

# Leica Rugby 810, 820 & 840

The toughest construction lasers on site



**SITE PROOF**  
by Leica Geosystems

# Leica Rugby

## The toughest construction lasers on site

Leica Rugby construction lasers are more than just a product, they are an intelligent, versatile, clever solution that significantly enhance your application performance. The Rugby lasers are an integrated part of the Leica Geosystems intelligent CONstruction portfolio, providing a comprehensive solution for our customers.



### Outstanding performance with Laserman

Perform applications easier and faster than ever before – no mistakes possible!

- **Smart Targeting:** Automatically align your laser plane at the touch of a button – horizontal, vertical and dual axis
- **Smart Lock:** Monitor and correct the laser plane in real-time avoiding costly mistakes, any movement of the laser plane will be detected



### Unique power concept

Unbeatable versatility – power and charge anywhere, anytime!

- Intelligent and rugged Li-Ion battery concept
- Interchangeable battery packs throughout the new Leica Rugby family (Alkaline and Li-Ion)
- Run and charge anywhere – in the car, from a 12v battery / generator or out in the sun with the solar panel





reddot design award  
winner 2013



## Toughest laser in the market

Site proof design – rugged and robust housing provides reliable application performance even in the harshest jobsite conditions.



- IP 68 protected and the only laser in the market with Military Grade Certification, the highest standard in water and dust protection!
- Quality you can trust – Lifetime manufacturer's warranty, 5 years no cost period and 2 years knockdown warranty



## Intelligent, versatile, clever – it's more than just a laser!

Intelligent laser systems combined with unique accessories provide unbeatable application performance.



- The Rugby 820 and Rugby 840 are designed for use as horizontal or multipurpose lasers for forms, flat work and many more applications.
- Increase the functionality of these Rugby lasers with the use of the RC 800 remote which turns them into semi-automatic, grade lasers for slope applications.

# Leica Rugby

## Fit, fast, tough – select the best player for your site

Leica Rugby lasers are the toughest rotating lasers in construction. Level, align and square much quicker than ever before, eliminating costly errors and downtime.

### Leica Rugby 810



#### Levelling made easy

- Simple and reliable, one button laser where no mistakes are possible
- Single axis slopes up to 45° with manual slope adapter
- High application performance with Leica Rod Eye 140 – with the built-in 12 cm detection window, you can easily detect the beam over the entire distance



### Leica Rugby 820



#### Tough as concrete – unbeatable with slopes

- Carry out concrete forming, pad placement and framework levelling; setting foundations and footings has never been more efficient
- Automatic slope matching in single or dual-axis with the Leica Rod Eye 180 RF receiver by using the Smart Targeting and Smart Lock functionality
- Semi-automatic, dial-in grade using the RC 800 remote control





## The laser that tackles it all

- Highest application performance for any levelling, aligning and squaring applications on site
- **Smart Targeting:** Tie-in slopes in single or dual axis and automatically align – fast and easy, at the touch of a button
- **Smart Lock:** Monitor and correct the laser plane in real-time, always ensuring reliable results
- Complete application solution in one case, with Leica Rod Eye 180 RF receiver, RC 400 and RC 800 remote controls



