



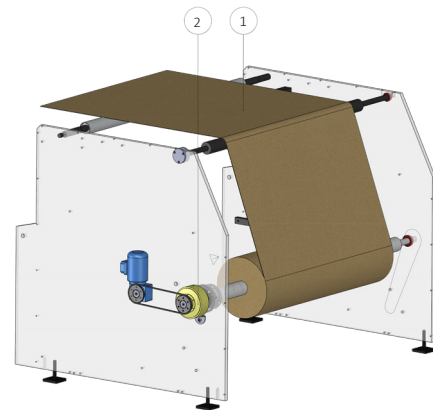
# REWINDING AUTOMATIC CLUTCH TENSION CONTROL

The purpose of the automatic belt tension control system for end of line rewinder modules is to perform the dragging of the belt under stable linear speed conditions to the converting industry. These features will contribute to perform converting processes more reliably and efficiently downstreams of the rewinder module.

## GENERAL SCHEME

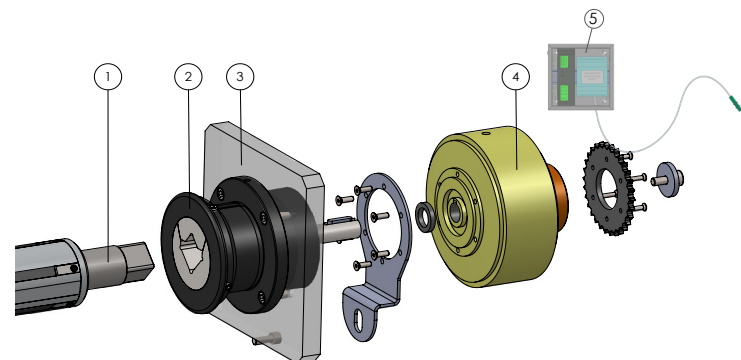
### ITEM NO. GENERAL SCHEME DESCRIPTION

- 1 Rewinding machine with automatic web tension control
- 2 Clutch tension control assembly



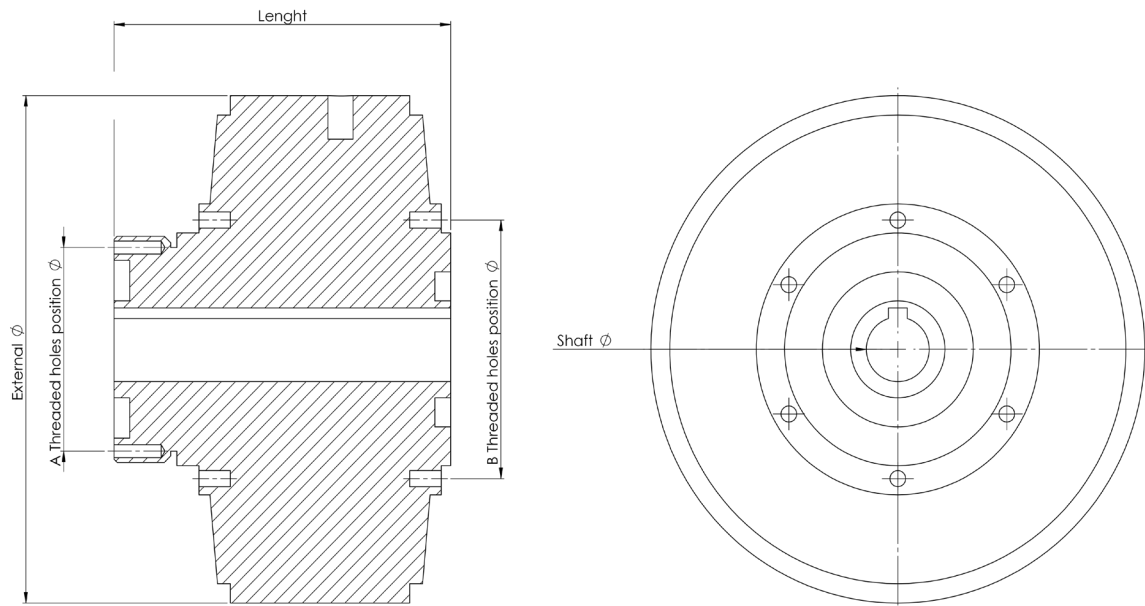
### ITEM NO. TENSION CONTROL ASSEMBLY DESCRIPTION

