

TES700M



TES700M
Digital Electronic
Tube Expansion
Controller



KRAS
TUBE EXPANDERS

TES700M ▶ Main features



The new KRAIS TES-700-M – Digital Electronic Tube Expansion Controller. The system is controlled by an 8-bit micro processor with 2kB of Dynamic RAM memory and 32 kB of Program Memory.

We've thought of everything: A Battery Backup is provided with NV RAM which retains set up information with an unlimited number of erase/write cycles. The system has 8 flexible programmable memory presets that may be assigned to differing tube diameters that are stored within the device.

We designed the Krai TES system from the ground up to give unparalleled productivity with unmatched quality & accuracy. For starters, the TEC controller is equipped with a large and easy to read LCD display. All controls are ergonomically designed for ease of use.

- The Torque values generated within the system are measured at the tube expander, and are continuously sampled via a 12-bit micro processor sampling.
- The TES is furnished in a lightweight, durable, aluminum housing.
- The TES is intuitive by design for easy set up of tube rolling parameters.
- The TES can be used in any one of three modes, manual, semiautomatic or fully automatic.

To give our customers the greatest flexibility when choosing a TES System, we offer the following voltages: 110, 230 and 400 Volts.

The single phase motors can run up to 2070 Watts (230V). We also offer a 3 phase 400 V as an option. The TES comes complete with a memory card and USB card read that is easy to use and can be read on your PC or Laptop. Reports are generated with a key stroke documenting each expansion along with time stamp for each joint.

TES700M ▶ Quality and flexibility



Footswitch - comfortable and safe way to set up the machine, before using the auto mode.

High quality plugs made by Harting assure trouble free connections.



Lightweight durable aluminum housing and intuitive at it's core makes it easy to set up the target as well as other parameters.



Six way adjustable handle allows you to position the control box in the most convenient way suit to your application.

TES700M ▶ PC data exchange



TES-700-M is equipped with high capacity, easy to use SD memory card. The card can be read on your computer: PC or notebook with any operating system supporting FAT16 and print the quality reports, that list the expanding values, results and time stamps for each joint. Data in the file are stored in regular text mode and can be accessed via any text editor. Memory card is initiated on start up of the TES-700-M device. Green LED indicates successful initialization of memory card interface.



KRAIS TUBE EXPANDERS
HTTP://WWW.KRAIS.COM

COUNTER	TARGET	REACHED	SET DEV.	STATUS	DATE
0000	0650	0650	00%	OK	2007.0
0001	0650	0650	00%	OK	2007.0
0002	0650	0650	00%	OK	2007.
0003	0650	0650	00%	OK	2007.
0004	0650	0650	00%	OK	2007.
0005	0650	0650	00%	OK	2007.
0006	0650	0650	00%	OK	2007.
0007	0650	0650	00%	OK	2007.
0008	0650	0650	00%	OK	2007.

TES700M ▶ Menu advanced features

TES-700-M Tube rolling controller is equipped with a large and easy to read LCD display.

Display appears upon start up:

- TARGET = when reached machine stops
- COUNTER = Forward cycles
- CURRENT = value of torque
- DIAMETER = chosen in pre-selection
- OPERATION MODE = manual, semi-automatic or automatic

In the menu there are following working settings: *Expanding Time; Hold Time; Reverse Time; Pause Time; Suppression Time; Deviation (%)*.

SETUP SETTINGS : *Phase/Direction; Language - English, Spanish, Polish; Date; Time; Edit log header; Clear counter.*

PRE-SELECTION

Pre-Selected Torque set up for metal to metal contact expansion.

Pre-Selection menu is used to store TARGET settings for deferent values of diameter of tubes. There are 8 available memory cells assigned to 8 deferent diameter values, from 3/8" to 1-1/2". Once the value for a specific diameter is changed by the operator it will be stored in memory.



TES700M ▶ Flexpander



TES-700-M in conjunction with FLEXPANDER. The new tube rolling system will improve productivity and safety, while delivering unmatched performance and durability! The safest tube rolling system with unsurpassed productivity and value.

The all new state of art electronic tube rolling system has been developed to improve productivity and safety, while delivering unmatched performance and durability! We have engineered the safest tube rolling system on earth with unsurpassed productivity and value.



TES700M ▶ Trolley

TES-700-TRO - easy to move mobile trolley mounted on 4" wheels with brakes. Superior solution to suspending the rolling motor with rotating bracket and telescopic Shaft. Equipped with compartment to store your expanders, lube-a-tube or other Hand tools. There are two attachments to lock your telescopic shaft while not working or for the transportation.



Motor with rotated bracket and telescopic shaft will assure Convenience during the tube rolling operation



Lockable compartment and telescopic shaft help maintain orderliness.

