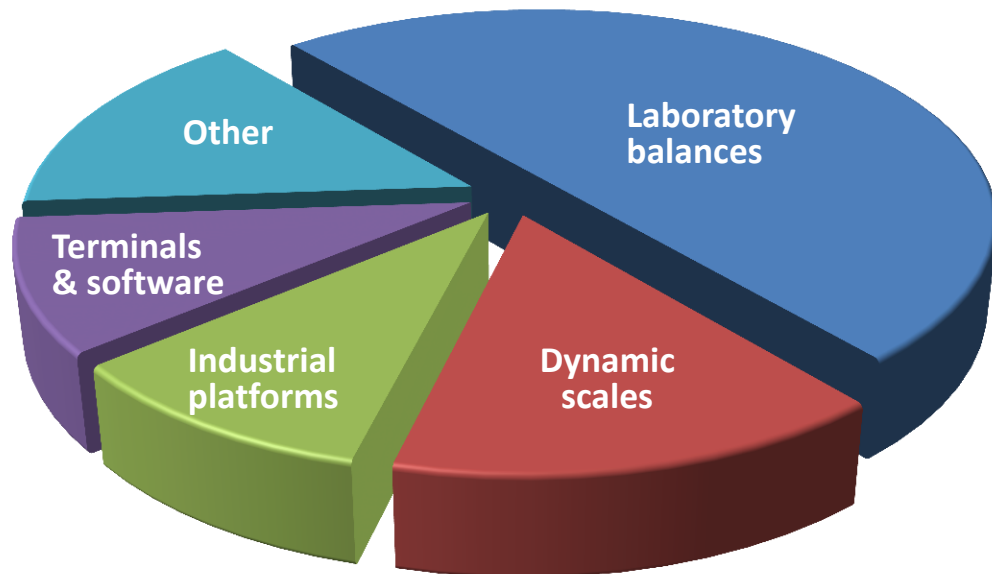
Dynamic scales
15%

Industrial weighing platforms
10%

Terminals and PC software
10%

Other
15%

(medical scales, service, calibration services, etc.)



Employment in 2014

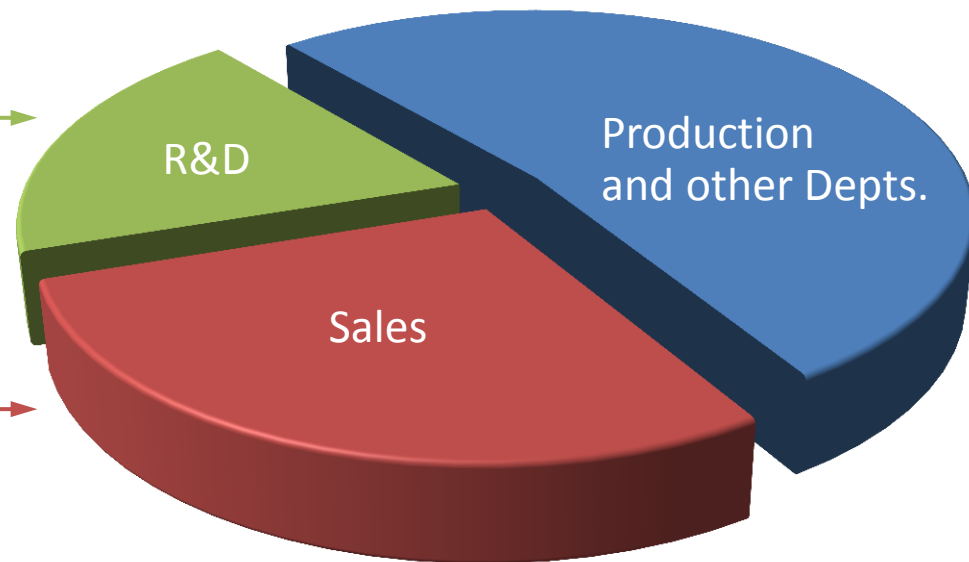
average global employment in RADWAG: approximately 400 people

Employees
in R&D departments:

80 people
(20% of global employment)

