

# Proven Positioning with a Plan

Positioning, Guidance and Autosteering Technology



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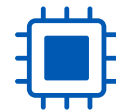
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# Topcon Agriculture

Precision hardware, software and data to bring efficiency and enhanced productivity to every phase of your farming operation.





GUIDANCE TECHNOLOGY

## Why Positioning

Getting the correct position is key to precise measurements. Our solutions help you get more done with less, making your work easier and your yield better. Whether you're using manual guidance or autosteering, positioning brings efficiency and accuracy to your farm.

Manual guidance works great for basic tasks, but automatic guidance really steps it up, especially when you need pinpoint accuracy. Our technology is designed to cut down on fuel use, maintenance, overlap, and mistakes, saving you time and money.

With better execution comes better yield. Precision control helps reduce compaction and allows for more targeted applications, improving soil health and fertility. Guidance supports every step of farming, from soil prep to planting, crop care, and harvest.

While guidance alone is powerful, it's also a crucial part of many other precision solutions, like seeding and spraying control. Position data helps you manage your farm site, making your operations more efficient today and setting you up for success tomorrow.



Reduce  
Key Inputs



Empower  
Labor



Improve Fertility  
and Yield

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# Plan Better, Use Less and Empower Labor

Good planning is at the heart of precision farming. With our easy-to-use in-cab touchscreens and software, our guidance solutions make it easy to manage your field's paths. You can quickly create, customize, and follow the pattern your field needs. By improving your planning and control, you can save on fuel and maintenance.

Research shows that autosteering can cut inputs by 10%-15%, which can really boost your bottom line. As labor costs rise and skilled workers become harder to find, guidance gives your operators the precision they need. Whether you're looking to improve overall efficiency, help less experienced workers perform better, or manage multiple tasks at once, our technology ensures accuracy at every step. Our solutions help you make the most of your resources, so you can do more with less.



Optimize Plans



Reduce Fuel and Maintenance



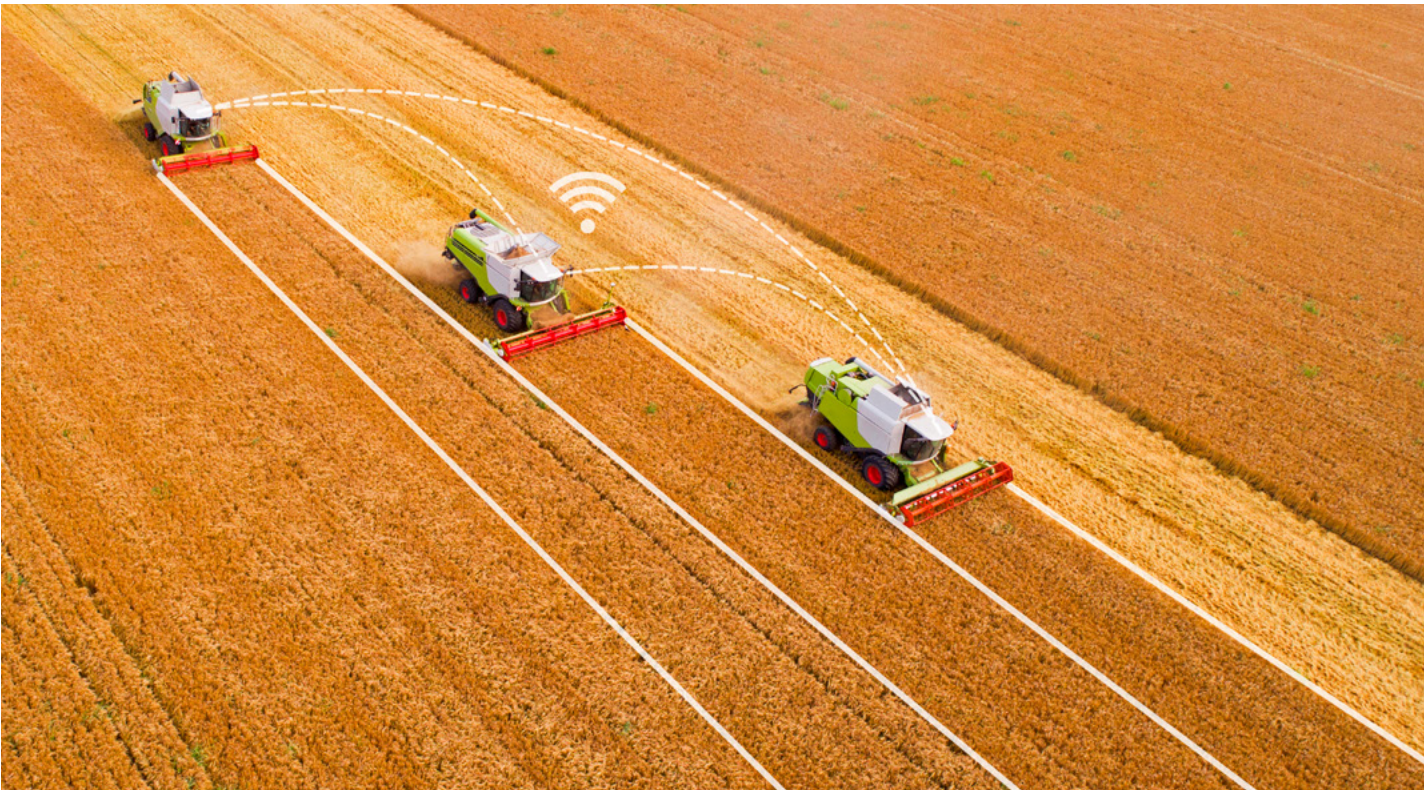
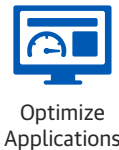
Improve Labor Skill



