

←R-O-T-H-S-C-H-I-L-D→

INSTRUMENTS ZÜRICH

**MEMO-TENS R-3010
NEW !**

**Smallest - light portable ELECTRONIC-TENSIOMETER
with full data evaluation and statistics**

MEMO-TENS R-3010 on spinning machine



Measured Solutions, Inc.

Trusted Resource. Precise Results.

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Greenville, SC 29607

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MEMO-TENS R-3010



Memo-Tens R-3010 with Measuring Head, Tablet PC

Description of new MEMO-TENS R-3010

MEMO-TENS R-3010 is a **new concept** for yarn tension measurements on multiple yarn production machines for fast data acquisition in the whole plant.

Since years our ROTHSCHILD ELECTRONIC TENSIO METER are a trade word with yarn producers worldwide.

Up to now ROTHSCHILD ELECTRONIC TENSIO METER where composed of three parts.

- Measuring electrode (measuring head) to take up the yarn under tension

- proper ELECTRONIC TENSIOMETER for signal amplification ,data preparation for transfer to data evaluation - this instrument, weights approx. 8 kgs. - and is connected to electric power.

- a PC or Laptop.

All this units had to be mounted on a trolley and guided through the plant for measuring yarn tensions during production. A near by electric plug was condition.

NEW

The new ROTHSCHILD MEMO-TENS R-3010 is a revolution in data acquiring of yarn tension in the plant.

Thank new engineering technics, new miniaturised electroniques it was possible to build all parts of the ROTHSCHILD ELECTRONIC-TENSIOMETER into the measuring head. All of minimal dimensions and weight.

(30 x 160 mm 220 gramms)

This brings the whole yarn tension device inclusive all parts to a :
measuring head 220 grams +Tablet PC 600 grams !

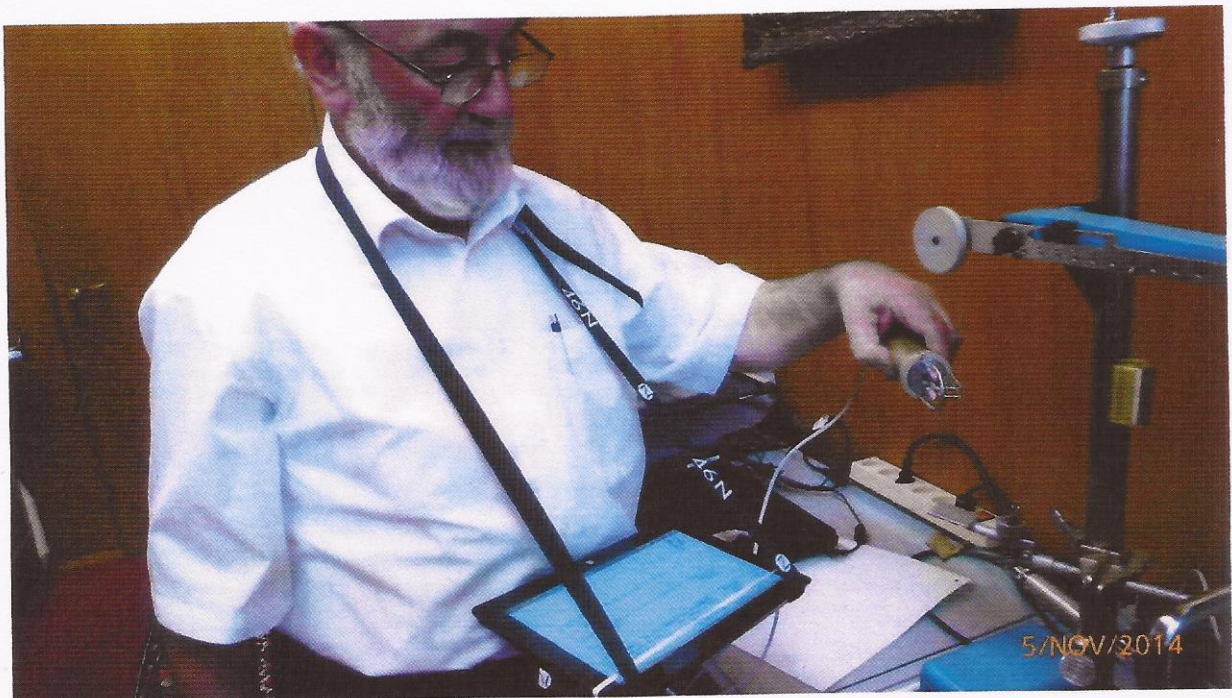
No problem anymore to go though the whole plant taking yarn tension measurements and record all data .