Employees
in sales departments:

120 people
(30% of global employment)



Investments into R&D: 10% of the turnover

RADWAG community

culture of development, innovation and improvement



Global sales network

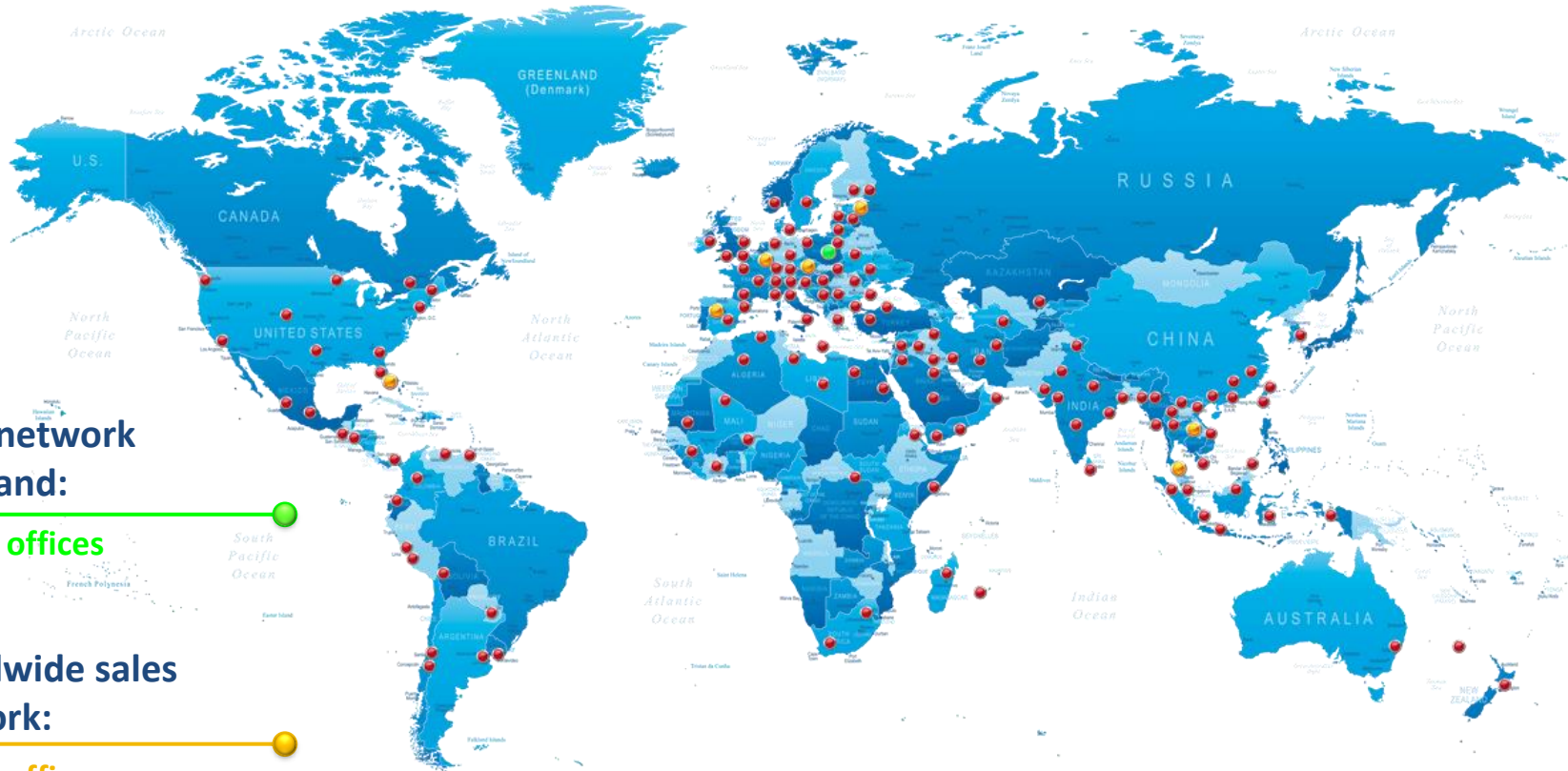
**Sales network
in Poland:**

8 sales offices

**Worldwide sales
network:**

7 sales offices

over 150 distributors



About RADWAG

Management System

Research and Development

Technical And Commercial Trade Offer

Knowledge As A Key To Success

Metrology Center

The Future of RADWAG

Quality Management System ISO

use of ISO system for a unique technological and IT structure

ISO
9001



Since 2002

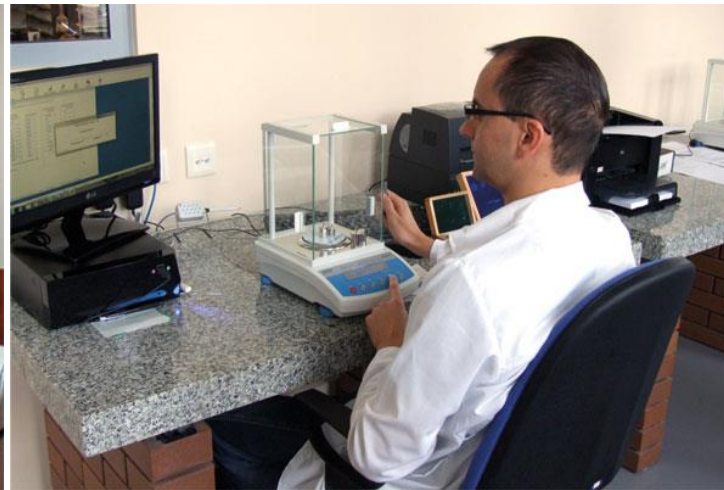


Quality Management System ISO

complex control departments




Components check



Final test

Quality Management System ISO

Q.C. Test Report




Q.C. TEST REPORT

RADWAG WAGI ELEKTRONICZNE
Bracka 28, 26-600 Radom, Polska
www.radwag.pl


Certificate number: 434519
Date of issue: 08.05.2014

Product specification

Model: PS 6000.R2	Max capacity [Max]: 6000 g
Serial number: 434519	Readability [d]: 0.01 g
Software version: 1.5.0	Verification interval [e]: 0.1 g
Product code: 	

Test ambient conditions

Temperature: 22 °C	Date of test: 08.05.2014
Humidity: 55 %	Time: 11:03
Pressure: 998 hPa	



Quality Control Department
PS 6000.R2 - 434519

LINEARITY