# Maximize Land and Build Fertility

Guidance helps you make the most of your land by creating and following plans that fit your fields perfectly. Our solutions let you easily manage field patterns, customized for your environment and crops. With better control, you can cut down on overlap, which means fewer wasted inputs, less soil compaction, and healthier soil.

Crops need the right space and nutrients to grow strong. In crop production, it's all about applying the right amount at the right time and place. Positioning helps you get it just right, optimizing your applications for better results. With site-specific management, our guidance solutions boost soil fertility and help your crops thrive.





# Proven Positioning, Guidance and Autosteering

Our products work with most agricultural machines including tractors, sprayers, spreaders, harvesters and more. We offer manual guidance or automatic guidance for non-steer-ready or steer-ready vehicles. Solutions are directed by a Topcon receiver, controlled by reliable touchscreen consoles, steered using integrated hydraulics or our replacement electric steering wheel, and made accurate through a range of correction service options. Our software is easy-to-use and consistent across consoles, offering a clear interface, flexible path planning, and access to ISOBUS or Topcon control solutions.



XR-1

XC1 plus and XC1

XW-1

## Featuring

Proven and reliable hardware - receivers, controllers, and displays

Position-based (GNSS) guidance and automatic steering for many agricultural machines

Embedded Topcon Software with optional ISOBUS compatibility

Suite of complementary Topcon solutions for smart precision adoption

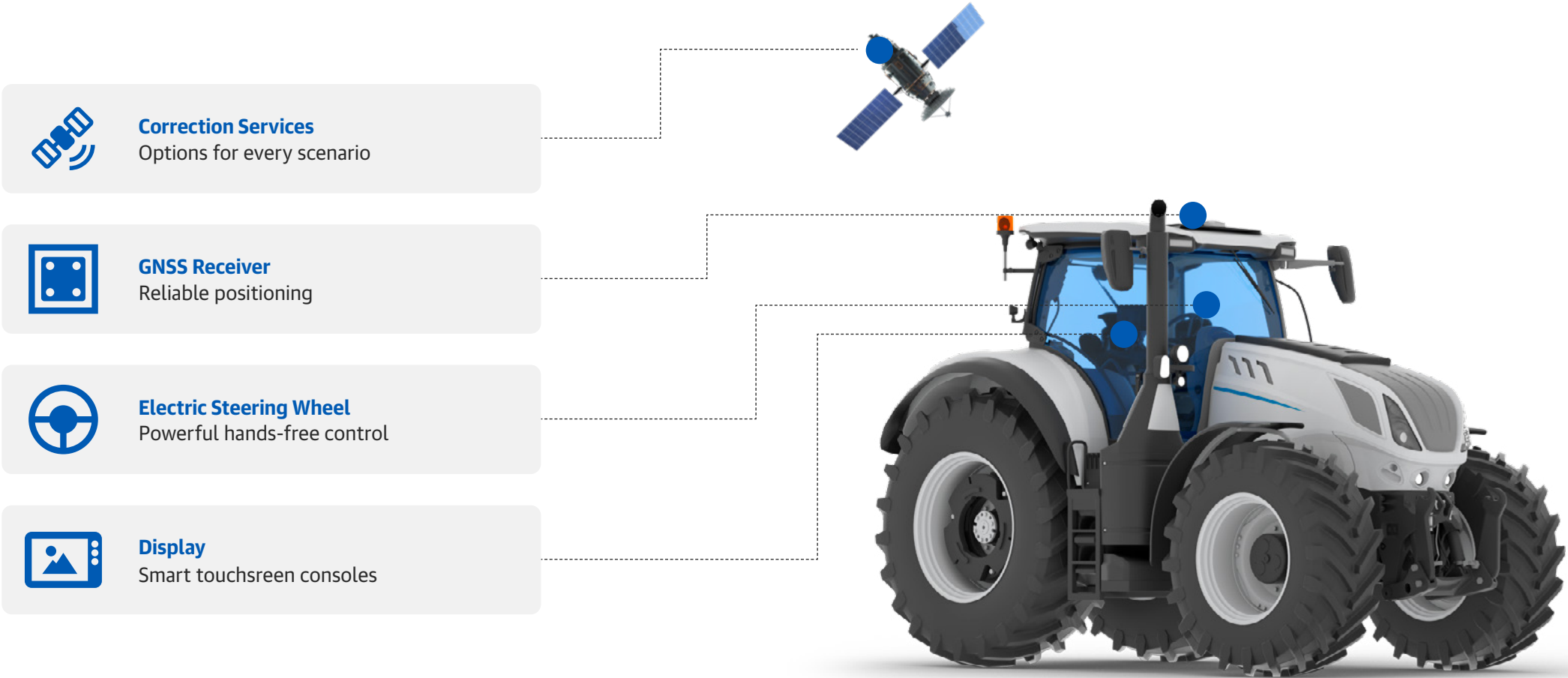
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# Integrate easy-to-use guidance technology that slashes costs and boosts yield



