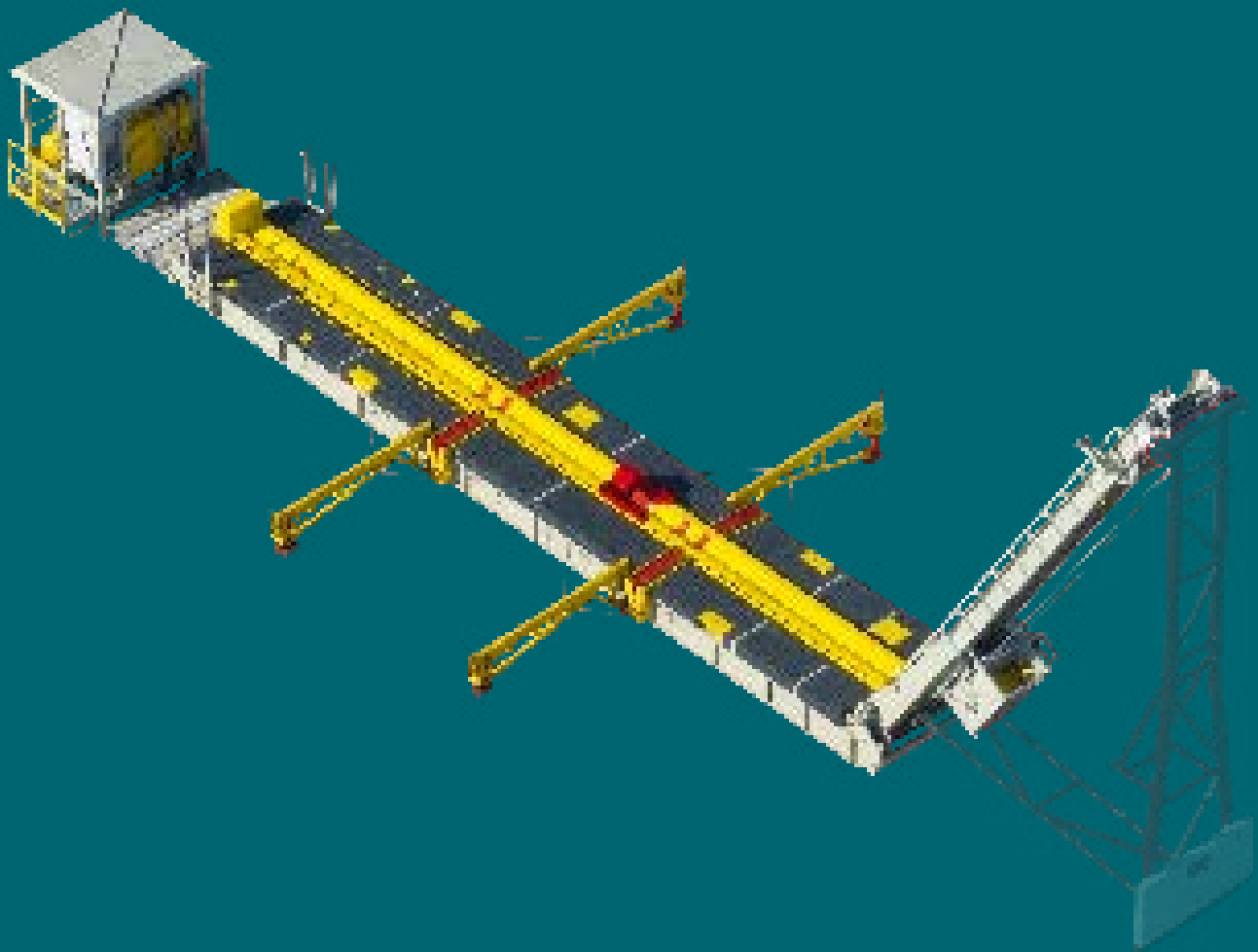


Hydraulic Catwalk System (Winch Type)

Reducing manual pipe handling
for safe operations



- ✓ **Fast cycle times enabling highest rig performance.**
- ✓ **Safe and hands-off pipe handling.**
- ✓ **Compact transport dimensions.**
- ✓ **Seamless integration into the rig design.**
- ✓ **Highest local service quality and availability.**

The BENTEC Hydraulic Catwalk System (HCS) promotes efficient operations through reducing tubular handling between the catwalk and the rig floor to ultimately improve rig floor safety.

What does it do?

The BENTEC HCS simplifies and speeds up pipe handling from the pipe rack to the drill floor.

How does it work?

By lifting the pipes to the drill floor, they can be directly picked up by an elevator, reducing storage time in the mouse hole. In addition, personnel on the drill floor operate the HCS by a remote control panel, eliminating any risk to their safety.

