



# 塑 造 智 慧 变 革

2018年海克斯康新产品新技术发布暨用户大会

HxGN Local Beijing 2018

2018年9月10日-12日 北京·国家会议中心



HEXAGON  
海克斯康



北京  
国家会议中心  
**2018年**  
**9月10-12日**

2018.hexagonchina.com.cn

# 塑造智慧变革





# **Next generation of manual total stations – TZ05, TZ08 and TZ12**

## **新一代手动全站仪TZ05,TZ08,TZ12**

---

Hans-Martin Zogg, Business Director TPS

12. September 2018



海克斯康  
**HEXAGON**

# What do these construction sites all have in common? 这些建筑工地有些什么共同点?



**They are build up based on total station measurements...**

**它们的建造都需要使用全站仪进行测量**



Leica Geosystems – very long history in building total stations...

徕卡测量系统制造全站仪有悠久的历史

T2



1921 - 1936

**Leica Geosystems – very long history in building total stations...**

徕卡测量系统制造全站仪有悠久的历史

Empire State Building

帝国大厦



1921 - 1936

# Leica Geosystems – very long history in building total stations...

徕卡测量系统制造全站仪有悠久的历史

T2



T2 (mod)



1921 - 1936

1973 - 1996

# Leica Geosystems – very long history in building total stations...

徕卡测量系统制造全站仪有悠久的历史

T2



1921 - 1936

Sears Towers 西尔斯大厦



1973 - 1996

# Leica Geosystems – very long history in building total stations...

徕卡测量系统制造全站仪有悠久的历史

T2



T2 (mod)



TPS300/400/700/800



1921 - 1936

1973 - 1996

1998 - 2008

# Leica Geosystems – very long history in building total stations...

徕卡测量系统制造全站仪有悠久的历史

T2



1921 - 1936

T2 (mod)



1973 - 1996

Emirates Towers 阿联酋大厦



1998 - 2008

# Leica Geosystems – very long history in building total stations...

徕卡测量系统制造全站仪有悠久的历史

T2



T2 (mod)



TPS300/400/700/800



TS02/06/09



1921 - 1936

1973 - 1996

1998 - 2008

2008 - 2019

# Leica Geosystems – very long history in building total stations...

徕卡测量系统制造全站仪有悠久的历史

T2



1921 - 1936

T2 (mod)



1973 - 1996

TPS300/400/700/800



1998 - 2008

Shanghai Towers 上海中心大厦



2008 - 2019

# Leica Geosystems – very long history in building total stations...

徕卡测量系统制造全站仪有悠久的历史

T2



1921 - 1936

T2 (mod)



1973 - 1996

TPS300/400/700/800



1998 - 2008

Leica FlexLine  
TS02/06/09



2008 - 2019

?