By preference the MICRO SOFT 10" Surface 2 Tablet is recommended

Scope of delivery

Following items are parts of the new MEMO-TEN R-3010 unit :

- 1 Yarn Tension measuring head - with build in ELECTRONIC - TENSIOMETER
following units can be delivered 10 / 40 / 100 / 400 / 1000 cN
- Tablet PC 10" MICROSOFT Surface 2 with key board cover
- 1 memory stick with software
- 1 charger for tablet
- Instruction manual
- various accessories
as USB triple plug., tablet pen, purse, ear-phone. cables etc.



correct position of the tablet for preliminary tests



Tablet in parking position (hanging from your shoulders)

While measuring continuously the yarn positions on the production machines - the tablet stays in parking position.

One measuring cycle measures up to 150 yarn positions ..

Data evaluation from MMT 3010 measurements

Example : 106 yarn positions where measured.

Measuring head 100 cN - Range 0 - 25 cN

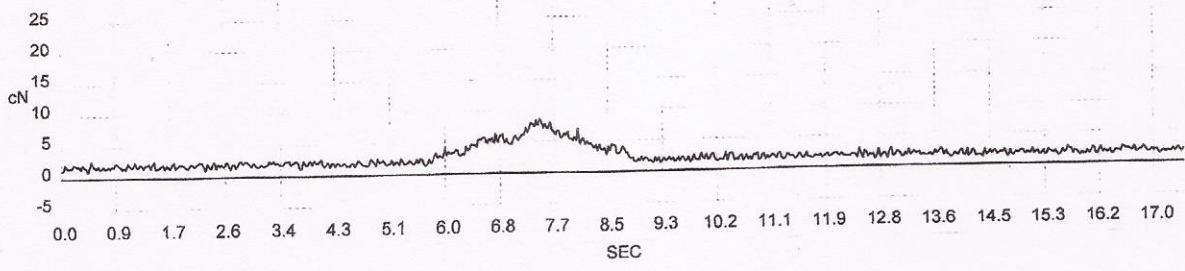
Measuring Time / Position between 4 -38 seconds

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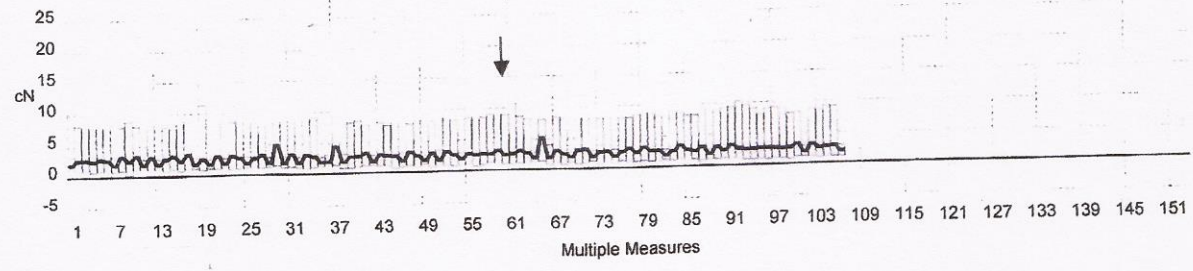
1

TEST:	Trigger	LOT:	47	DATE:	07:11:2014 / 09:46
YARN:	Cotton	COND.:		OPTION:	Neue Position
FILE:	110714b_60	MISAN:	Wesskopf mit Finger bewegt	OPERATOR:	Rolf

