What's new?

WICHITA *are developing the motorised solution specifically dedicated to the* ***TENSION CONTROL*** *market. What a brake can do, the motor can do, too. Yes, but at which price for the customer? Our challenge is to offer a motorised solution at the right market price.*

WHICH TECHNOLOGY?

Our experience in frequency converter and the clear market trend in term of motorised system lead us toward the AC solution. The DC motor performances are available today with the assembly AC motor + AC flux vector control drive.

WHICH FEATURES?

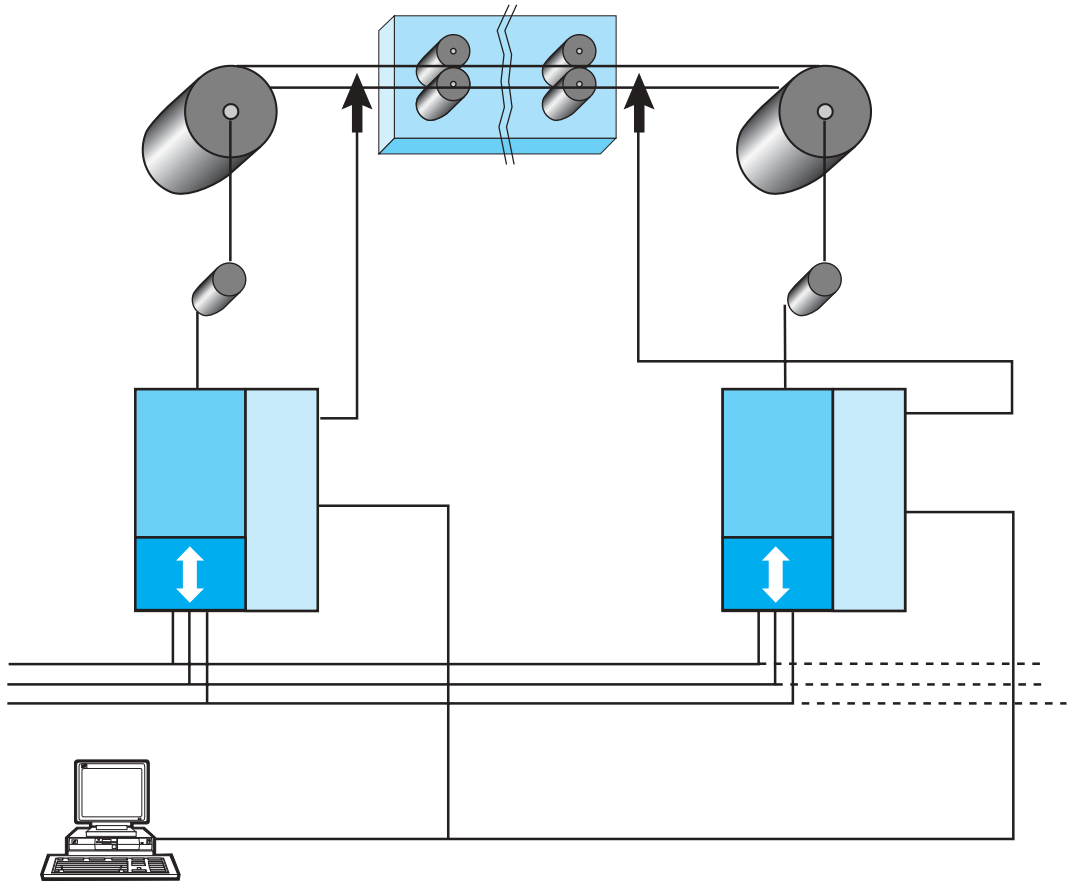
- ❒ All that is necessary to guarantee an accurate tension control in large roll diameter unwinding and rewinding operations.
- ❒ The full power regeneration in the line.
- ❒ The complete machine PID auto-tune.

DYNAMIC CONTROL SYSTEM

DTS ***the DYNAMIC TENSION SYSTEM – the perfect stability***
DTS ***the end of fastidious closed loop setting***

For more information, please contact WICHITA.

What's new?