# Next generation of manual Total Stations – the new Flexline

## 下一代手动型全站仪-全新的Flexline系列



# Next generation of manual Total Stations – the new Flexline

## 下一代手动型全站仪-全新的Flexline系列



TZ05



TZ08



TZ12

# Next generation of manual Total Stations – the new Flexline

## 下一代手动型全站仪-全新的Flexline系列

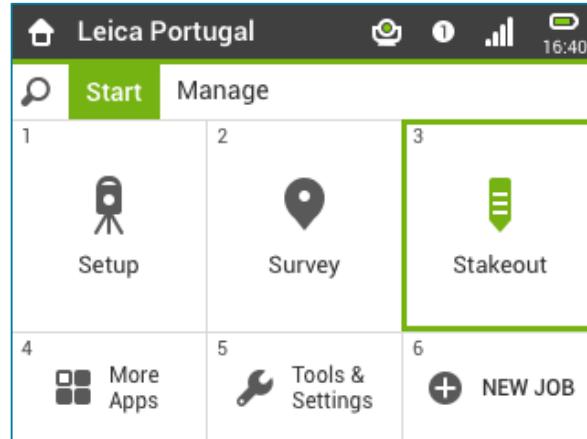


TZ05



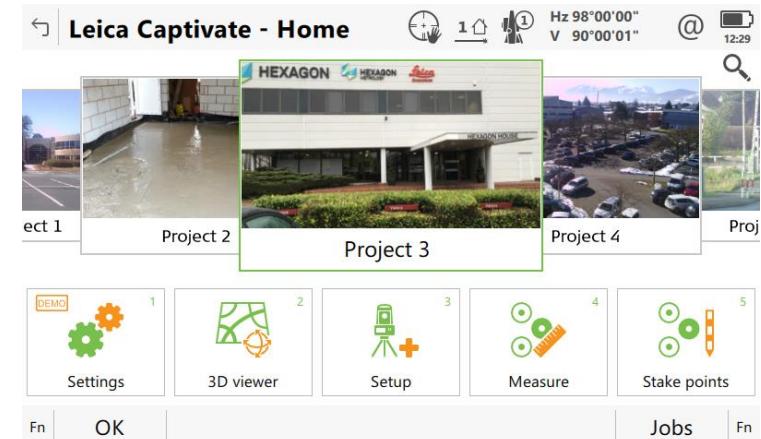
TZ08

Leica FlexField



TZ12

Leica Captivate



# New Flexline Total Station – What is unique?新一代Flexline全站仪有什么独特的地方

- **Greatest reliability** in all environmental conditions 在各种环境条件下有更高的可靠性
  - IP66(防尘标准)
  - Swiss quality and precision 瑞士质量和精度
  - Latest technology 最新科技
- **More points measured and laid-out** 测量和放样更多的点
  - Dedicated trigger key for measurements 测量专用的触发键
  - Full numeric keyboard 全数字键盘
  - Endless fine drives 无限微动螺旋
- World's first **AutoHeight** measurements for fast and reliable instrument setup 世界上第一台可自动快速准确量高的测量仪器



# AutoHeight自动量高

- **AutoHeight** is easy, quick and error-free – all saving time and money **自动量高**简单、快速、准确，将大大节省时间和费用



Conventional methods 传统的量高方式



The new, revolutionary way of measuring instrument height  
全新的、颠覆传统的量高新方法

# AutoHeight自动量高

- With AutoHeight we can ...有了自动量高我们可以
  - Still use the laser for centering as always我们仍然可以使用激光对中
  - Now additionally measure the instrument height除此以外，测量仪器高度
    - ... by a simple button press 只需简单一按
    - ... based on EDM Technology基于EDM的技术
    - ... with mm-Accuracy毫米级的精度
    - ... within seconds秒速完成
    - ... for all common tripod use cases对所有的三角架均可用
- Measurement range (量程) :
  - 0.5 m to 2.5 m (0.5米-2.5米)
- Distance Accuracy (量高精度) :
  - 1 Sigma = 1.5 mm @ 1.5 m (1.5m高度偏差1.5mm)



## Greatest reliability in all environmental conditions

### 在各种环境条件下有更高的可靠性

The new Flexline Total Stations outperform accuracy in standard conditions. 在标准条件下最新的Flexline系列全站仪精度更高

The specified accuracies apply over the entire life span of the instruments, even at the most extreme environmental conditions. 即使在极端的环境条件下，仪器也将一直拥有仪器本身的精度



## Greatest reliability in all environmental conditions 在各种环境下有更高的可靠性

- **IPx6 testing – Water** (IPx6 防水测试)



## Greatest reliability in all environmental conditions 在各种环境下有更高的可靠性

- **IPx6 testing – Dust** (IPx6 防尘测试)

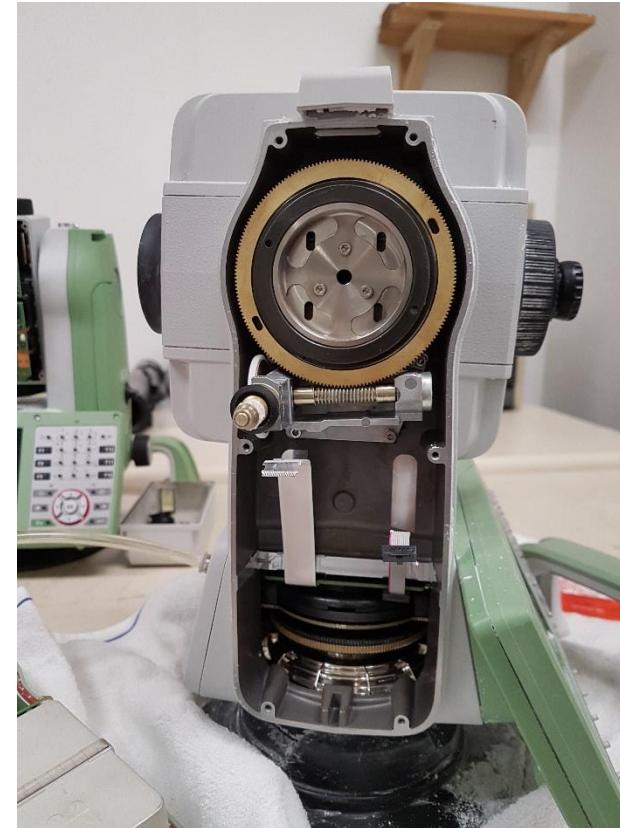


## Greatest reliability in all environmental conditions 在各种环境下有更高的可靠性

- **IPx6 testing – Dust** (IPx6 防尘测试)