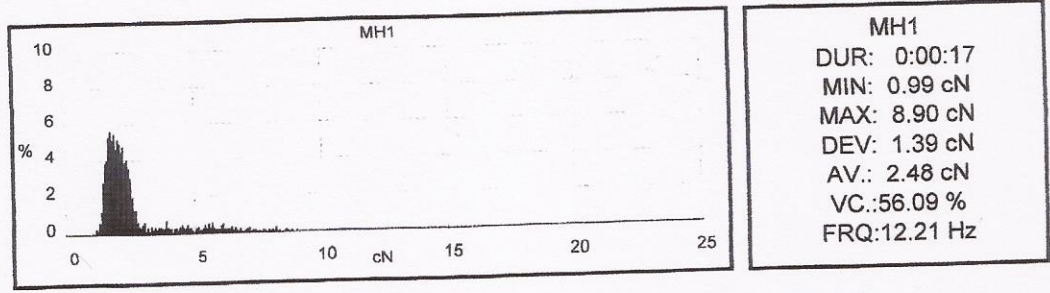
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3



4

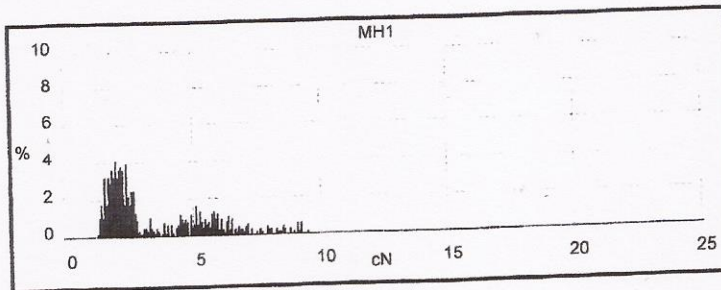
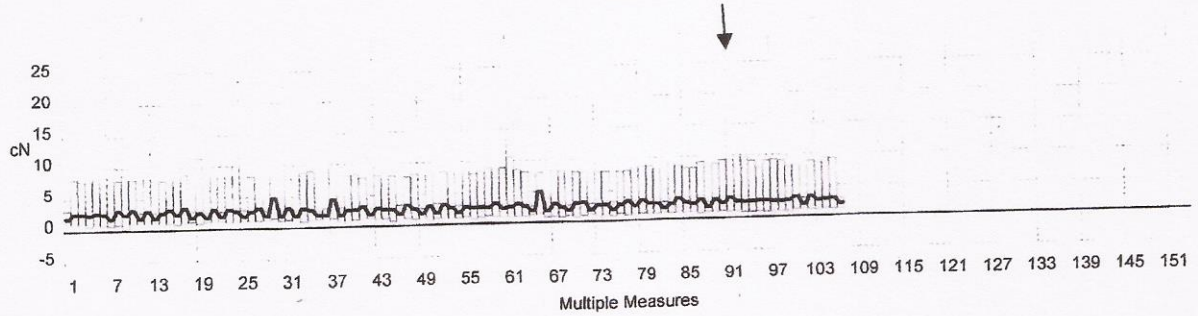
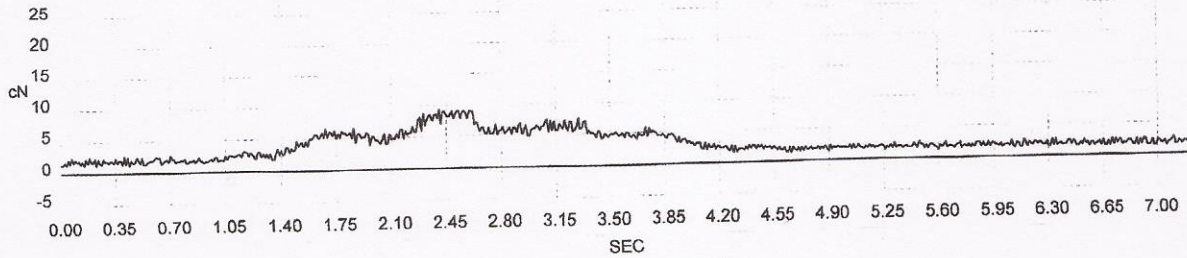