L (g)	RESULT (R)	E-R/R-1	Tolerance
0.00	1000.00	0.00	0.03
1000.00	1000.01	0.01	0.03
2000.00	1000.00	0.00	0.03
3000.00	1000.00	0.00	0.03
4000.00	1000.01	0.01	0.03
5000.00	1000.00	0.00	0.03

TEST RESULT:
The device meets the GMP requirements ($SD/10 \leq T$)


ing on called Minimum Capacity which specifies weighing range low limit (GMP 41, 1251)

L (g)	RESULT (R)	E-R/R-1	Tolerance
2000.00	2000.01	X	0.10
2000.00	2000.00	-0.01	0.10
2000.00	2000.01	0.00	0.10
2000.00	2000.01	0.00	0.10
2000.00	2000.00	-0.01	0.10

TEST RESULT:
The device meets the GMP requirements ($EECC \leq T$)

Number pattern	876542
Nominal mass	2000 g
Mass of standard (MN)	2000 g
Uncertainty (U)	0.00
Tolerance (T)	0.1
Weighing result (R)	2000 g

TEST RESULT:
The device meets the GMP requirements ($MN/R \leq T$)





metrological parameters for balances constitute part of our system of quality measurement control procedures, recommendations of GMP, R, H, USP 41, etc. for manufactured products are used.
ISO weighing equipment with legal requirements of different countries and

Control department are adjusted and monitored by an automatic system of conditions after specified warm-up time.

Certificates issued by accredited Calibration Laboratory APOB

Any accessories, specially, linearity are smaller than applicable (GMP) in terms of mass measurement.

R2: 

0: 

File for mass measurement.