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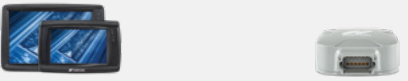
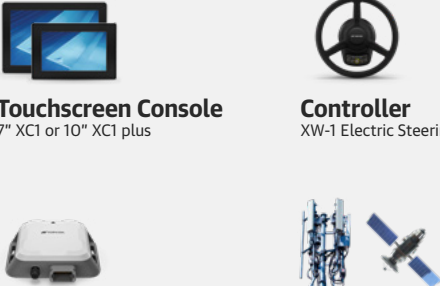

WHY TOPCON



# What's right for your operation?

Manual Guidance	Value Line Steering <sup>1</sup>	Premium Line Steering
 <p>Manual Guidance</p> <p>ISOBUS Implement Control <i>Note: Compatible with ISO UT and TC for enhanced capability</i></p> <p>Topcon Premium Control (Horizon OS)</p>	 <p>Automatic Steering</p> <p>ISOBUS UT Compatible</p>	 <p>Automatic Steering</p> <p>ISOBUS Implement Control <i>Note: Compatible with ISO UT and TC for enhanced capability</i></p> <p>Topcon Premium Control (Horizon OS)</p>

## Flexibility to build the right solution.

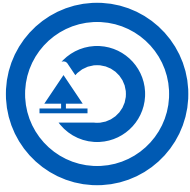
 <p><b>Touchscreen Console</b> 7" XD or 12.1" XD+</p> <p><b>GNSS Receiver</b> AGM-1</p>	 <p><b>Touchscreen Console</b> 7" XC1 or 10" XC1 plus</p> <p><b>Controller</b> XW-1 Electric Steering Wheel</p> <p><b>GNSS Receiver</b> XR-1 GNSS Receiver and Steering Controller</p>	 <p><b>Touchscreen Console</b> 7" XD or 12.1" XD+</p> <p><b>Controller</b> AES-35 Electric Steering Wheel, ACU-1 Hydraulic Integration, Series IV Valve Hydraulic Retrofit</p> <p><b>GNSS Receiver</b> AGS-2 GNSS Receiver and Steering Controller</p>
	<p><b>Correction Service</b> Satellite · Cellular · Local Network</p>	<p><b>Correction Service</b> Satellite · Cellular · Local Network</p>

<sup>1</sup> Value Line Steering is only compatible with front wheel steer tractors

# Guidance patterns for every application and powerful steering features



**Straight**



**Center Pivot**



**Curved**



**Custom**



**Steer to Boundary**

Generates guidance line from boundary to follow with autosteer to maximize land.



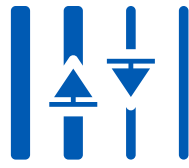
**Guidelock**

Generates guidance line based upon last pass coverage so you don't overlap.



**Headland Turns**

Automatically generate and execute turns at end of rows for seamless transition into next pass.



