

# ARMoured CABLE MACHINERY

INTERLOCK • FLEX • UMBILICALS • ESP • CONDUIT • TAPING

## CT1-32: 1-1/4" CT1 INTERLOCK ARMOURING MACHINE

Calmec's newly designed 1-1/4" CT1-32 Armouring Machine produces round interlocked armored cable and conduit in a continuous operation. The CT1-32 incorporates servo motor technology for optimal motion control, a fixed head design using Calmec's superior tooling design and functionality, and the latest in HMI product recipes and machine controls.



All Calmec Armouring machines are based on a **SIMPLE** ... yet **SOPHISTICATED** philosophy. A methodology designed to provide an accurate and repeatable manufacturing process, where it is easy to set up machine parameters, tooling, as well as maintain the machine itself.

- Easy setup of the machine parameters & tooling • Less Maintenance • No Slip Rings • No Gear Boxes • No Differentials

Sophisticated in that the machine stores through a touch screen interface all process parameters and tooling setups for each product type and size, and will load all recipe parameters with the push of a button.

### Plug n' Play Tooling

#### Strip Widths:

3/8" & 1/2"

#### Strip Thickness:

Steel 0.010" - 0.034"

Aluminum 0.016" - 0.040"

#### Finished Cable Diameters:

0.30" - 1.42"

#### Input Cable Diameters:

0.12" - 1.18"



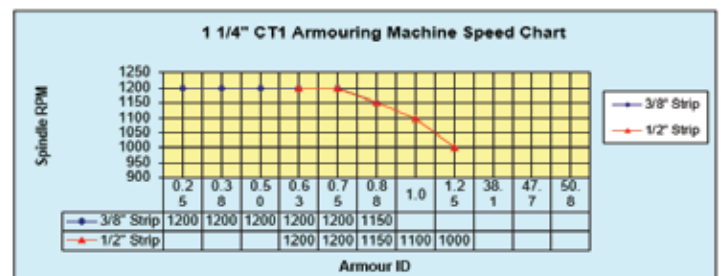
Tooling with offline setup jig

### High Production Speeds

Maximum Spindle Speed: 1200 RPM

Maximum Line Speed: 35 FPM

Fixed head angle plus tooling compensation suits the full range of helical angles required for the complete diameter range of products, ensuring maximum production speeds.



# ARMOURED CABLE MACHINERY

INTERLOCK • FLEX • UMBILICALS • ESP • CONDUIT • TAPING

## Recipe Driven HMI Settings

Color touch screen operator interface with recipe control of each product, display of pertinent machine parameters, and tooling setup data.

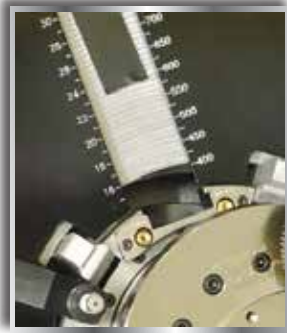


## Pad Pneumatic Chuck

The strip pay-off has a well proven pneumatic chuck, which automatically adjusts for inner pad expansion as the strip is consumed.

Expansion of the chuck using dual air valves with spring assistance, easily accessible to the operator.

- No stopping for tension adjustments
- No strip breaks because of a loose pad
- Easy pad loading



## Recirculating Coolant & Lubricant System



- Spray mist lubrication of tooling
- Automatic adjustment of misting levels based on strip speed, HMI programmable
- Self contained lubrication system with recirculation, settling tank, and filtration
- Ultrasonic liquid level sensor with warning and critical alarms
- Visual inspection of lubricant level, with easy access for cleaning and flushing
- Mist collection of spray above the tooling head

## Fully Synchronized 3-Motor Servo System

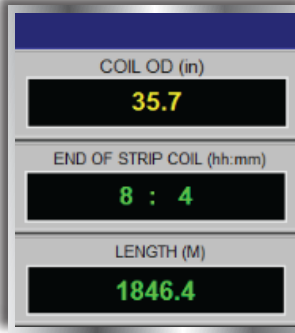
Precise speed synchronization of all three motor drives, plus the Capstan drive, including during acceleration and deceleration.

- Spindle
- Strip Feed
- Strip Tension

~10 kW/hr running power



## Electronic Strip Tension Control



- Accurate and constant electrical strip tension control
- No wear parts or brake pads.
- AC vector or servo drive with servo motor runs in regenerative mode pumping power back into the system
- Full HMI display of pad size with low level alarms and run time.
- Sensor-less broken strip detection



Calmec Precision Limited  
1400 Bonhill Road  
Mississauga, ON, Canada  
011-1-905-677-7976  
sales@calmec.com  
www.calmec.com