## Leica Rugby 840



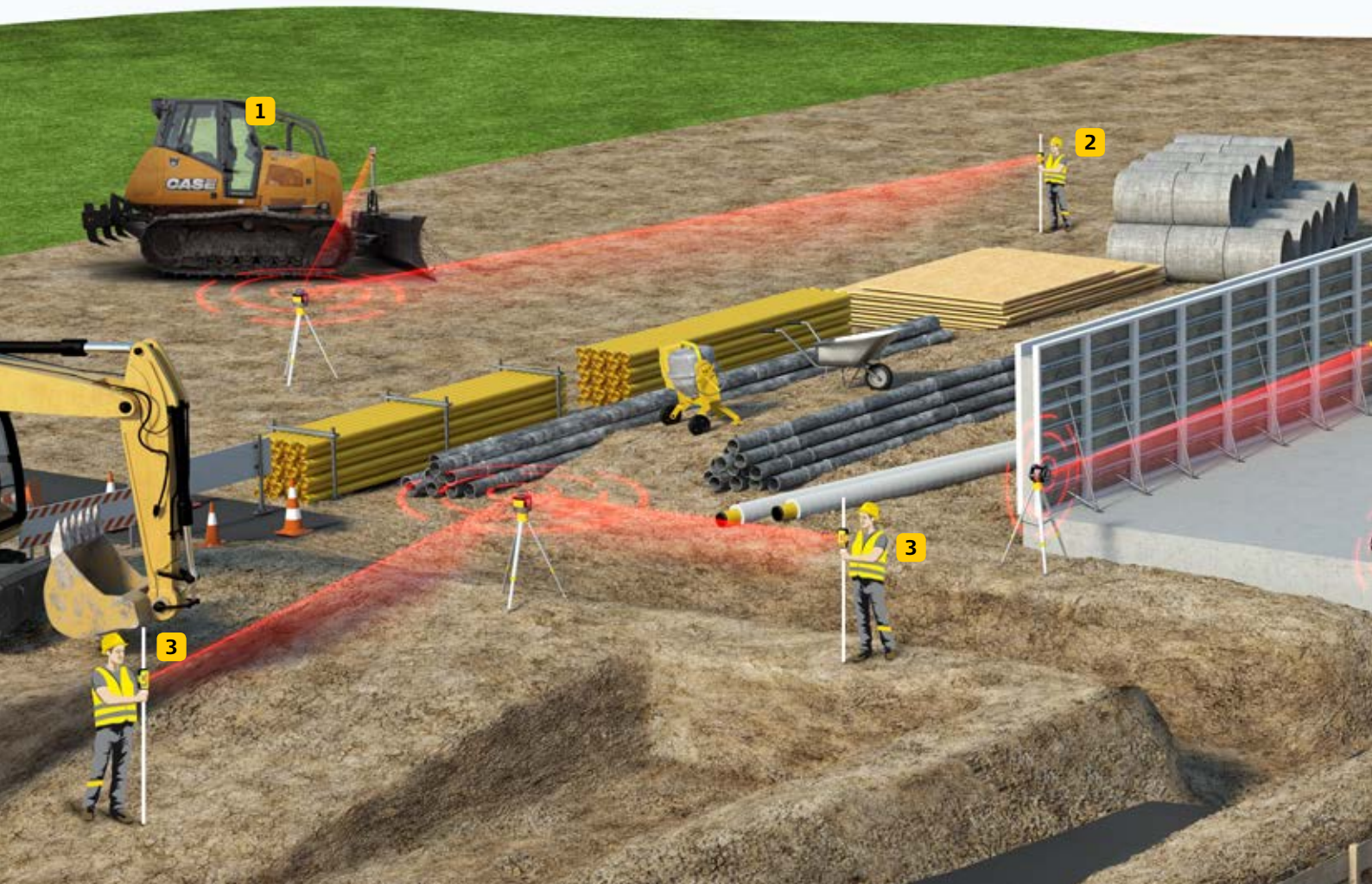
## Dial in semi-automatic grade for slopes

- Enhance the performance of the Rugby 820 and Rugby 840 with digital grade capability using the RC 800 remote control
- Dial-in grade in single or dual axis, easy and fast at the touch of a button
- The unique Smart Slope function continuously monitors time and temperature changes to ensure accurate performance over the course of the day



# Leica Rugby

The right team for every application on site



- 1 Land levelling**  
Full system for agricultural land levelling operating dozers with the best results.



- 2 Dial-in grade**  
Dial-in, semi-automatic grade using the RC 800 remote control



- 3 Slopes for ramps and driveways**  
Automatically tie-in slopes in single and dual axis using Smart Targeting.