- 1 Rewinding air shaft
- 2 Safety chuck or standard bushing
- 3 Machine frame
- 4 6 Nm to 50 Nm electromagnetic clutch accessory for rewinding web tension control
- 5 Electric box + clutch power regulation sensor





# TECHNICAL PARAMETERS



## MAIN TECHNICAL PARAMETERS

TORQUE [NM]	VOLTAGE [V]	SPEED [RPM/MIN]	CURRENT [A]	WEIGHT [KG]	EXTERNAL Ø [MM]	LENGHT [MM]
6	24	1400	0,8	3	130	91
12	24	1400	1	6	157	107
25	24	1400	1,5	9	182	125
50	24	1400	1,8	14,5	219	144

## OVERALL DIMENSIONS

SHAFT Ø [MM]	A THREADED HOLES POSITION [MM]	B THREADED HOLES POSITION [MM]	A SCREWS	B SCREWS
16	50	70	M5	M5
20	63	80	M5	M5
25	71	97	M6	M6
30	85	110	M6	M8

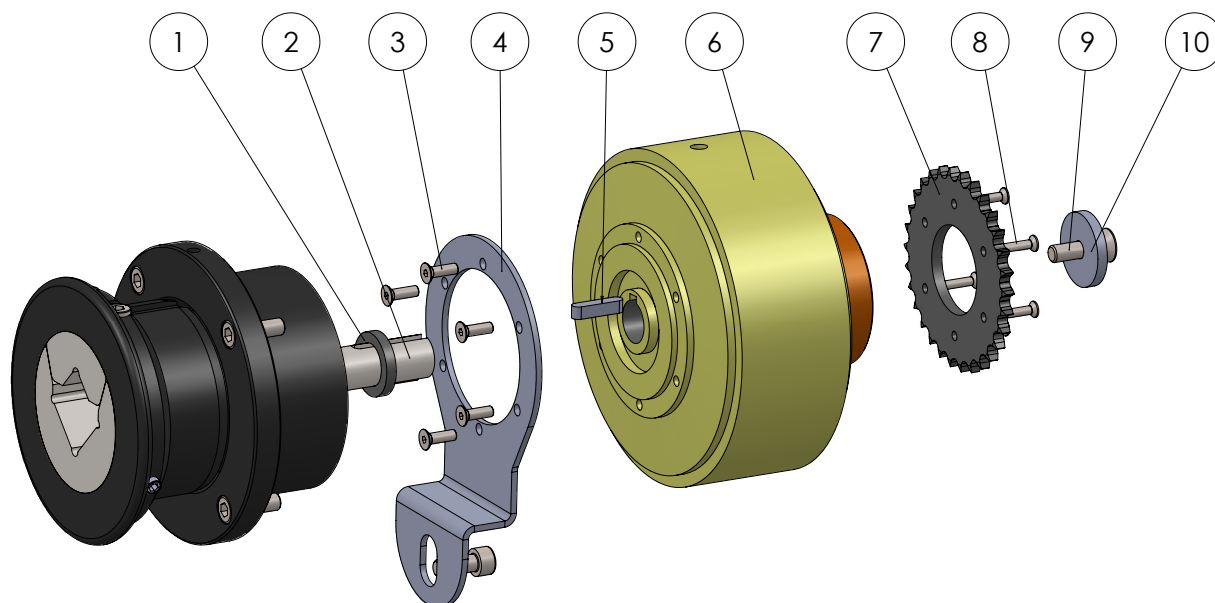




# MECHANICAL ASSEMBLY

## ITEM NO. TENSION CONTROL ASSEMBLY DESCRIPTION

- 1 Separator washer
- 2 Shaft
- 3 X6 screw DIN 7991
- 4 Antirrotation arm
- 5 Shaft key
- 6 6 Nm to 50 Nm electromagnetic clutch accessory for rewinding web tension control
- 7 Traction sprocket
- 8 X6 screw DIN 7991
- 9 Screw DIN 912 M8x30
- 10 Compression washer