**Controlled Traffic<sup>2</sup>**

View multiple guidance paths with operating guide-lines differentiated from surrounding tasks.

<sup>2</sup> Feature not offered in Value Line Steering

# Our software allows you to easily add implement control and connectivity



### Auto Section Control (ASC)<sup>3</sup>

Auto section control (ASC) is a function of application control that switches sections of an implement in order to apply inputs more precisely. Our feature is compatible with Topcon and 3rd party ISOBUS controllers to prevent over-application and follow precision management strategies.



### Variable Rate Control (VRC)<sup>2</sup>

Variable rate control (VRC) is a function of application control that varies the output rate of an implement in order to apply inputs more precisely. Our feature is compatible with Topcon and 3rd party ISOBUS controllers to optimize inputs, boost production, and follow precision management strategies.



### Machine Link<sup>2</sup>

Machine Link is a connectivity feature that allows multiple machines to collaborate in-field by sharing live coverage and application data. Task data is seamlessly connected across machines so all operators can view overall progress to work more effectively and avoid duplicate effort.



**XTEND<sup>2</sup>**  
The XTEND app extends Horizon UI windows and elements. Use as an additional screen in-cab or outside for calibration and loading activities.



**ISOBUS Implement Control<sup>4</sup>**  
Display compatibility for ISOBUS protocol solutions. Integrate with ISO ECUs for automatic control and mapping.



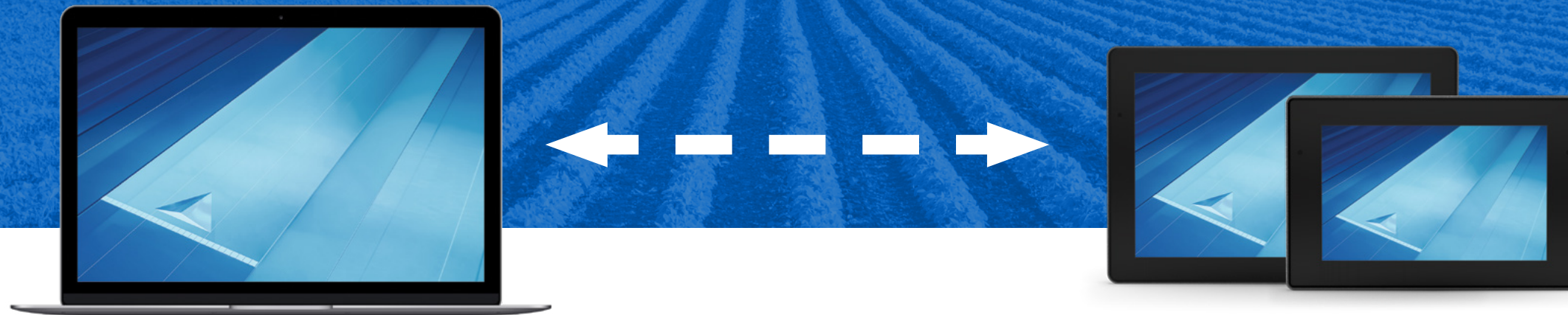
**Cameras<sup>2</sup>**  
Integrate digital cameras (AgCams) into interface.



**Weather Station<sup>2</sup>**  
Compatibility via ISO-UT for AirMar 150WX weather station.

<sup>2</sup> Feature not offered in Value Line Steering  
<sup>3</sup> Value Line Steering does not provide full functionality, only virtual implement capability  
<sup>4</sup> Value Line Steering only provides ISOBUS-UT functionality

# Feel confident you're supported with reliable dealer networks and remote support



## Remote Support

Our trained dealers and extensive support network is here to help. Our remote support capability, allowing 3rd parties to connect to your display make it even more efficient.

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# Easily connect consoles to our cloud-based software for data management and insights


Designed for farmers, dealers, agronomists, and input suppliers who need to gather and consolidate key operational information, the Topcon Agriculture Platform (TAP) brings connectivity to every phase of the farming cycle. TAP is a simple tool to organize, visualize, and automate information, helping farmers make better decisions based on data from across the entire operation. With TAP, we now offer a comprehensive and clear path into digital farm management.



**Console**  
Easily connect current or legacy Topcon X Family consoles to the Topcon Agriculture Platform, including the XC1, XC1 plus, XD, XD+, X25, X35, and X30.



**Data Transfer<sup>5</sup>**  
Plug-in a Cloudlynk data transfer device, including the CL-20 and CL-55 into your X Family console to seamlessly transfer data to TAP via cellular networks. Alternatively, use our Wi-Fi dongle or even a classic USB to manually transfer data.