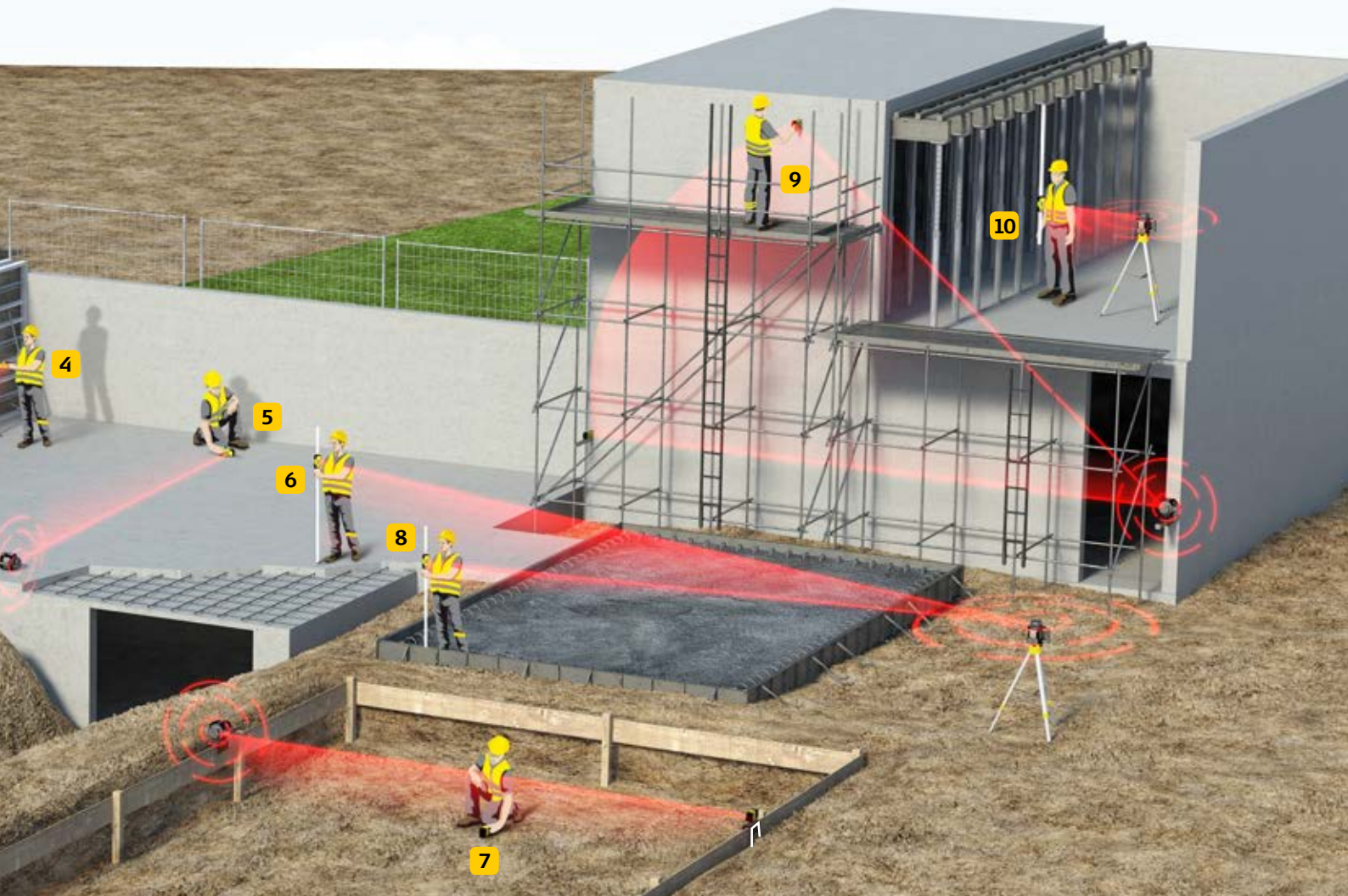
- 4 Vertical alignment of formwork**  
Automatically align parallel to the reference with Smart Targeting and check plumb of formwork.