### COMPATIBILITY WITH OTHER EJEMATIC SOLUTIONS

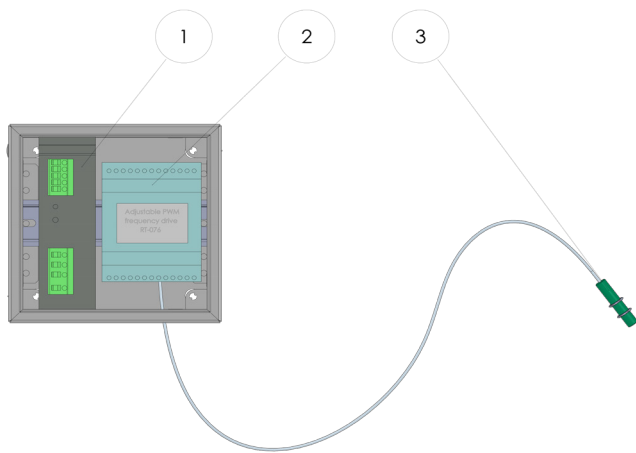
Our Electromagnetic Clutch Tension Control guarantees seamless compatibility across the complete range of standard airshafts and machine anchoring systems proudly offered by EJEMATIC:

Airshaft type	Double Support	Cantilever	Axial Displacement
<b>Body Diameter</b>	Ø69, Ø75, Ø150, Special	Ø69, Ø75, Ø150, Special	Ø69, Ø75, Ø150, Special
<b>Machine anchor type</b>	Flange & Foot Safety Chucks and Rolling Supports	Flange & Foot Bushings Ø35 and Ø45	



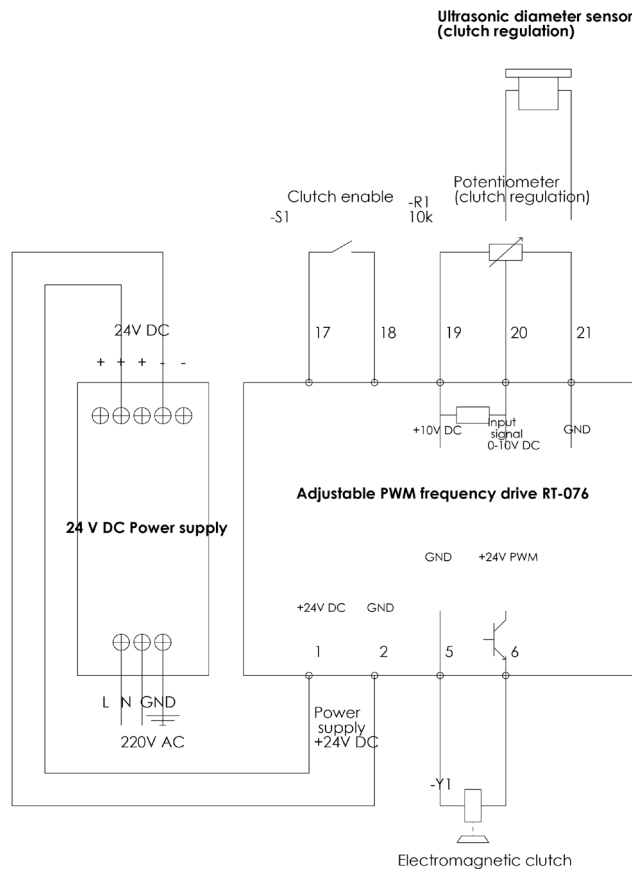


# TENSION CONTROL ELECTRICAL ASSEMBLY



## ITEM NO. TENSION CONTROL ASSEMBLY DESCRIPTION

- 1 Power supply
- 2 Adjustable PWM frequency drive
- 3 Clutch power regulation
  - 3.1 Manual potentiometer
  - 3.2 Distance sensor or pendulum probe sensor
  - 3.3 Load cell





## TENSION CONTROL TYPES

The web tension can be regulated through a manual potentiometer or with different sensor types.

Under low-demand unwinding conditions the web tension can be regulated by a manual potentiometer that adjusts the braking power.