**Topcon Agriculture Platform (TAP)**  
Combined with an X Family console and Cloudlynk data transfer device, the Topcon Agriculture Platform (TAP) automatically ingests data, helping you organize, visualize and make better decisions.

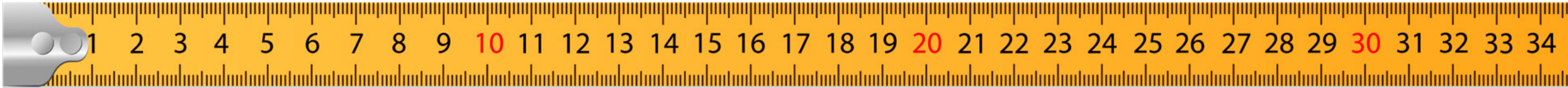
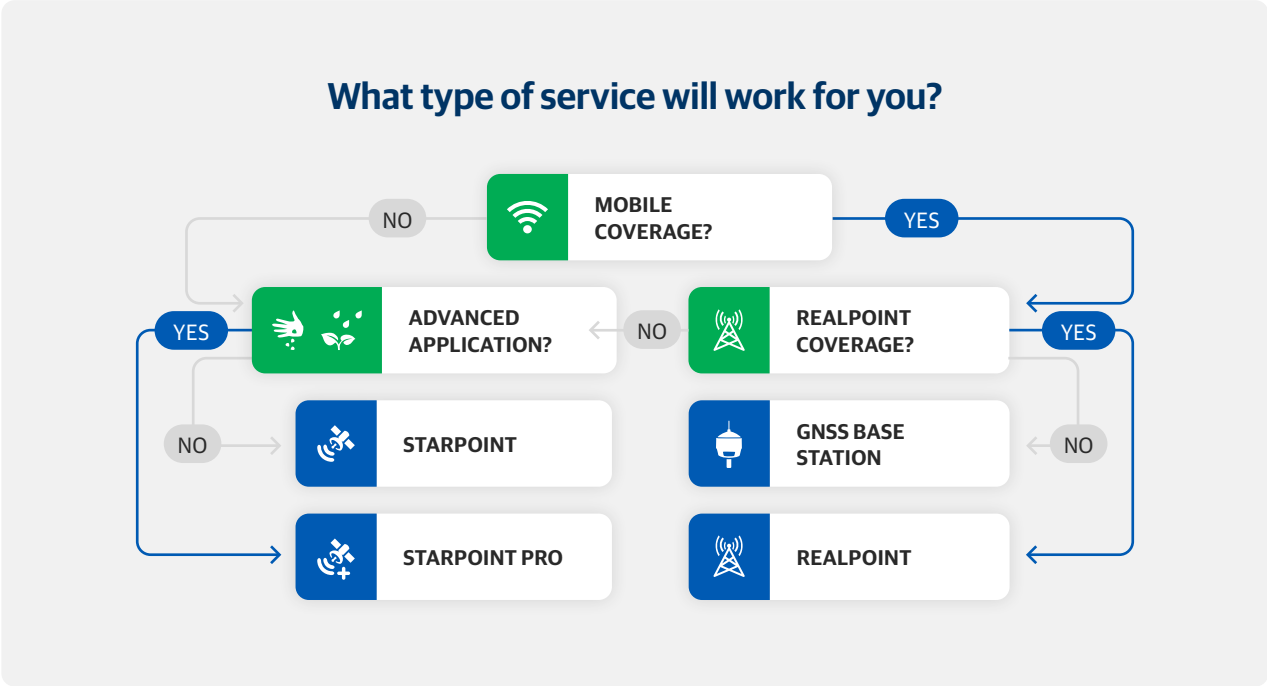
<sup>5</sup>Value Line Steering only compatible with CL-20 device

# How precise do you need to be?

From localized RTK base stations to expansive networks including subscription-based access to cellular and satellite, Topcon offers tailorable correction services to fit any operation, machine and application

Correction services are essential to the accuracy of GNSS-based guidance and autosteering to support key applications throughout the crop cycle, including soil preparation, seeding, crop care, and harvest. To account for the variable conditions and demands of global agriculture, Topcon has built a full-suite including localized and network-based solutions to deliver the high-quality accuracy and repeatability for any agricultural operation, application and machine.

Now more flexible than ever, including RTK and PPP subscriptions, Topcon correction services are globally tested, proven and reliable.