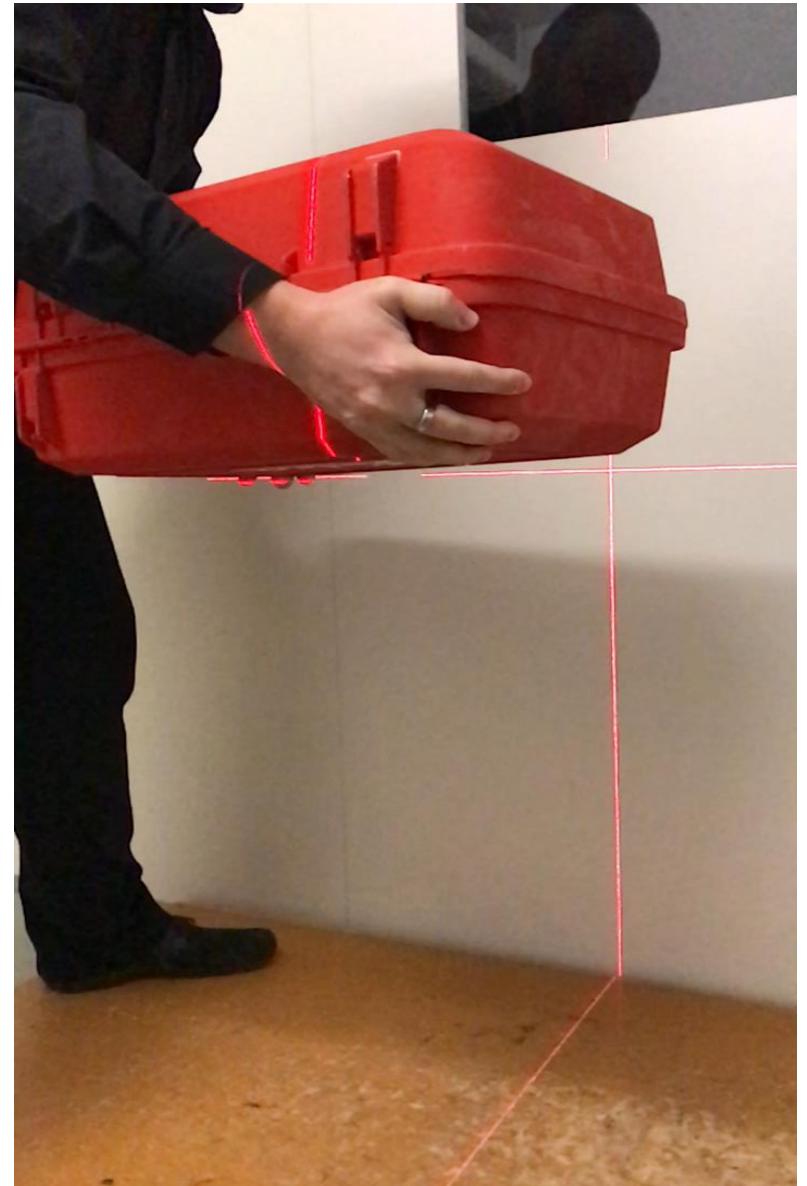
TPS after a  
«sand storm»  
沙尘暴过后的  
TPS外观



Disassembled TPS  
经历沙尘暴拆开的  
TPS内部

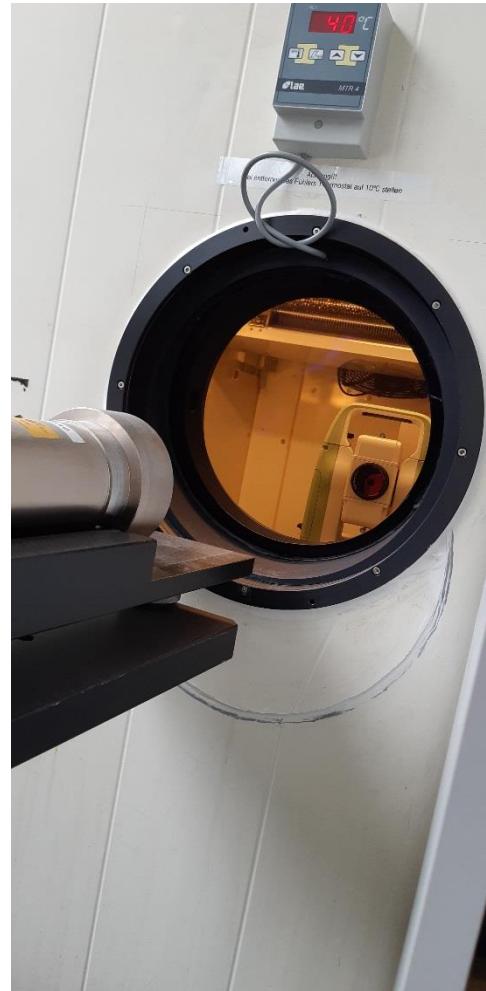
## Greatest reliability in all environmental conditions 在各种环境下有更高的可靠性

