40 Tonne Cable Drum Spooler and Petrol Hydraulic Powerpack Unit

Neumann Equipment was recently awarded a project which involved designing and manufacturing a 40-tonne cable drum spooler that could be used on-site with heavy 40-tonne drums. They needed to be portable and easily positioned on the drums to lift them off the ground on uneven surfaces and then be able to rotate the drum so the cable could be unspooled.

Neumann Equipment has a range of traditional cable drum spoolers with a carrying capacity of up to 12 tonnes. We are happy to introduce to the market our new model, specifically designed and manufactured to support heavy-duty cable drums with a load capacity of up to 40 tonnes.

Traditional spoolers support cable drums using an axle that passes through the cable drum's centre hole. With larger 40-tonne capacity cable drums (manufactured from steel), a different approach can be adapted to support and drive the drum using the outside rim of the cable drum cheek plate.

When large drums are delivered to the site, considerable planning and infrastructure is required to unload the drums from the trucks. On many occasions, unsealed roads are needed to access and position the drums, making this task weather dependent. Wet weather combined with large cable drum unloading equipment (e.g. Cranes) can cause significant delays while systematically increasing costs.

With traditional large spoolers, the Crane must re-access the site to lift the drum. Then, the cable spooler is assembled, and the drum is lowered into position. Our new spooler design eliminates the need to recall the cranes, removing further delays due to bad weather and availability and reducing costs.

The new spooler has four stands on each side of the cable drum against the outside rim. Each stand is fitted with three levelling screws allowing the operators to level the stand no matter the terrain. Each of the stands is equipped with a hydraulic hand pump that jacks the hydraulic cylinder in and out, lifting and lowering the level of the cable drum. When the drum requires rotating, two of the four stands are fitted with hydraulic motors which rotate the drum at a given speed. This provides a considerable advantage to the operators as these drums are never balanced. This control ensures that no damage to the cable's outer layer can occur as the cable never contacts ground surfaces.

The hydraulic motors can be driven by a dedicated hydraulic power pack or coupled to an excavator. This flexibility suits existing operating equipment. Each stand is fitted with three lifting points allowing a safe and level lift every time. These units can be stored beside each other or stored in our optional stack and rack system ordered separately, reducing storage space.

The works included the supply of:

- 2 x Hydraulically driven cable drum stand bases.
- 2 x Idling cable drum stand bases.
- 4 x 2m long 13mm chains to secure bases together.
- A hand pump is located on each base to raise and lower the drum rollers.
- Jacking screws fitted with feet to level and support bases.
- Maximum drum capacity 30T.
- 11kW Petrol Hydraulic Power Pack.
- The single-slice directional control valve is fitted with a detent to hold the spool allowing the operator the freedom to move around
- The engine RPM and a flow control valve variable the drum speed.
- The motors are fitted with a counter-balance valve to resist overrun from an unbalanced drum.
- 2 x 6m Hydraulic hoses with quick-connect fittings. Drive motors to be connected in parallel teed to each together.
- All components are blasted to class 2.5 and coated with the Neumann Equipment Industrial Specification Y14 Yellow.

If you have questions regarding our new cable drum spooler, don't hesitate to contact our experienced staff on 07 5589 9746.

NEUMANN EQUIPMENT

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