08.05.2014

Manager of Quality Control Department
Jacek Pilecki

Products quality verification

verification of conformity with standards, performed by notified bodies:

Certificates of Quality System



TÜV Saarland
The Management System Certificate
ISO 9001

CE-Certificate



TÜV Nord
CE-Certificate for medical products
of MDD type

Metrological Approvals



Český Metrologický Institut
EC Type Approval Certificate



Central Office of Measures
EC Type Approval Certificate



NMI Nederlands Meetinstituut
EC Type Approval Certificate

Safety Certificates



National Institute of Public Health
Certificate of Health Quality



Military Centre for Standardization
Declaration of conformity with NATO
standards



Central Mining Institute
Notification of Quality Assurance

About RADWAG

Management System

Research & Development

Technical And Commercial Trade Offer

Knowledge As A Key To Success

Metrology Center

The Future of RADWAG

R&D Strategy

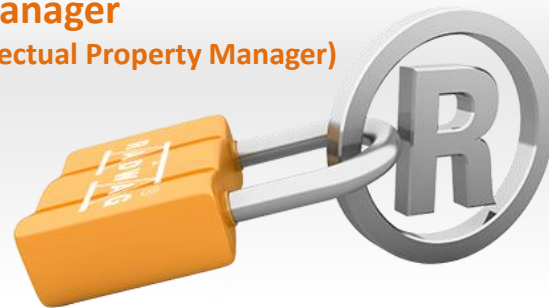
Innovation



Development and innovative solutions, implemented by R&D departments, are a response to customer's needs.

IP Manager

(Intellectual Property Manager)



Success of research and development actions taken by the company requires „patent purity” for the implemented solutions.

Sourcing

(sources of sourcing)



Certified components are the guarantee of R&D departments success.

Regulatory and Compliance

(conformity with regulations)



High product quality and product conformity with legal and branch regulations are both effect of R&D actions.

All RADWAG products

Are manufactured based on our own technology
and PC software of our own design

Among suppliers of components for our products
there are companies operating
for automotive and space industry.

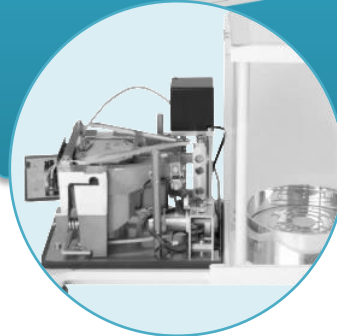


Electromagnetic mechanisms line manufactured on the basis of our own technology and design