TES700M ▶ Available sets

TES-700-M-BASIC

- TES-700-M-STD-S
- TES-700-M-STD-D
- TES-700-M-DTS
- TES-700-M-D -FLEX
- TES-700-M-400V



Controller
Rolling motor KS-SPY-550-1"
Up 1" 550 rpm

- TES-700-M-BASIC

TES-700-M-STD-S

- TES-700-M-STD-D
- TES-700-M-DTS
- TES-700-M-D -FLEX
- TES-700-M-400V



Controller with footswitch
Rolling motor KS-SPY-550-1"
Up 1" 550 RPM

- TES-700-M-BASIC

- TES-700-M-STD-S

TES-700-M-STD-D

- TES-700-M-DTS
- TES-700-M-D -FLEX
- TES-700-M-400V



Controller with footswitch
4 Speed motor: KS-DUS-500-2"
Up 2" 110/190/350/590 RPM
1500 W

TES700M ▶ Available sets

TES-700-M-BASIC
 TES-700-M-STD-S
 TES-700-M-STD-D
TES-700-M-DTS
 TES-700-M-D -FLEX
 TES-700-M-400V



*Controller with footswitch
 4 Speed motor: KS-DUS-500-2"
 Up 2" 110/190/350/590 RPM
 1500 W
 Telescopic Shaft F-632-MT-3
 Trolley as option*

TES-700-M-BASIC
 TES-700-M-STD-S
 TES-700-M-STD-D
 TES-700-M-DTS
TES-700-M-D -FLEX
 TES-700-M-400V



*Controller with footswitch
 4 Speed motor: KS-DUS-500-2"
 Up 2" 110/190/350/590 RPM
 1500 W
 Flexpander*

TES-700-M-BASIC
 TES-700-M-STD-S
 TES-700-M-STD-D
 TES-700-M-DTS
 TES-700-M-D -FLEX
TES-700-M-400V



*400V controller with footswitch
 Motor D-542 – 400 V
 (120/195/360/680 RPM)
 or DSL-550 – 400V
 (20/40/80/160/700 RPM)
 Telescopic Shaft F-632-MT-3
 Trolley or Flexpander (option)*

