

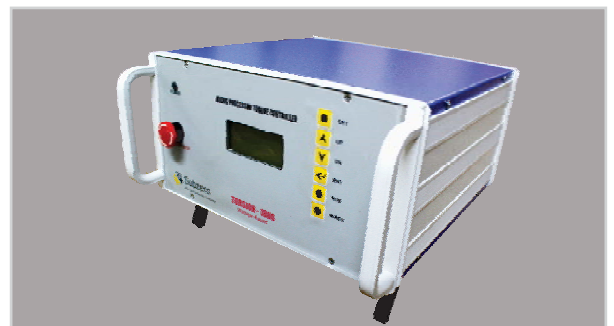


TORSION-1800 IS WATTAGE based Electronic Controller. Compact, light weight, durable & solid state. It is designed to provide accurate wattage /torque control for SUBZERO electric tube expansion drive.

## Electronic Torque Control Unit

### Specification

Volts	230
HZ	50/60 Hz
Amp	12
Wattage Adjustment	1 increments
Weight	7.5 kg



**TORSION- 1800** is wattage based Electronic controller using the latest Microcontrollers which reduce number of components . Specially designed to give fast and uniform tube expansion.

TORSION 1800 is a “Wattage” based Digital Torque Controller which uses multiple microcontroller Chips for controlling power and managing displays. Many useful features have been incorporated to improve the job quality & to enhance the drive life.

With this innovative creation, tube expansion is made easy with greater accuracy and all this can be achieved with fingertips.

## Features

- Automatically detects the connected Drive.
- Microcontroller based circuits
- User Friendly Software with all protections.
- Fully Solid state. Short Circuit and Over Load Protection.
- SMD devices used for the Electronic circuits.
- Military Grade Output connectors.
- Precise control for Torque by selecting the Wattage.
- Soft Start for all drives. Additional smooth control by selecting the slow ramp in both Forward and Reverse.
- Drive Parameters automatically seals the upper limit.
- Trip Time adjustable from 2 Sec to 10 Sec
- Adjustable Reverse Time
- Adjustable Pause Time from 1sec to 100 Sec.
- Plug in type Industrial grade connectors for PCB – reducing the number of interconnections.
- 64KB Flash Memory and 1KB RAM Built In.
- Low Power 8 Bit Micro Controller.

# Electrical Tube Expansion System

## Electric Expansion Drive



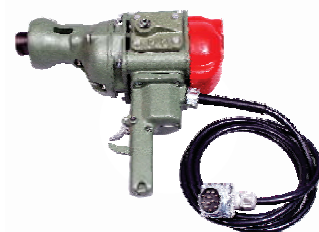
DRIVE-1



DRIVE-2



DRIVE-3



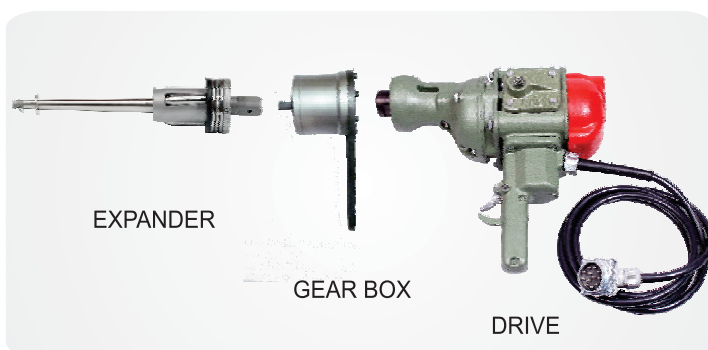
DRIVE-4



DRIVE-5



DRIVE-6



Voltage	Drive Model	Suitable tube OD range	Chuck Square Size	Weight KG
230	Drive - 1	1/4" – 3/8"	1/4" - 3/8"	2.0
	Drive - 2	1st Speed 3/8" – 1/2" 2nd Speed 1/2" – 5/8"	3/8"	2.5
	Drive - 3	1/2" – 3/4"	3/8" & 1/2"	8.5
	Drive - 4	3/4" – 1.1/2"	3/8" & 1/2"	12.0
	Drive - 5	1st Speed 5/8" – 3/4" 2nd Speed 3/4" – 1"	3/8" & 1/2"	7.5
	Drive - 6	1st Speed 1" - 1.1/2" 2nd Speed 1.1/2" - 2"	1/2" & 3/4"	8.5
	Drive - 7 (Drive 3 + Gearbox)	GB-1 1" - 1.1/2" GB-2 1.1/2" - 2"	1/2", 3/4" & 1"	16.0
	Drive - 8 (Drive 4 + Gearbox)	GB-1 2"-2.1/2" GB-2 2.1/2"-4"	3/4" & 1"	19.5
	Drive - 9 (Drive5 + Gearbox)	1.1/2" - 3"	1/2", 3/4" & 1"	15
	Drive - 10 (Drive6 + Gearbox)	2" - 5"	3/4"	16

GB - Gear Box

## TUBE EXPANSION ACCESSORIES



### TELESCOPIC SHAFT



**Application :** Use to free operator from handling drives.

Universal telescopic shaft is connected to the rolling motor by Morse taper locking. The balancing is obtained directly from the Rolling motor & operator's safety is guaranteed by protection Placed on all the rotating parts. Spindle has wide radius of action With an expansion of about 400mm for an arc of 60 degree. It is Available in different dimensions &

MODEL	Max. Tube OD	Morse Taper	Close / Expanded Length (MM)	Weight KG	Square Drive
STS - 1	32	2MT	650/1000	9.0	1/2"
STS - 2	32	3MT	950/1350	9.0	1/2"
STS - 3	76	3MT	665/1060	14.0	3/4"
STS - 4	120	4MT	710/1175	20.0	1"



TUBE EXPANSION TROLLY



BALANCE ARM