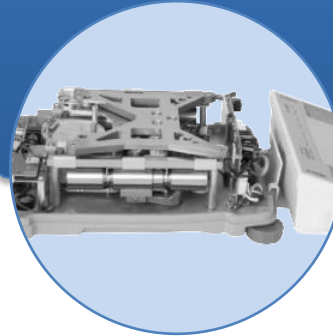
Microbalances



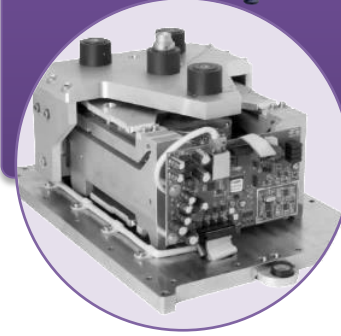
Analytical balances



Precision balances



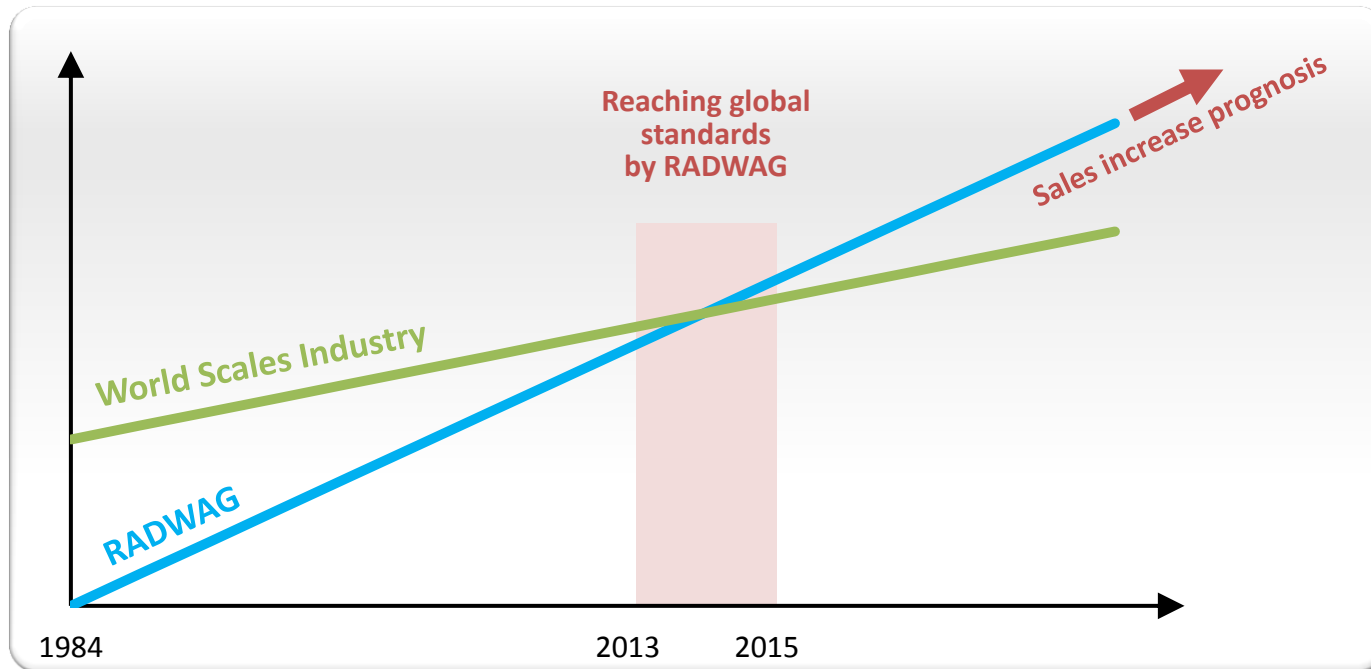
Checkweighers



ASSETS: Low production cost + High weighing accuracy + Simple and not costly service

RADWAG development speed

In reference to development speed of advanced solutions of world scales industry



Judging by the chart analysis, it may be concluded that dynamic sales growth after 2014 is certain if presently observed trends remain unchanged.

About RADWAG

Management System

Research and Development

Technical And Commercial Trade Offer

Knowledge As A Key To Success

Metrology Center

The Future of RADWAG

Laboratory balances

Specific design solutions as a guarantee of high quality

Ultra-micro i Microbalances



Analytical balances



Precision balances



Moisture Analyzers



Universal solutions

Standardization of
procedures for analysis
of moisture content

Professional device within a reach

Industrial scales

Common solutions

Scales with IP 65



Scales with ATEX conformity



Solutions for EX endangered zones

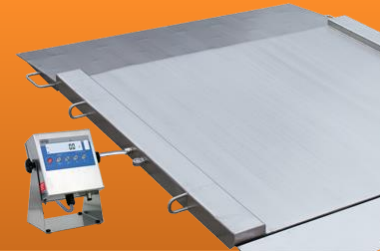
Solutions for severe ambient conditions

Scales with IP 69K



Multi load cell scales

Platform scales



High resolution scales



Electromagnetic scales of high capacity

Checkweighers

For detection of any impurities in the weighed products

Magnetoelectric checkweighers



Up to 500 items/min. with accuracy 0.01 g

Metal detecting checkweighers



Rotational checkweighers



For controlling of cylindrical items

Terminals and weighing modules

5,7" touch screen

High-tech terminals



5,7" touch screen

High-tech terminals

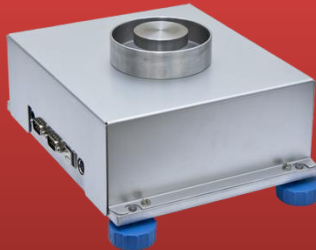


19" or 15" touch screen

Professional terminals



Modules IP32



Max 220g / d = 0,1mg

Modules IP65



Max 6000g / d = 0,01mg

Modules IP65



Max 10 kg / d = 0,01 g

Weighing systems



E2R System:
multistation,
modular weighing system,
ensuring full support
and automation
of manufacturing
process.