When the unwinding conditions are more demanding the web tension is regulated with different sensor types with different technologies involved. The web tension is controlled by a dancer arm and a potentiometer that adjusts the braking power, is controlled by a distance sensor that reads the diameter of the roll and adjusts the braking power or is controlled through a load cell that adjusts the braking power.

### MANUAL

#### 1 MANUAL TENSION CONTROL

The web tension is regulated by a manual potentiometer that adjusts the clutch power.

#### COMPONENTS:

- 1 Electromagnetic clutch
- 2 Adjustable PWM frequency drive
- 3 24V DC 100W power supply
- 4 Potentiometer
- 5 Electric box







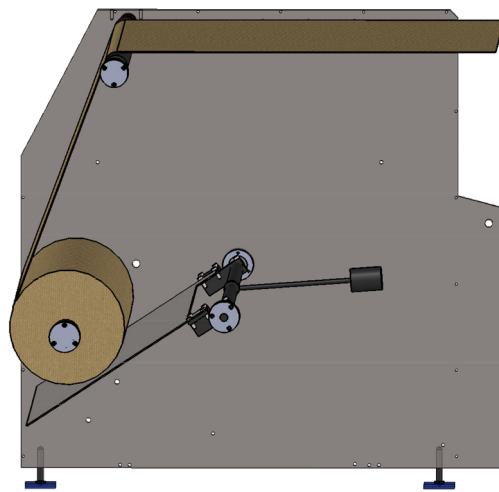
## SENSORITZATION

### 1 TENSION CONTROL THROUGH DISTANCE SENSOR

The web tension is controlled by a load cell that adjusts the clutch power.

#### COMPONENTS:

- 1 Electromagnetic clutch
- 2 Adjustable PWM frequency drive
- 3 24V DC 100W power supply
- 4 Load cell
- 5 Electric box

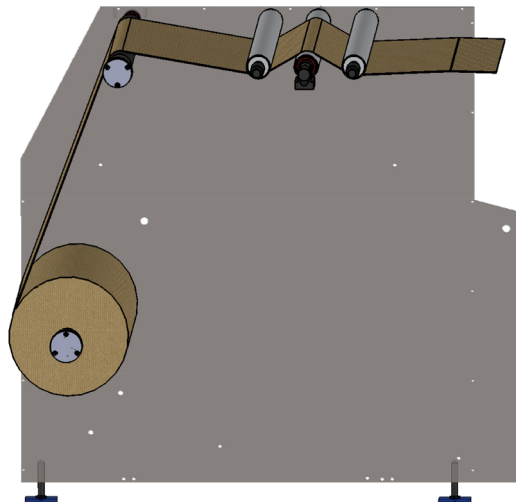


### 2 TENSION CONTROL THROUGH LOAD CELL

The web tension is controlled by a load cell that adjusts the braking power.

#### COMPONENTS:

- 1 Electromagnetic clutch
- 2 Adjustable PWM frequency drive
- 3 24V DC 100W power supply
- 4 Load cell
- 5 Electric box



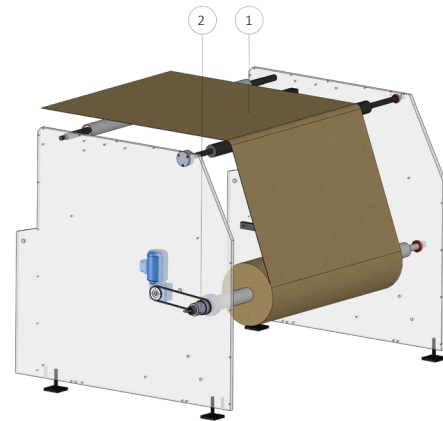


# REWINDING MECHANICAL CLUTCH TENSION CONTROL

## GENERAL SCHEME

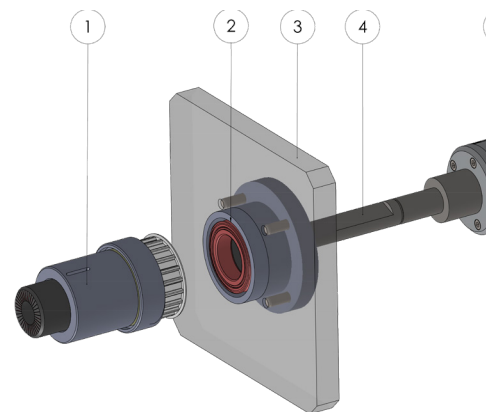
### ITEM NO. GENERAL SCHEME DESCRIPTION

- 1 Rewinding machine with mechanical clutch tension control
- 2 Mechanical clutch tension control assembly