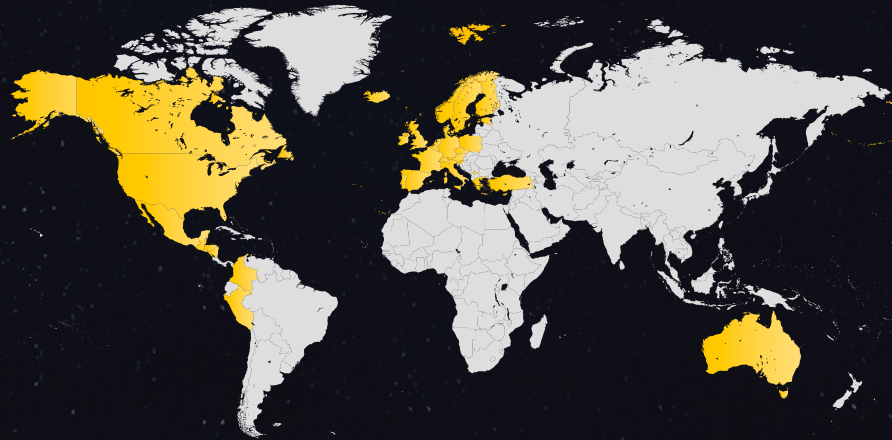
## Precision Application

**Seeding**  
accuracy up to 4 cm

**Crop Care**  
accuracy up to 10 cm

**Harvest**  
accuracy up to 15 cm

**Soil Preparation**  
accuracy up to 30 cm



Realpoint

Provides network RTK accuracy and quick start-up time.



Starpoint

Provides the PPP service anywhere on the planet, independent of local networks.

The graphics are intended as a representation of countries that have coverage available. However, coverage may not be fully available within the countries indicated.



Skybridge

Skybridge allows RTK subscribers to combine RTK with PPP correction services. RTK is supported by PPP during lack of coverage or service outages.

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# We offer Long Term Strategy through Complementary Solutions



### Implement Control<sup>5</sup>

Key ISOBUS and Topcon Horizon OS based solutions across the crop cycle seamlessly tied to guidance and autosteering.



### Crop Monitoring<sup>5</sup>

Optimize on-the-go application or collect data for prescription plans and analysis.



### Data Management Platform

Easily organize data, visualize and make relevant decisions with the Topcon Agriculture Platform (TAP).



### Data Transfer Devices

Seamlessly transfer data to the Topcon Agriculture Platform (TAP).

## Topcon Solutions

- 3D Landforming
- Tillage Depth Control
- Seed Drill Control
- Broad Acre Seeding Control
- Row Crop Planting Control
- Spreading Control
- Spraying Control
- Boom Height Control
- Crop Monitoring
- Yield Monitoring
- Grain Cart Weighing
- On-Board Weighing



<sup>5</sup>Value Line Steering is only ISOBUS UT compatible



# Suited for nearly all crops and many niche applications



## Commodity Crops

Corn, soybeans, wheat, cotton, rice, etc.



## Specialty Crops

Fruit, sugar cane, vegetables, vineyards, orchards, etc.



## Other

Golf and turf, municipalities, etc.

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Use case

# Value Line Steering Saves Money, Time and Makes Operators More Confident

Brian Dunaway out of Georgia, USA is not an amateur when it comes to precision technology. Using various steering systems over the years, he's energized by the performance and simplicity of Value Line Steering. Noting cost reductions of 20% less fuel and time spent in the tractor, Dunaway is also finding his operators are more confident and less stressed. Compared to alternatives, he's satisfied with the reliability and strong Topcon support network, retiring previous solution to the shed.

**Benefits/Highlights:**

- 1 Reduced inputs, reducing fuel and machine operating time by 20%
- 2 Empowered labor, reducing stress and improving operating confidence
- 3 Satisfied with reliability of components and a strong support network

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Click on the image to watch a video.

Use case

# Applications Made Easy with Steering and ISOBUS Control

Based in Gettorf, Germany, crop specialist Stephan Nehls-Westpfahl stands impressed by the benefits realized through automatic steering coupled with Topcon's ability to control ISOBUS application-based solutions. With Premium Line Steering, comprising an XD+ display and AGS-2 receiver, as well as control of ISOBUS enabled spreading and spraying implements, Stephan is getting more out of his land, reducing application input costs, and improving workflow efficiency.

## Benefits/Highlights:

- 1 Maximized arable land through reliable GNSS and precision mapping
- 2 Reduced input costs through path efficiency and eliminating overlap of fertilizer and pesticide
- 3 Easily integrated ISOBUS application control solutions
- 4 Improved setup through XTEND App, allowing spray nozzle testing outside the cab



Click on the image to watch a video.