E2R Moisture Analyzer



E2R Weighing, Transactions, Weighing Records, Formulas, PGC



E2R Checkweigher



Mass comparators

Automatic mass comparators



Manual mass comparators



Manual mass comparators



Services



About RADWAG

Management System

Research and Development

Technical And Commercial Trade Offer

Knowledge As A Key To Success

Metrology Center

The Future of RADWAG

Training and support

1. On-site product training
2. Technical and service training at Radwag site.
3. On-line support (help-desk).



RADWAG dealers training, Korea



RADWAG dealers training, Dubai

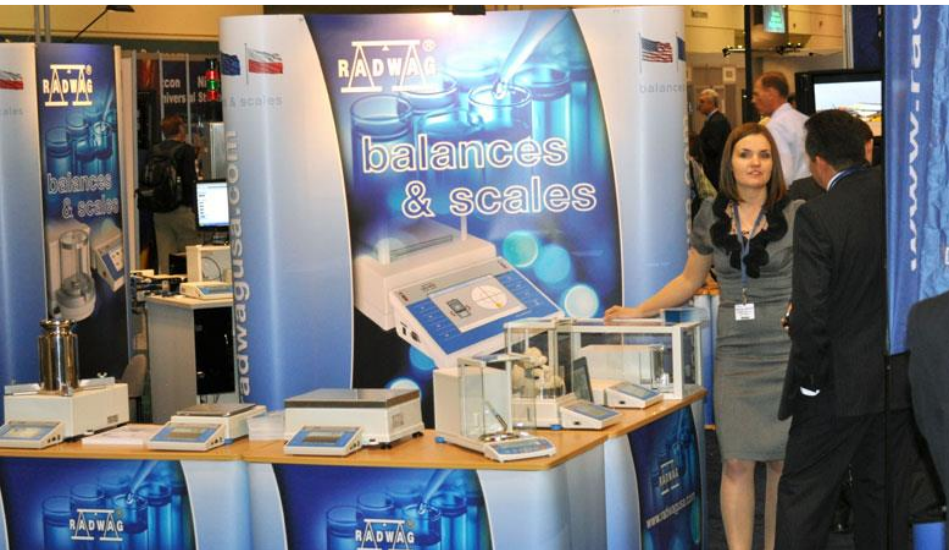
Conferences and expos

1. Participation in branch expos

Pittcon, Achema, Analytica, ArabLab, Interweighing

2. Participation in Metrology Congress

Congres International de Metrologie, Forum Measure, Cafmet, Admet, Imeko, APMF



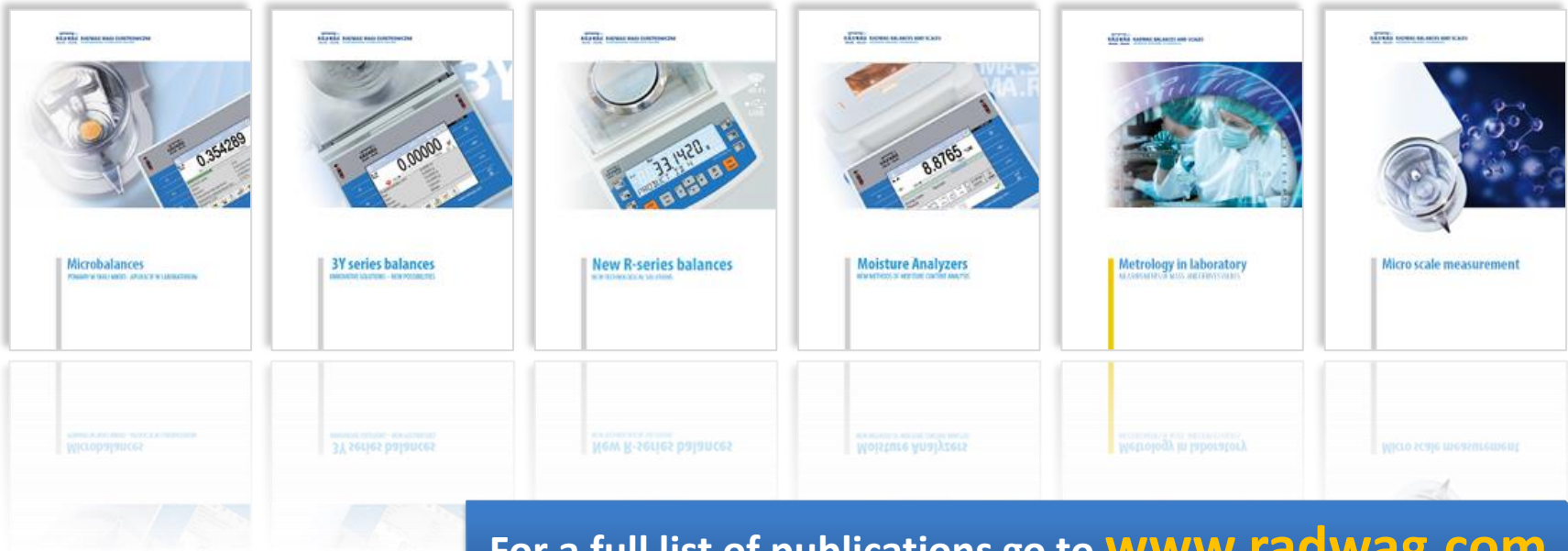
Pittcon, USA



Lab Africa, Africa

Publications

Number of publications on balances, scales, regulations etc.



About RADWAG

Management System

Research and Development

Technical And Commercial Trade Offer

Knowledge As A Key To Success

Metrology Center

The Future of RADWAG

Information on Metrology Center

Metrology Center was established in 2012.

Metrology Center laboratories are equipped with measuring instruments and devices for control, both of these manufactured by RADWAG.



AP 069



Accreditation
ISO/IEC 17025

Metrology Center offers



**Metrology
CENTER**

- Trainings
- Consultation
- Audits
- Ekspertizes
- Control of measuring equipment
- Research
- Sharing knowledge on metrology



Measuring Technology Laboratory offer