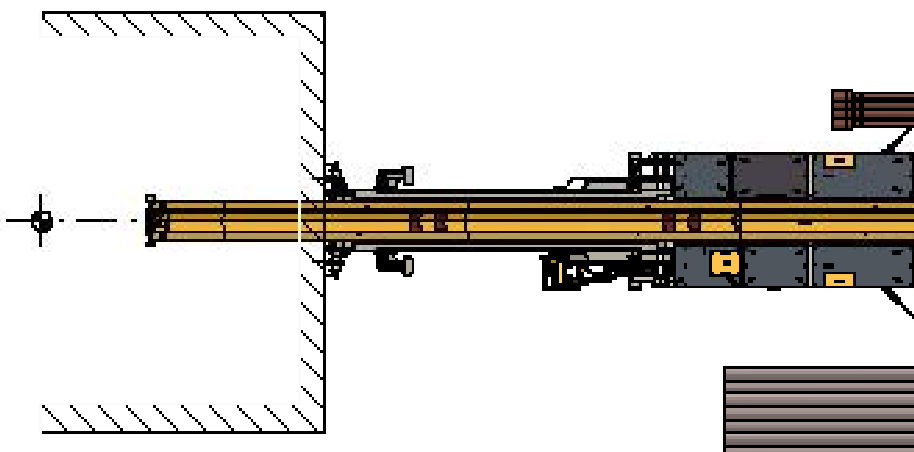
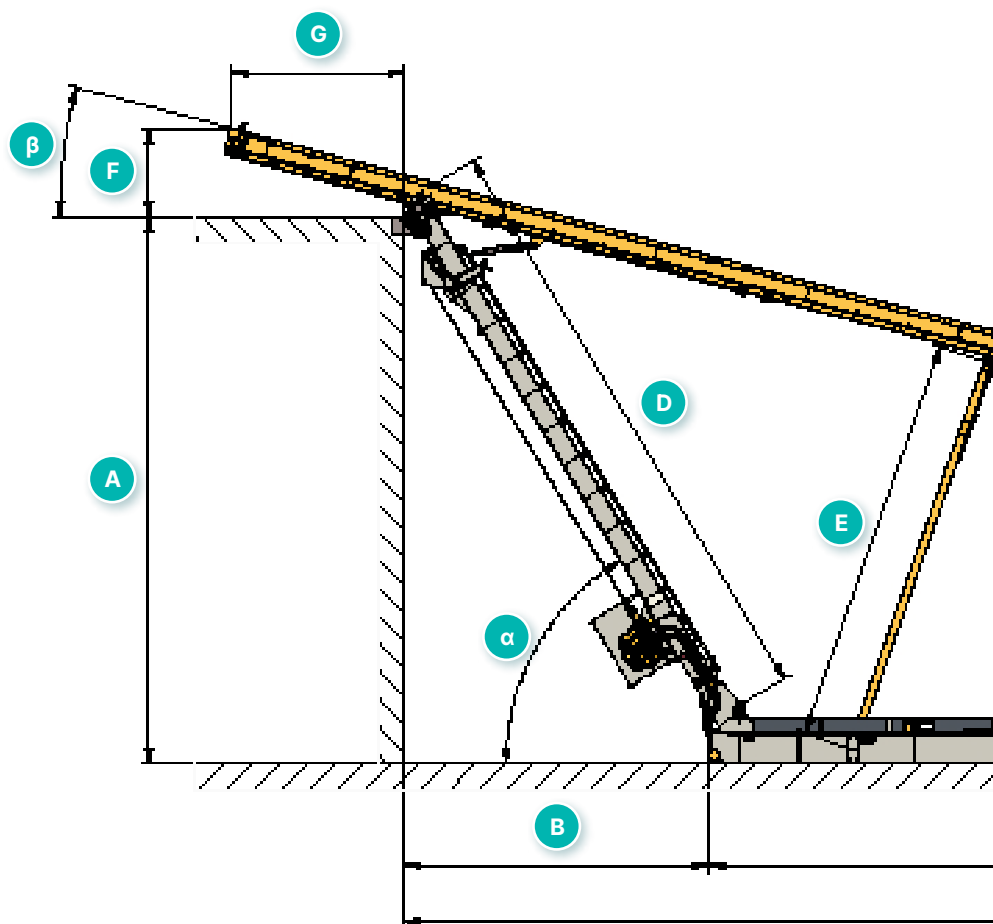
As a custom catwalk design, it can be tailored to an operator's tubular handling requirements. The machine can automatically feed pipes from the side racks into the trough and transport them to the drill floor. The pipes are positioned for direct pickup by the elevators, eliminating the need for lifting subs or manual intervention.

The external Hydraulic Power & Control Unit (HPCU) is easy to maintain and repair outside the danger zone. No need to disconnect for traveling.

The control position offers a good overview and the entire unit can be quickly replaced. The elevated blower increases system efficiency.

