Application Scenarios





Pipeline Engineering



Highway Construction



Port and Wharf Construction



Drainage Ditches



Farmland Grading



Channel Dredging



Pile Driving

SOUTH Intelligent 3D Excavator Guidance System EGS01





Safe and Reliable







Improved Efficiency and Reduced Costs



Flexible Expansion



Extensive Application



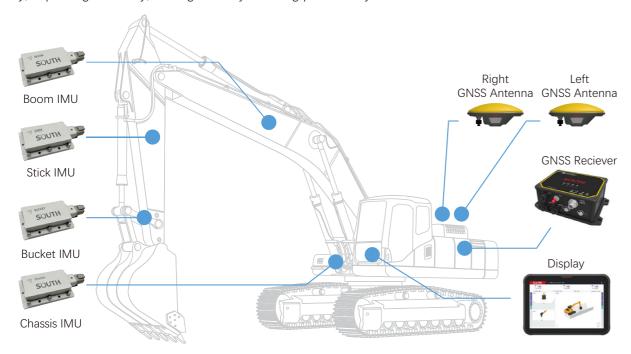






Application Scenarios

South Intelligent 3D Excavator Guidance System is based on GNSS high-precision positioning and tilt sensor fusion technology. By integrating surveying and engineering design data, the system delivers real-time operation guidance against design surfaces. The bucket tip's horizontal and elevation accuracy can reach ±3 cm, optimizing construction quality, improving efficiency, and significantly boosting productivity.



System Components



MC10 Display-Control Pannel

Industrial vehicle-mounted terminal with GNSS positioning and orientation, Android 14, 10.1-inch touch screen, IP68 protection, stable and reliable, durable magnesium-aluminum alloy casing.



Super Base Station

Equipped with the latest high-precision chip, supports all-constellation and all-frequency tracking, 50+ satellites instant lock, Farlink radio technology, 15 km transmission, dual power supply with over 15 hours endurance.



MG02 Receiver

High-precision positioning and orientation receiver, powerful GNSS solution capability, high precision, integrated, three-proof design, meeting diverse needs of construction machinery control.



IMU Sensor

Industrial-grade IMU-based dynamic tilt sensor, designed for construction machinery and intelligent robots. Features anti-interference dynamic tilt algorithm, stable under harsh conditions, compact and versatile.

Syetem Functions



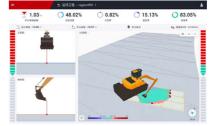


3D Grading

3D Slope Finishing

3D Trenching







3D Advanced Projects

3D Dredging - cleaning silt

3D Dredging - underwater slope finishing

System Features and Values



Precise Guidance

Horizontal and elevation accuracy within ±3 cm. Reduces need for repeated checks and auxiliary measurement, workload reduced by 90%.



Cost Savings

Cuts construction cycle, reduces fuel and labor costs, saves 30% overall.



Improve Efficiency

Simplified workflow, faster excavation, zero rework —up to 40% efficiency improvement.



Enhance Safety

No need for lime marking or staking, significantly reducing auxiliary labor requirements. Avoid potential underground collisions and ensure construction safety.