### ITEM NO. TENSION CONTROL ASSEMBLY DESCRIPTION

- 1 2 Nm to 12 Nm mechanical clutch accessory for rewinding web tension control
- 2 Machine frame
- 3 Air shaft journal end
- 4 Air shaft body



### COMPATIBILITY WITH OTHER EJEMATIC SOLUTIONS

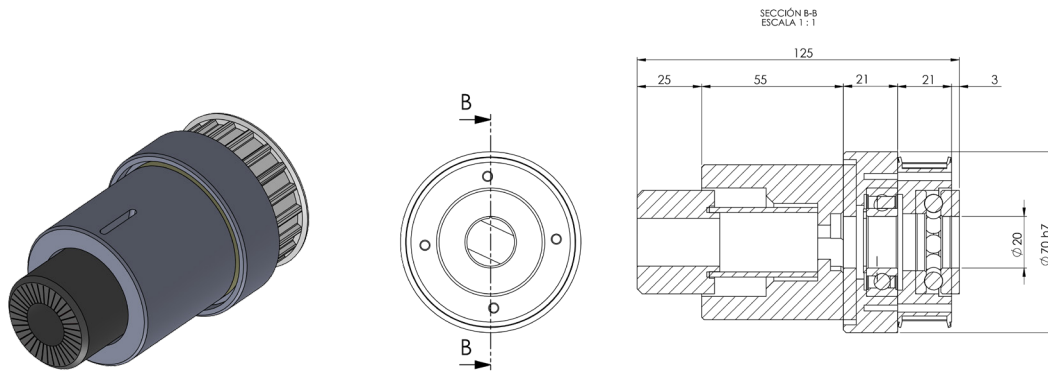
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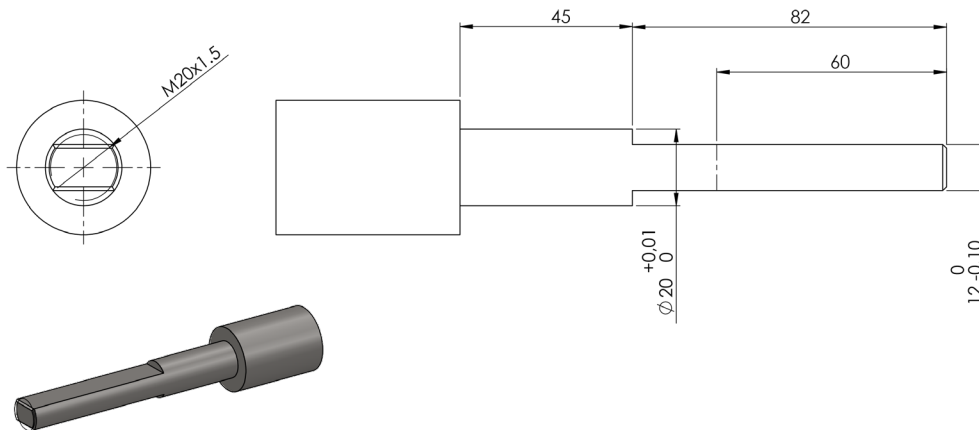


## TECHNICAL PARAMETERS



Clutch power manual regulation through the nut

### REQUIRED JOURNAL END TO ASSEMBLE THE MECHANICAL CLUTCH:



TORQUE [NM]	SPEED [RPM/MIN]	WEIGHT [KG]	EXTERNAL $\varnothing$ [MM]	LENGHT [MM]	SHAFT $\varnothing$ [MM]	PRODUCT REFERENCE
2	1000	2	70	125	20	CTS- MCX-002
4	1000	2	70	125	20	CTS- MCX-004
6	1000	2	70	125	20	CTS- MCX-006
12	1000	2,4	90	130	20	CTS- MCX-012