Use case

# Network Correction Services Make Accurate Farming Easy

Topcon offers tailorable correction services suitable for any operation, machine and application. From localized RTK base stations to expansive satellite PPP and cellular RTK network options, our solutions are enabling users to improve accuracy, empower labor, and reduce costs. Throughout the globe, farmers are energized by the ease-of-use, reliability, and repeatability throughout the crop cycle.

## Benefits/Highlights:

- 1 Flexible Solutions
- 2 Improved Accuracy
- 3 Reduced Costs
- 4 Enabled Repeatability
- 5 Easy Setup and Use



# Empowering Your Work

As a worldwide leading developer and manufacturer of precision positioning workflow solutions, we help the people who build and feed the world work smarter and faster.

The technology we provide brings increased accuracy, saves time, boosts productivity and efficiency, and lowers expenses, all resulting in greater profitability for you.

Seemingly impossible jobs can be possible because we empower you to do more with less. Projects can be completed with fewer skilled workers with less re-work.

SPEED TO MARKET | GLOBAL NETWORK | EXPERIENCED OEM TEAM

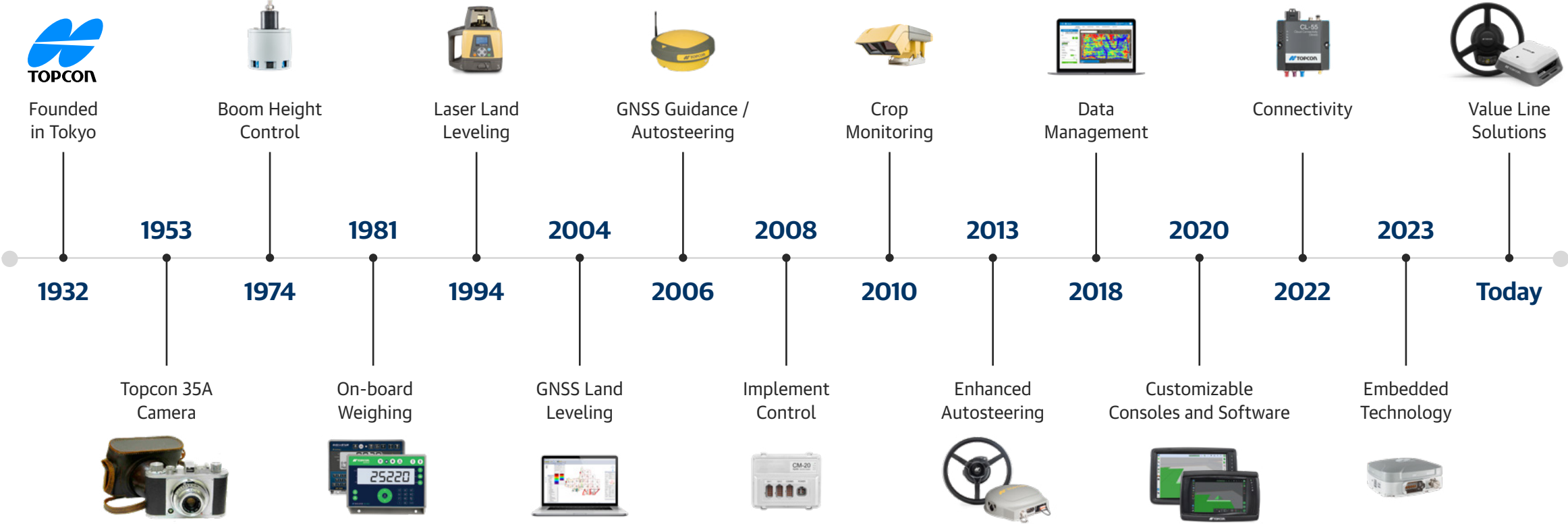
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# A History of Topcon Corporation in Agriculture



Note: displays current product images in reference to when development began.

# Unleash Your Potential

We provide innovative yet intuitive solutions that integrate high-precision measurement technology, software, and data for the construction, surveying, and agriculture industries. By embracing our solutions, our customers can:

- Accelerate infrastructure creation and repairs, ensuring safety and cost-effectiveness
- Efficiently gather and handle vast amounts of data, reducing field time
- Maximize crop yields and returns, all while minimizing environmental impact and preserving natural resources.

We're here to make complex tasks easier - so you can work smarter, not harder.