- 5 Set-out walls**  
Automatically align two points with Smart Targeting and mark position of wall/formwork.



- 6 Concrete pouring**  
Check height of concrete and use digital readout for clear indication of offset.



**7 Batter board**  
Align batter board markings and set-out building axis.



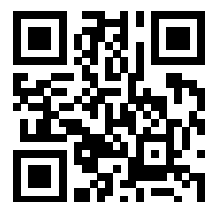
**10 Level decks and slabs**  
Level decks and slabs easily and efficiently. Digital readout provides clear indication of offset.



**8 Formwork levelling**  
Transfer reference height and level formwork.



**9 Facade alignment**  
Align fixings for facade over the entire plane.



# Leica Rugby Accessories

The Leica Rod Eye family of receivers and accessories offers solutions for any general construction and interior application. They are engineered to the highest standard and work seamlessly with the Leica Rugby laser portfolio.

## Leica Rod Eye 180 Digital RF



- Top of the range receiver with integrated radio remote functionality, digital readout, half millimetre accuracy and strobe rejection
- **Intelligence inside with Laserman:**
  - Automatically align your laser plane at the touch of a button – horizontal, vertical and dual axis
  - Monitor and correct the laser plane in real-time using Smart Lock functionality



## Leica Rod Eye 160 Digital



- Professional receiver with digital readout, half millimetre accuracy and strobe rejection
- Capture digital readout for convenient height readings

## Leica Rod Eye 140 Classic



- High application performance with Leica Rod Eye 140 – with the built-in 12 cm detection window you can easily detect the beam over the entire distance

## Plug and play – perfect application set-up with clever accessories



**A220 Batter Board clamp and adapter:** provides a simple, string free set-up on batter boards. When not in use, the 90° receiver adapter attaches to the main clamp for easy storage.








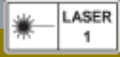





**A240 Manual Slope adapter:** up to 90° slope possibility in one axis using the Leica Rugby in manual mode.



**A280 Facade adapter:** enables an easy and practical set-up for all facade installations. The kit consists of two adapter brackets and a batter board clamp with the 90° receiver adapter.