Measuring LABORATORY

- Mass standards and weights calibration, 1 mg - 25 kg
- Electronic balances calibration
- Piston pipettes calibration
- Calibration of tools for length measurement
- Weight measurement



About RADWAG

Management System

Research and Development

Technical And Commercial Trade Offer

Knowledge As A Key To Success

Metrology Center

The Future of RADWAG

Expanding professional products offer

LABORATORY BALANCES

Colour touch screen
5 inches

RY Series



Available in 3rd quarter of 2015

The image displays three models of the RY Series laboratory balances. On the left is a balance with a draft shield and a large 5-inch color touch screen showing '0.0000'. In the center is a top-loading balance with a similar 5-inch color touch screen showing '0.00'. On the right is a balance with a printer output, also featuring a 5-inch color touch screen showing '0.000'. All three units are white with blue accents on the base and control panel. The background is a light blue gradient.

Expanding professional products offer

LABORATORY BALANCES

Colour touch screen
5,7 inches

4Y Series

sd < 10 μ g

sd < 1 μ g

Available in 3rd quarter of 2015

Offer intended for pharmaceutical industry,
accordant with USP regulations.

Expanding professional products offer

IP 69 K
Colour touch screen
10 inches

HY 10

WEIGHING TERMINAL



Available in 3rd quarter of 2015

Expanding professional products offer

HIGH RESOLUTION SCALES HIGH CAPACITY

**IP 67
HY
terminal**

HRP Y



Available now!

The new head office – new possibilities



September 2014



October 2014



November 2014



December 2014



Thank you for your attention

www.radwag.com