Topcon Training Center,  
*Livermore, CA*

Topcon Technology  
Roadshow Truck

Topcon Positioning Systems  
Headquarters, *Livermore, CA*

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4900+ Employees | nearly 3500 Patents

## Global Network

With an extensive worldwide network of corporate offices, R&D centers and technical groups, we have an unmatched capability to assist any manufacturer, no matter where they are located, with fully integrated machine automation solutions. This also positions us to create programs to assist and support dealer networks, directly or through extensive training programs.


## Experienced OEM Team

Our experienced OEM team knows what questions need to be answered first and the potential pitfalls to be avoided along the way. Their first objective is to make sure our technology is the right fit for your application and be your partner every step of the way.











# Easily Integrated Modular Technology


 **Guidance**


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Consoles	Steering	
		 XW-1
	 ACU-1	 EHi Valve
 XC1	 XC1 plus	

 **Correction Services**

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GNSS Receivers	Base Stations & Reference Stations Network
 XR-1	


 **Digital Farm Management**

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Data Software	Connectivity


Click a product block to be directed to the respective web page.

# Customizable Solutions for Every Application










## Soil Preparation

Landforming and Drainage	Tillage
	 <p>Strip Till Control</p>
Hardware	
 <p>MC-X1 / GR-i3F Controller/Receiver</p>	 <p>HCM1 Controller</p>
 <p>GC-35 Controller/Display</p>	 <p>UC7 Ultrasonic Sensor</p>
Software	
 <p>AGForm-3D Survey/Design</p>	 <p>ISOBUS</p>














## Seeding

Seeding	Planting
Hardware	
 <p>Apollo CM-40 Controller</p>	 <p>Artemis AS-1X Controller</p>
 <p>MFDC 100 Seed Drill Monitor</p>	 <p>CAN Motor</p>
Software	
 <p>ISOBUS</p>	 <p>ISOBUS</p>



## Crop Care

Spreading	Spraying	Crop Monitoring
Hardware		
 <p>SM-1X Controller</p>	 <p>SL2 Convertor (Weigh)</p>	 <p>CM-40 / CM-20 Controller</p>
 <p>HCM1 Controller</p>		
 <p>CM-20 Controller</p>	 <p>LMS-20 Sensor</p>	 <p>H2 Spraymaster</p>
	 <p>UC7 Ultrasonic Sensor</p>	
Software		
 <p>ISOBUS</p>		 <p>ISOBUS</p>
	 <p>ISOBUS</p>	

Click a product block to be directed to the respective web page.





# Customizable Solutions for Every Application





## Harvest

- Yield Monitoring
- Grain Cart Weighing

### Hardware

 YM-3 Controller	 Optical Sensor	 YM-2 Controller	
 Moisture Sensor		 Load Sensor	 Load Sensor

### Software








 ISO BUS	 ISO BUS
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## Weighing

- Material Handling / Onboard Weighing
- Universal Weighing
- Livestock Weighing

### Hardware

	 SL2 Converter	 Indicator SW4600EID
 Pressure Sensor	 Indicator Cab Control App	 Weighing Platform
 Pressure Sensor	 Load Sensor	




## Feed Management

- Feed Mixing

### Hardware

 Indicator/Data Transfer Digi-Star FD1 / CL-55	 Indicator EZ 2810BT / 3410B	 Indicator TMR 3610 / 4610	 Indicator TST 7600
 ERM Wi-Fi Module	 SL2 Converter	 Load Sensor	

### Software



TMR Tracker

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# Committed to Sustainability

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The work we do as an organization complements and supports the sustainable development goals adopted at the UN Summit in 2015.

"The Sustainable Development Goals are the blueprint to achieve a better and more sustainable future for all. They address the global challenges we face, including poverty, inequality, climate change, environmental degradation, peace and justice."

To learn more about our commitment to sustainability visit: [topconpositioning.com/sustainability](https://topconpositioning.com/sustainability)



## Zero Hunger

Our tools improve the management and measurement of cropping areas and sustainable agriculture. Through automation, we are helping create more productive crops and increase harvests, which leads to an improved food system and less food shortages.



## Industry, Innovation and Infrastructure

We help farmers be more productive through proven, innovative agricultural precision measurement technology, resulting in increased productivity, larger yields and reduced labor.



## Life on Land

Our technology empowers users to "do more with less" by optimizing inputs like fuel, fertilizers, and seeds through precision measurement and machine control. By minimizing material usage and reducing environmental impact, we help protect biodiversity, supporting sustainable ecosystems for both plants and animals.



[topconpositioning.com](https://topconpositioning.com)

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