Designed with expertise

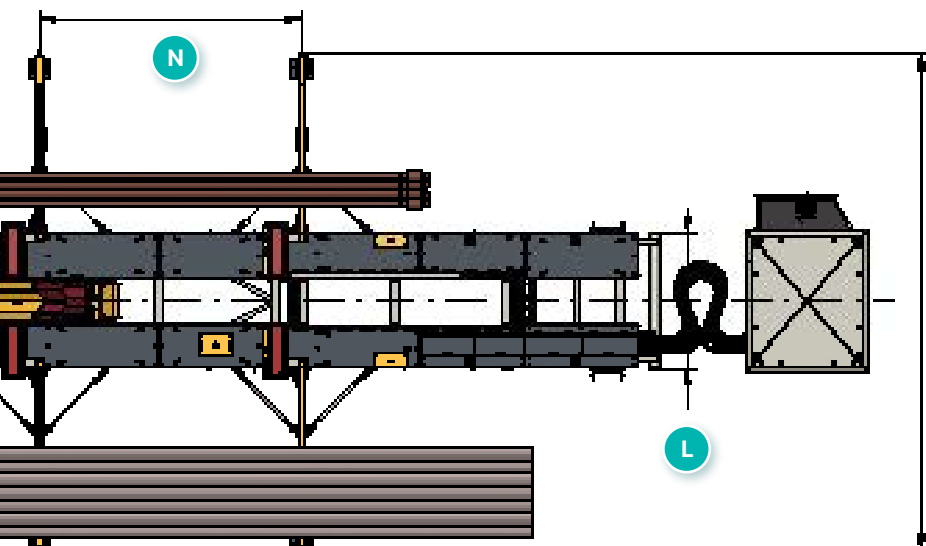
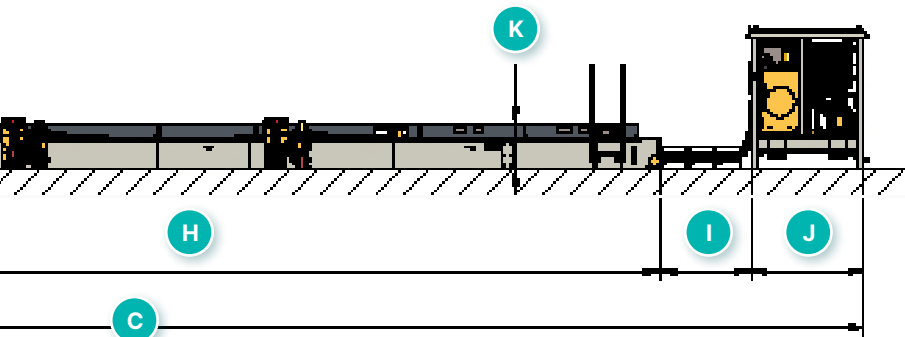
Proven and proprietary technology from a company backed by more than 130 years of drilling rig and oilfield expertise to support your operations.



Configurations

Configuration	A	B	α	C	D	E	F	G	β	H	I	J	K	L	M	N
	Subfloor height	Maximum distance setback	Ramp angle	Total installation length	Ramp size	Rear arm size	Approx. trough presentation height	Approx. trough extension	Approx. trough angle	Base frame length	Distance between HCS & HPCU	HPCU length	Operating deck height	Base frame width	Width between pipe storage	Distance between pipe racks
	ft	m	°	m	m	m	m	m	°	m	m	m	m	m	m	m
1	22-23	7.0	41.9	28.8	9.1	5.6	1.0	3.2	5.7	18	1.7*	2.15	0.87	2.6	9.5	5
2	24-26	6.5	48.4	28.3	9.1	5.8	1.2	3.2	9.5							
3	27-30	5.5	59.5	27.4	9.1	7.8	1.4	3.4	8.6							
4	31-35	7.2	54.9	29.1	11.3	7.8	1.3	3.3	11.3							
5	36-39	6.8	60.7	28.7	12.2	9.8	1.3	3.2	10.1							
6	40-42	7.2	60.6	29.1	13.4	9.8	1.5	3.0	13.6							

* Distance can be varied. It can be reduced to 0.25 m or extended to 8 m, which allows flexible positioning of the HPCU.



Features

- High-speed cycle times down to 25 seconds
- Operational deck height <1 m
- Transport length <18 m for reduced transport cost
- Hydraulic pipe rack
- External HPCU, easy to maintain and repair
- Wireless remote-control console as a standard feature
- Full integration into a holistic rig pipe handling system
- Manual operation if failure arises
- Compatible with BENTEC pipe guide arms, top drive and iron roughneck

Applications/upgrades

- Fast moving rig concepts: adds wheel set, kingpin and hydraulic lifts to speed up rig movement
- Walking system: allows the catwalk system to move in X & Y directions, e.g., multi well drilling
- Automatic pipe storage system: feeds drill pipes between the magazine and catwalk, e.g. modern rigs without a racking board

Environments suitable for

- Oil, gas and geothermal
- Land rigs
- Arctic or desert

Specifications

Weight (preliminary)	76,390 lbs / 34.7 t
Operational deck height	2.85 ft / 0.87 m
Width (incl. pipe storage)	30.97 ft / 9.44 m
Minimum tubular handling diameter	2 7/8 in / 73 mm
Maximum tubular handling diameter	24 in / 609.6 mm
Maximum tubular length	48 ft / 14.6 m
Maximum tubular weight	10,000 lbs / 4.5 t
Storage capacity (each side)	30,000 lbs / 13.6 t
Quantity pipe racks	2+2
Cycle time	25 sec (ground to drill floor)
Length base skid (transport)	18 m

Unit can be controlled locally...



...or by wireless control panels



Standard set up