# Technical Specifications

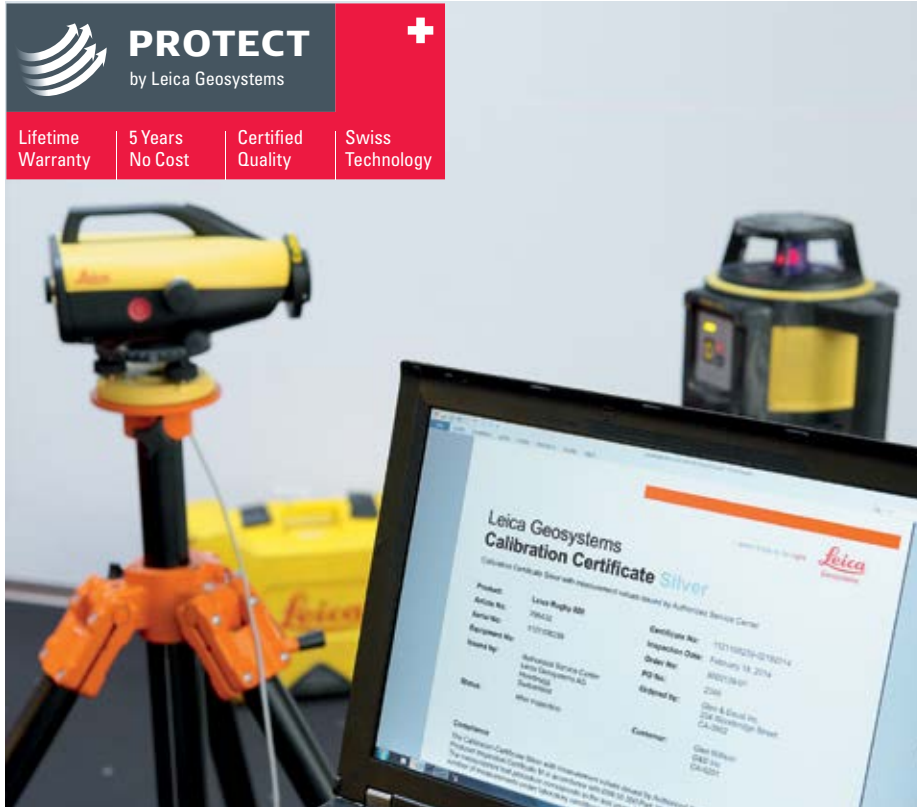
			
Technical data	Rugby 810	Rugby 820	Rugby 840
Functionality	Self-levelling horizontal, single manual slope (with slope adapter)	Self-levelling horizontal & manual slope in dual axis	Self-levelling horizontal, vertical, 90° and manual slope in dual axis
Smart Targeting	-		
Smart Lock	-		
Operating range (diameter) with Rod Eye 140/160/180	1.300 m (4.265 ft)	1.300 m (4.265 ft)	1.300 m (4.265 ft)
Self-levelling accuracy*	± 1.5 mm at 30 m (± 1/16" at 100 ft)		
Self-levelling range	± 6°		
Rotation speed	10 rps	10 rps	0, 2, 5, 10 rps
Scanning modes	-	-	10°, 45°, 90°
Laser diode type / class	635 nm (visible)		
Dimensions (H x W x D)	235 x 238 x 190 mm (9.2 x 9.4 x 7.5 in)		
Weight with batteries	3.0 kg (6.6 lbs)		
Batteries (alkaline/li-ion)	Four D-cells / Li-Ion pack		
Battery life** (alkaline/li-ion)	60 hours / 50 hours @ 20°C		
Operating temperature	-20° to +50° C (-4° to +122° F)		
Storage temperature	-40° to +70°C (-40° to +158°F)		
Environmental standard	IP 68 / MIL Standard 810G		
Laser Class 1 or Class 2 products in accordance with IEC 60825-1 (2014-05)			
RC 400 remote control			
Operating range (radius)	-	-	100 m (325ft)
RC 800 remote control			
Operating range (radius)		100 m (325ft)	100 m (325ft)

\* Accuracy is defined at 25 °C (77 °F) \*\* Battery life is dependent upon environmental conditions

Laser Receivers			 
Technical data	Rod Eye 140 Classic	Rod Eye 160 Digital	Rod Eye 180 Digital RF
Working diameter	1.350 m (4.430 ft)	1.350 m (4.430 ft)	1.350 m (4.430 ft)
Extended detection window	120 mm / 5 in	120 mm / 5 in	120 mm / 5 in
Detection accuracies			
Ultra fine	-	± 0.5 mm / ± 0.02 in	± 0.5 mm / ± 0.02 in
Super fine	± 1.0 mm / ± 0.04 in	± 1.0 mm / ± 0.04 in	± 1.0 mm / ± 0.04 in
Fine	± 2.0 mm / ± 0.08 in	± 2.0 mm / ± 0.08 in	± 2.0 mm / ± 0.08 in
Medium	± 3.0 mm / ± 0.12 in	± 3.0 mm / ± 0.12 in	± 3.0 mm / ± 0.12 in
Coarse	-	± 5.0 mm / ± 0.20 in	± 5.0 mm / ± 0.20 in

# PROTECT by Leica Geosystems

## We always protect your success!



In addition to comprehensive technical knowledge, thinking holistically about the needs and requirements of our customers has the highest priority at Leica Geosystems. Close cooperation with practical professionals leads to user-friendly products that fulfil the customers' expectations perfectly.

