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Solving Problems!

The MGS Group



MGS
Manufacturing
HALL
Industries



SLB 1000 / 42" DOUBLE TWIST MACHINE

The SLB 1000 is available in two versions.

The **SLB 1000EAC** is a two-motor version. One AC motor for the rotor and one AC motor for the takeup reel. Takeup tension is adjustable from the outside and is constant as reel fills from barrel to flange.

The **SLB 1000DAC** is the same size and construction as the SLB 1000EAC and includes an additional AC motor driving the capstans to provide digital lay control. The operator selects the desired lay length on the HMI Screen.

Typical Range Of Products

Soft Annealed Copper (Bare Wire)

7 & 19 wire constructions

16 awg to 1/0 awg
(1.5mm² to 50mm²)

Compacted Compressed Dies

Up to 2 awg
(35 mm²)

Compacted Rolls

Up to 2 awg
(35 mm²)

Insulated Cores

3, 4 and 5 cores

Maximum Finished Cable Diameter

0.67" (17mm)

Direction

Left-to-Right or Right-to-Left

Rotor (Bow) Speed

2800 twist per minute

Reel Size

42" flange
(1000 mm)

Lay Range

1" to 15-3/4" (25mm to 400mm)

Direction of Lay

Left or Right (S or Z)

Line Speed

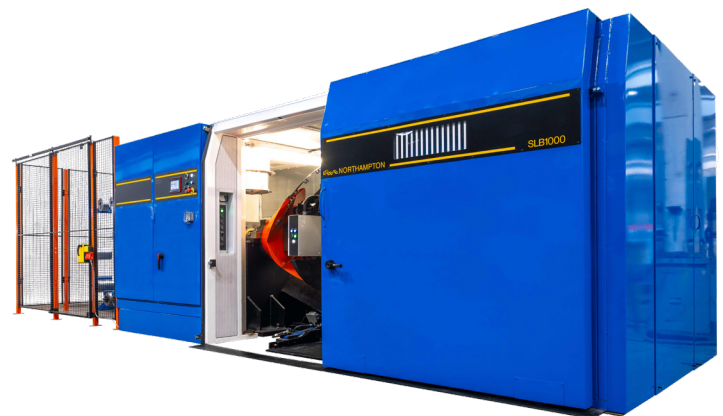
1000 feet per minute
(300 meters per minute)

Main Motor

AC

Reel Motor

AC



Capstan Motor (SLB 1000DAC only)

AC

PLC

Allen Bradley

HMI

12" AB Optix Touchscreen/pushbuttons

Drives

AB/Siemens/Yaskawa

Approximate Weight

33,600 pounds
(15,000 kg)

Dimensions (Unpacked)

Length 19' 0" (5800mm)
Width 7' 9" (2360mm)
Height 7' 4" (2250mm)

Braking Time For The Bow

Normal stop 30 to 75 seconds preset
'E' stop – 5 to 10 seconds preset

CONSTRUCTION FEATURES:

Machine Design - Rotors, baseframe and loading system are all integrated in one unit. The Safety / Acoustic enclosure can be isolated from mainframe. Integrated control cabinet.

Machine Frame - Stress relieved torsion-free steel fabrication.

Safety / Acoustic Enclosure - Self-supporting construction, electrically locked during operation, operator door slides sideways, internal lighting, end access for servicing.

Bow - Carbon fiber with wear strip.

Take Up Tension - Adjustable from outside, constant as reel fills from barrel to flange.

Rotor Drive - By transmission shaft to both rotors.

Rotor - Statically and dynamically balanced and arranged for excellent wire path.

Reel Loading And Unloading - Foundation free, powered loading platform.

Rotor Lubrication - Grease lubrication.

Capstan – SLB1000EAC Driven by change gears mechanically interlocked with rotor by timing belt drive. SLB1000DAC driven by AC motor.

Capstan Diameter – 2 x 300mm.

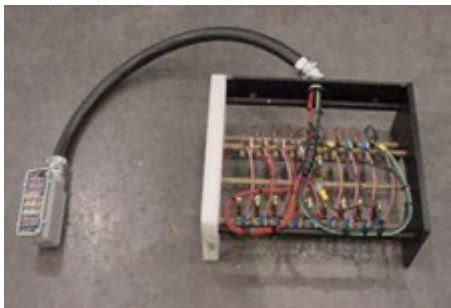
Traverse With Screw - By AC Servo motor. Optional end points can be adjusted from outside during operation.

Layplate - 2 pieces mounted on stand, longitudinally adjustable.

Wire Break Monitoring - Contact strip on baseframe and detectors at Capstan.

Safety Installations - Machine starts running with closed door only. Door can only be opened if rotor is not in motion. Emergency stop occurs during excessive movements of the cradle. Wire breaks strip on the machine frame.

Operator Control Panel – Standard AB 12" Optix (HMI) with all necessary instruments and operator controls. Operating screen, motor performance screen, and length measurement screen.



Design Highlight

Quick-change brush Holder assemblies with new constant tension brushes and new holders to reduce maintenance down time.

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