

# ANTI COLLISION SYSTEM

Safe and collision-free operation of the traveling equipment.



## UNIQUE FEATURES

- Redundant PLC controlled safety surveillance system
- Prevents damage from collision of mast and drill floor equipment
- Ensures safety by controlling the position of the traveling block with precisely predictable stops in any position within the safety zone
- Freely programmable upper and lower limit of safety zone
- Round trip time significantly reduced
- Field approved equipment
- Easy to retrofit
- Available for all rigs

# TECHNICAL DATA

## ANTI COLLISION SYSTEM

The Bentec ANTI COLLISION SYSTEM protects the mast and drilling equipment in the center line from collisions and damage when operating the traveling equipment. The system continuously monitors all of the traveling equipment's movements in the mast. Safety is achieved by controlling the position of the traveling equipment with precisely predictable stops in any position within the safety zone. This provides a high level of protection to prevent personnel injury and damage to the mast or drill floor equipment. Any differences in calculations made by two independent control systems immediately initiate emergency braking in case of a system failure.

The Bentec ANTI COLLISION SYSTEM can be extended with the Rig Control System, which prevents collision with all other drilling equipment on the rig such as pipe handling systems, casing stabbing boards or cherry pickers. Movement of the traveling equipment within the safety area depends on the position of the interlocked equipment, the desired direction, and the hook position. If it enters the minimum safety distance, movements are automatically stopped in order to safely prevent any collisions with the crown block, top drive or rotary table and any additional rig equipment in between.

The ANTI COLLISION SYSTEM continuously manages the hook speed, the hook load, and the hook position to determine the actual required minimum braking distance. This considerably increases safety and shortens round trips significantly.

The driller has to define the upper and lower limit of the hook in order to determine the safety zone. The ANTI COLLISION SYSTEM automatically monitors the limitations and safely moves the hook into the desired position. The system is self-adjusting thanks to a menu-driven interface on a control panel. It is either monitored via an additional Human Machine Interface or it can be integrated into a Bentec infoDRILL system.

Bentec combines all of the experience it has gained from more than 25 years of developing and enhancing ANTI COLLISION SYSTEMS to offer a highly reliable and field-proven safety system.