- Drop Tests 坠落测试
- Instrument is in the box 仪器装在仪器箱里
- Box is falling onto the ground for several times 然后把仪器箱多次坠落测试



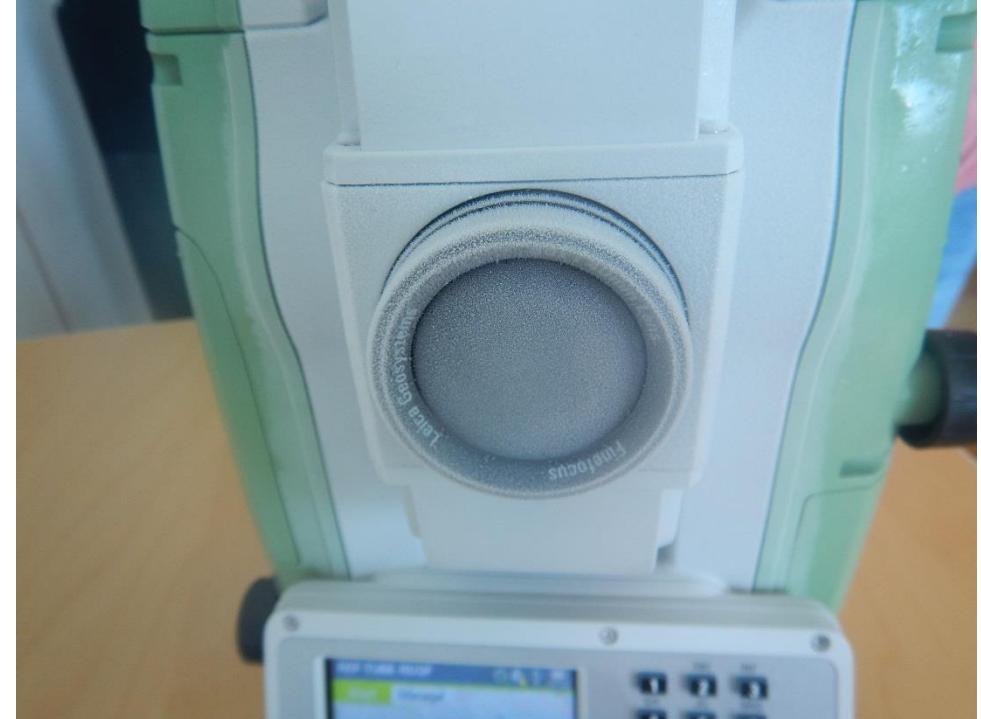
## Greatest reliability in all environmental conditions 在各种环境下有更高的可靠性

- Long term tests·长期测试



## Greatest reliability in all environmental conditions 在各种环境下有更高的可靠性

- Long term tests – arctic conditions 长期测试-极地条件



# The new Flexline Total Stations – and much more... 新Flexline系列全站仪-更多特点

Angular accuracy (测角精度) :

1", 2", 3", 5"

→ high accurate measurements  
测量高精度

GSM module

→ Mobile Data

GSM模块

→ 移动数据

Wlan, BT, USB, RS232

→ Convenient and modern data transfer (方便现代的数据传输)

Full numeric keyboard

Color&touch display

→ user friendly and productive 彩色触摸屏&全数字键盘

→ 亲切&更有效



PinPoint EDM

→ small spot size 小光斑

→ high accuracy 高精度

→ long ranges 更远距离

Long battery working time up to 30 hours

长达30小时的电池工作时长

→ Productivity secured in remote areas

偏僻地方的生产得到保障

Fast computer processors

Large memory 快速大内存处理器

→ large amount of data 处理海量数据

# 2019 – Construction sites will look as follow...

## 2019年，你将能在建筑工地见到它了



# The new Flexline Total Station 全新的Flexline系列全站仪



---

谢 谢

---





如果您对此篇PPT感兴趣，请扫描二维码