Out power stage

❒ AC motor and servo brushless compatible
❒ Auto-tune motor
❒ Full torque at zero speed

Power in + regen

❒ Triphased power supply
❒ Full power regeneration

Control board

❒ Auto tune machine
❒ Automatic PID adaptation
❒ Open + closed loop function
❒ Inertia compensation
❒ Compatible with any sensor (dancer, load cell,…)
❒ Controlled or automatic taper function
❒ Motor encoder feedback
❒ Calculator (diameter, rotation speed,…)
❒ RS232/485 communication
❒ Windows software interface
❒ Various input / output information
❒ Auto-splice capability

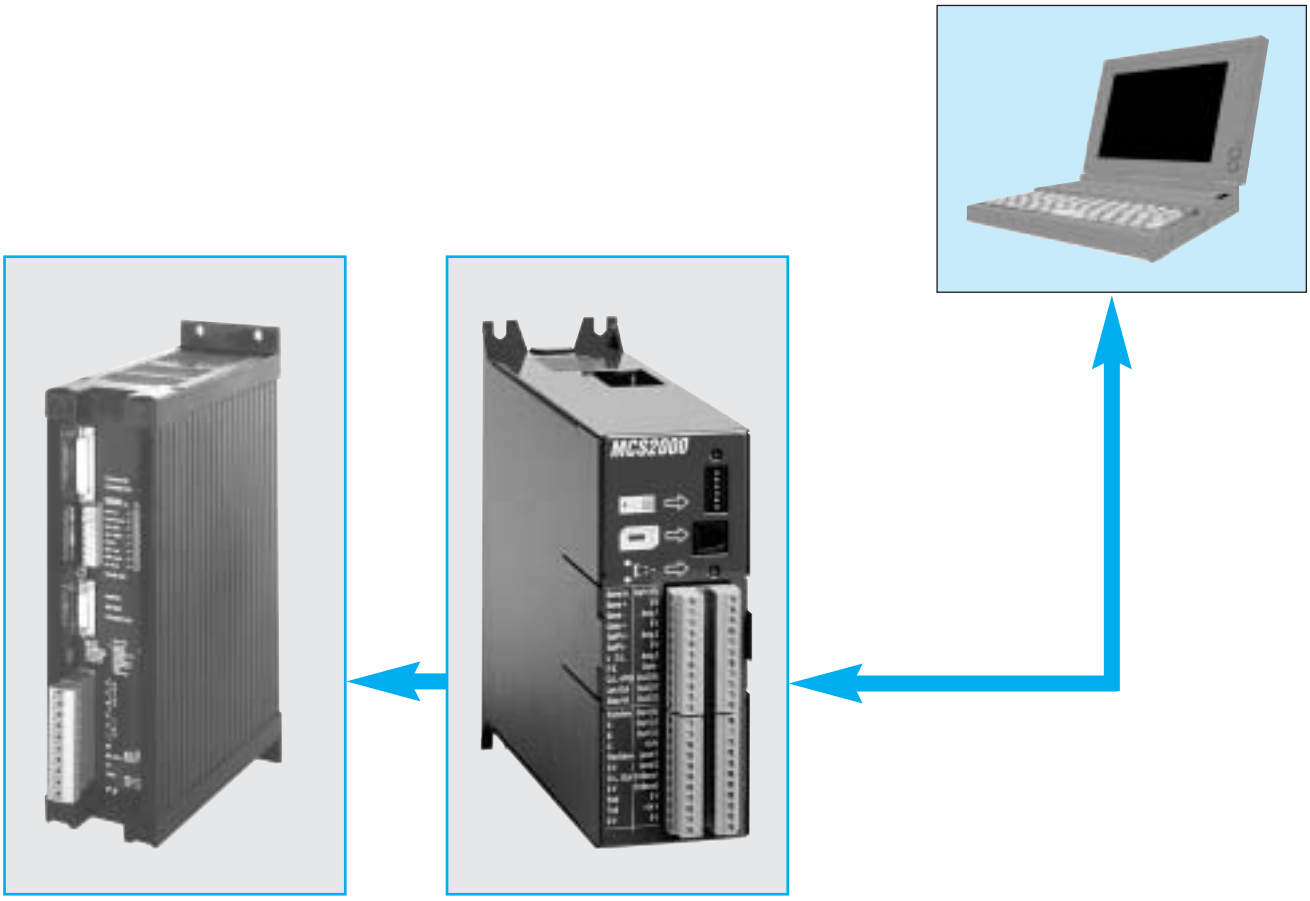
What's new?

When connected to an MCS2000, a low cost HAX servo drive does not require setting. Only the correct power / torque selection is important.
200% peak capability enables the drive to provide the necessary torque requested in case of an emergency stop.