Our products provide a high level of reliability, accuracy and robustness – even under the roughest jobsite conditions. They increase the productivity and success of our customers. With PROTECT by Leica Geosystems we offer a best-in-class service where customers can count on us, anytime, anywhere.

### Lifetime Manufacturer's Warranty

#### **Our promise – your peace of mind**

The lifetime warranty guarantees the quality and reliability of our products. However, should a device fail because of defects in material or workmanship, we will repair or replace it free of charge.

### 5 year No Cost period

#### **An all-round service from the specialists**

Guaranteed best-in-class service should your product become defective or require servicing under normal conditions of use, at no additional charge to you.

The 2 year Knockdown warranty offers you even more protection. If your Leica Rugby accidentally topples over on a jobsite, Leica Geosystems covers the repair costs for the integrated self-levelling system.

PROTECT is subject to Leica Geosystems International Limited Warranty and PROTECT General Terms & Conditions set out under [www.leica-geosystems.com/protect](http://www.leica-geosystems.com/protect).

### Certified Quality

#### **Assured reliability**

The Leica Rugbys are calibrated and tested according to ISO 17123-6. As a result, you can rely on the continuous high accuracy of your lasers, even under harsh site conditions. A Leica Rugby delivers what is promised!



### Swiss Technology

#### **Innovative products and first-class quality**

Our devices are manufactured all over the world in state-of-the-art production centres, where Swiss precision, extraordinary craftsmanship and cutting-edge technology go hand-in-hand. Continuous and extensive tests throughout all stages of development and production ensure our products meet the highest standards for precision and quality.

# Leica Geosystems intelligent CONstruction

## Enhancing your performance

Fully understanding construction carried us beyond the ordinary. The Leica Rugby products are an integrated part of the Leica Geosystems intelligent CONstruction portfolio, enabling you to enhance your performance and increase your profitability through perfecting your construction workflow.

### iCONstruct

Intelligent rotating lasers combined with unique accessories provide unbeatable application performance.



- Rugged and robust
- Versatile
- Reliable
- Interchangeable

### iCONtrol

Providing you with an efficient portfolio of rotating lasers that communicate with your machine receivers.



- High performance and precision for long range levelling
- Reliable and seamless receiver communication

**icon**  
intelligent CONstruction

### iCONSult

A global sales and support network, providing advice on intelligent CONstruction solutions to grow your business.



- Offering a best-in-class service with PROTECT by Leica Geosystems
- Personal service
- Professional consultancy

### iCONnect

Seamlessly integrate your rotating lasers with other intelligent construction products and solutions.



- Monitor and correct the laser plane in real-time
- Real-time data guarantees accurate jobs
- Reduced downtime
- High productivity

Understanding construction.



Easy-to-use, jobsite-tough, accurate and reliable - Leica Geosystems Rugby lasers and accessories ensure the most efficient use of your materials and resources.

### Leica Geosystems - when it has to be right

Revolutionising the world of measurement and survey for nearly 200 years, Leica Geosystems creates complete solutions for professionals across the planet. Known for premium products and innovative solution development, professionals in a diverse mix of industries, such as aerospace and defence, safety and security, construction, and manufacturing, trust Leica Geosystems for all their geospatial needs. With precise and accurate instruments, sophisticated software, and dependable services, Leica Geosystems delivers value every day to those shaping the future of our world.

Leica Geosystems is part of Hexagon (Nasdaq Stockholm: HEXA B; hexagon.com), a leading global provider of information technologies that drive quality and productivity improvements across geospatial and industrial enterprise applications.



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build**  
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880 & 870**  
Brochure



**Leica Rugby  
600 Series**  
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**Leica Piper  
100/200**  
Brochure

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[www.leica-geosystems.com](http://www.leica-geosystems.com)