K20 ▶ Pneumatic Rolling Motor

K50 ▶ Push&Pull Rolling Motor

OTHER TORQUE CONTROLLED PNEUMATIC TUBE ROLLING MOTORS MANUFACTURED BY KRAIS

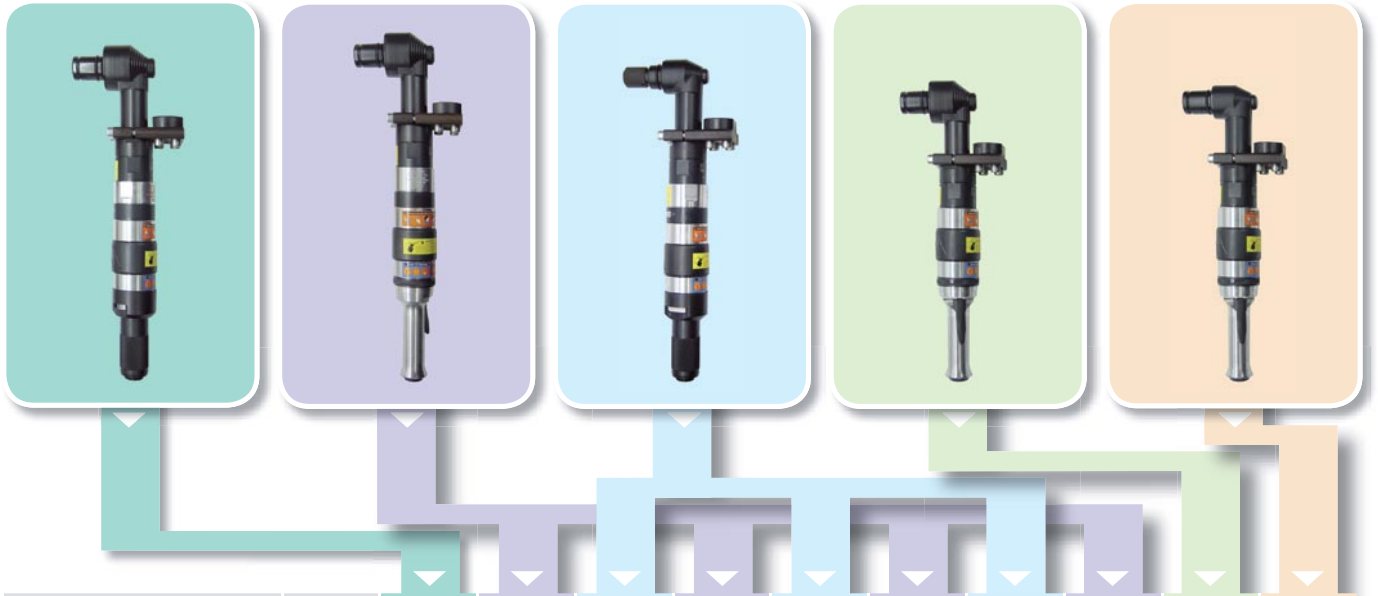


	K20-550	K20-1800	K20-2500
FREE SPEED WOLNE OBROTŲ	550 RPM	1800 RPM	2500 RPM
MINIMUM TORQUE MIN. SIŁA	0,226 NM	0,226 NM	0,226 NM
MAXIMUM TORQUE MAX SIŁA	8,47 NM	3,05 NM	0,9 NM
WEIGHT WAGA	1,20 kg	1,10 kg	1,10 kg
LENGTH DŁUGOŚĆ	219 MM 8,62"	205 MM 8,07"	205 MM 8,07"
AIR CONSUMPTION ZUŻYCIE POWIETRZA	480 L/M	480 L/M	480 L/M
TUBE CAPACITY MAX ŚREDNICA RURY	12,7 MM 1/2"	9,5 MM 3/8"	6,3 MM 1/4"
CHUCKS UCHWYT	6,35 MM 1/4"	6,35 MM 1/4"	6,35 MM 1/4"
CHUCKS OPT UCHWYT OPC.	9,5 MM 3/8"	9,5 MM 3/8"	9,5 MM 3/8"

	K50-1250	K50-600	K50-400
FREE SPEED WOLNE OBROTŲ	1250 rpm	600 rpm	400 rpm
MINIMUM TORQUE MIN. SIŁA	1,58 Nm	2,49 Nm	5,00 Nm
MAXIMUM TORQUE MAX SIŁA	12,2 Nm	21,81 Nm	36,00 Nm
WEIGHT WAGA	4,76 kg	4,76 kg	4,76 kg
LENGTH DŁUGOŚĆ	311 mm	311 mm	311 mm
AIR CONSUMPTION ZUŻYCIE POWIETRZA	1700 l/min	1700 l/min	1700 l/min
TUBE CAPACITY MAX ŚREDNICA RURY	3/4"	1"	1 1/4"
SQUARE SIZE KWADRAT	3/8"	3/8"	3/8"
CHUCKS UCHWYT	3/8"	3/8"	3/8"

K70 ▶ Right Angle Rolling Motor

OTHER TORQUE CONTROLLED PNEUMATIC TUBE ROLLING MOTORS MANUFACTURED BY KRAIS



		K72-RT-90	K72-LT-90	K73-RT-190	K73-LT-190	K73-RT-280	K73-LT-280	K73-RT-375	K73-LT-375	K72-LT-90-ST	K73-LT-190-ST
FREE SPEED	RPM	90	90	190	190	280	280	375	375	90	190
TORQUE CONTROLLED		YES	YES	YES	YES	YES	YES	YES	YES	STALL TYPE	STALL TYPE
MAXIMUM TORQUE	NM	410	410	200	200	140	140	110	110	440	210
	FT.LBS	305	305	140	140	104	104	82	82	325	155
MINIMUM TORQUE	NM	200	200	95	95	60	60	40	40	STALL TYPE	STALL TYPE
	FT.LBS	150	150	70	70	44	44	30	30	STALL TYPE	STALL TYPE
WEIGHT	KG	6,7	6,7	5,8	5,8	5,8	5,8	5,8	5,8	6	5,4
	LBS	14,75	14,75	13	13	13	13	13	13	13,2	11,8
OVERALL LENGTH	MM	550	550	530	530	530	530	530	530	485	465
	INCH	21,7	21,7	20,1	20,1	20,1	20,1	20,1	20,1	19	18,5
HEIGHT WITHOUT SQUARE DRIVE	MM	70	70	65	65	65	65	65	65	70	65
	INCH	2,75	2,75	2,6	2,6	2,6	2,6	2,6	2,6	2,75	2,6
SIDE TO CENTER	MM	37	37	28	28	28	28	28	28	37	28
	INCH	1,5	1,5	1,1	1,1	1,1	1,1	1,1	1,1	1,5	1,1
SQUARE DRIVE	MM	3/4"	3/4"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	3/4"	5/8"
	INCH	19	19	15,8	15,8	15,8	15,8	15,8	15,8	19	15,8
THROTTLE TYPE	TYPE	ROLL	LEVER	ROLL	LEVER	ROLL	LEVER	ROLL	LEVER	LEVER	LEVER
TUBE CAPACITY	MM	101,6	101,6	63,5	63,5	57,1	57,1	50,8	50,8	101,6	63,5
	INCH	4"	4"	2,5"	2,5"	2,25"	2,25"	2"	2"	4"	2,5"
CHUCK SIZE	MM	25,4 & 19	25,4 & 19	19	19	19	19	19	19	25,4 & 19	19
	INCH	1" & 3/4"	1" & 3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	1" & 3/4"	1" & 3/4"
CHUCK SIZE OPTIONAL	MM			12,7 QCC	12,7 QCC	12,7 QCC	12,7 QCC	12,7 QCC	12,7 QCC		12,7 QCC
	INCH			1/2" QCC	1/2" QCC	1/2" QCC	1/2" QCC	1/2" QCC	1/2" QCC		1/2" QCC

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