DRIVE AVAILABILITY AND MAIN CHARACTERISTICS

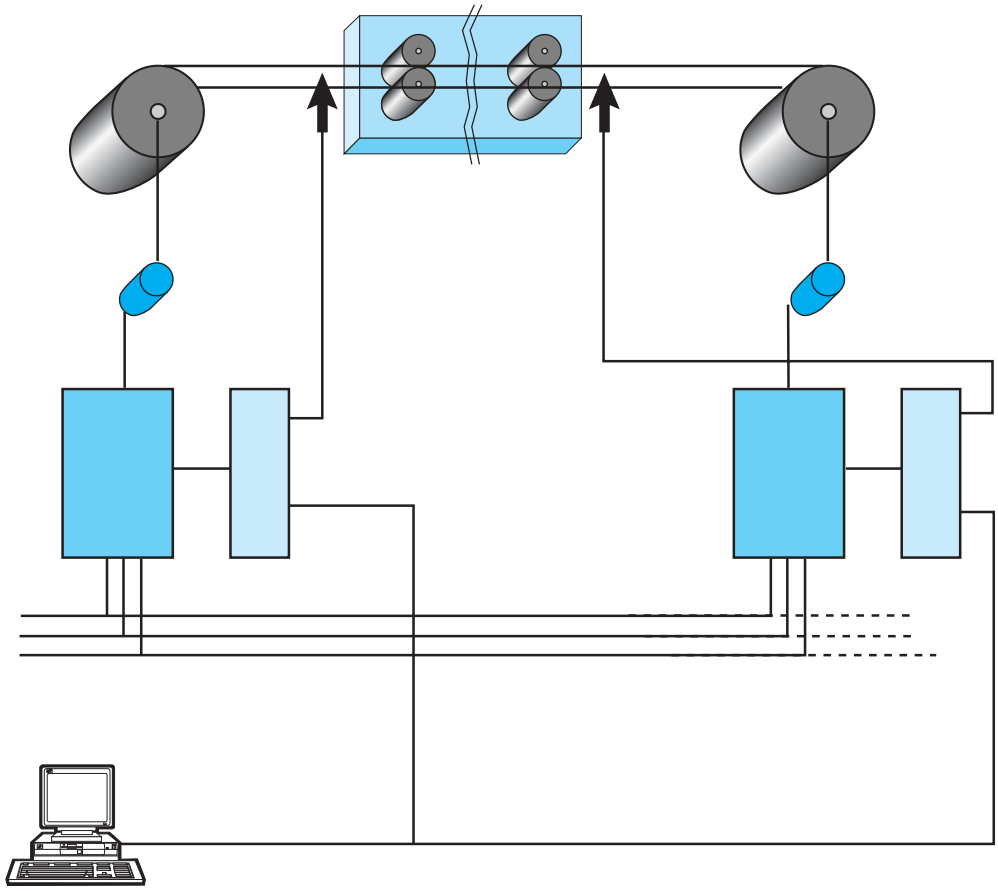
Electrical specifications	5.7/11-2	12/16-2	4/8-3	8.5/14-3	17/35-3	Units
Supply voltage	187-254 VAC Mono 24 VDC-600 mA		330-465 VAC Tri 34 VDC-600 mA			VAC
Nominal power	2.2	4.5	2.6	5.6	11.2	kW
Nominal output current, S1 factor	5.7	12	4	8.5	17	Arms
Peak current (50% duty or 5 minutes)	11	16.5	8	14	35	Arms
Max braking current	100% of nominal					

SERVO MOTOR IN TENSION CONTROL APPLICATION



What's new?

Up to 8 kW of power, the motorised tension control can be built with a servo motor system. The simple servo drive is considered as a "black box" and the entire loop is managed by the MCS2000. The MCS2000 control is, in this case, the same unit used with our braking system. The servo drive is set in torque mode.



Motor

MO Series

- ❒ Encoder feedback

Servo drive

HAX Series

- ❒ Servo brushless motor drive
- ❒ Full torque at zero speed
- ❒ Triphased power supply
- ❒ Regen on resistor

Control

MCS2000

- ❒ Automatic PID adaptation
- ❒ Open + closed loop function
- ❒ Inertia compensation
- ❒ Compatible with any sensor (dancer, load cell,…)
- ❒ Controlled taper function
- ❒ RS232/485 communication
- ❒ Windows software interface
- ❒ Various input / output information
- ❒ Auto-splice capability
- ❒ Memory card