5

- 1 Preset parameters
- 2 Tension graph of 1 position (no.60 out of 106 positions measured)
- 3 Display for each measured position (max / min / average)
- 4 Histogram of measured position (press down page)
- 5 statistic data evaluation of measured position

ROTHSCHILD INSTRUMENTS ZÜRICH

TEST:	Trigger	LOT:	47	DATE:	07:11:2014 / 09:53
YARN:	Cotton	COND.:		OPTION:	Neue Position
FILE:	110714b_91	MISAN:	Messkopf mit Finger bewegt	OPERATOR:	Rolf



MH1	
DUR:	0:00:07
MIN:	1.22 cN
MAX:	9.40 cN
DEV:	1.97 cN
AV.:	3.42 cN
VC.:	57.63 %
FRQ:	10.64 Hz

Graph of measured position 91 (out of 106 positions)

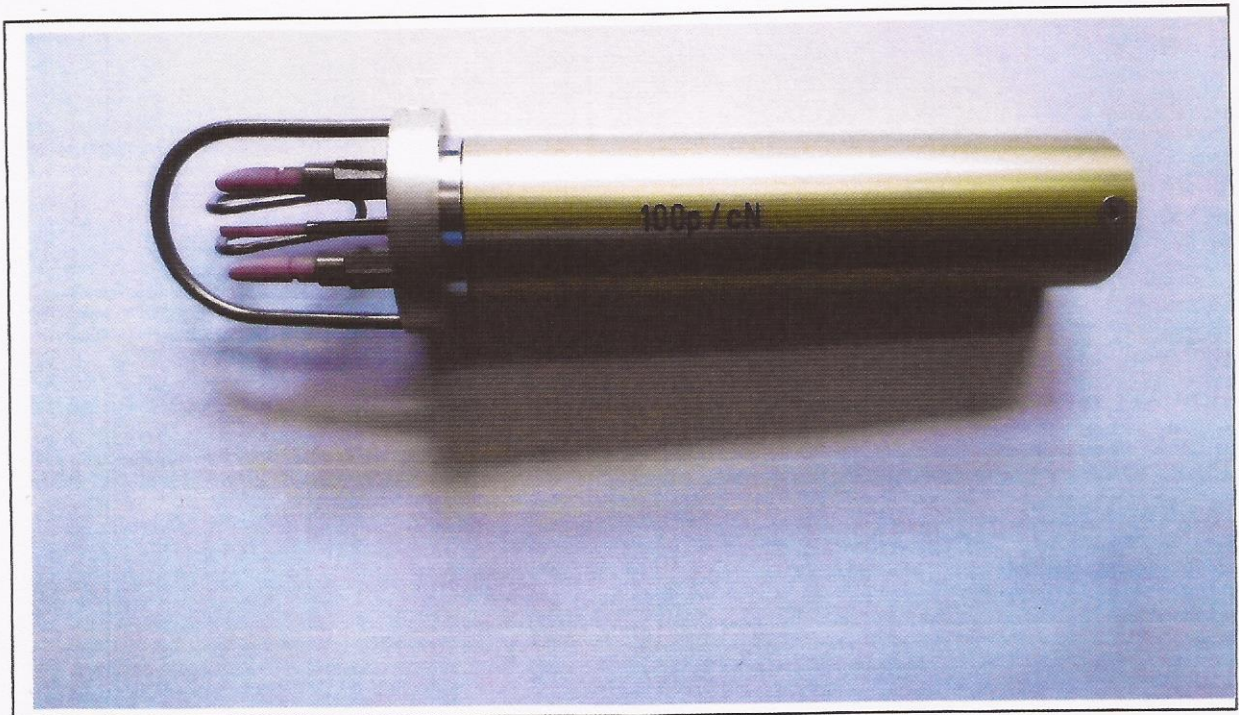
To see the statistics table of all measurements - press "stat" (top line) :

see following page

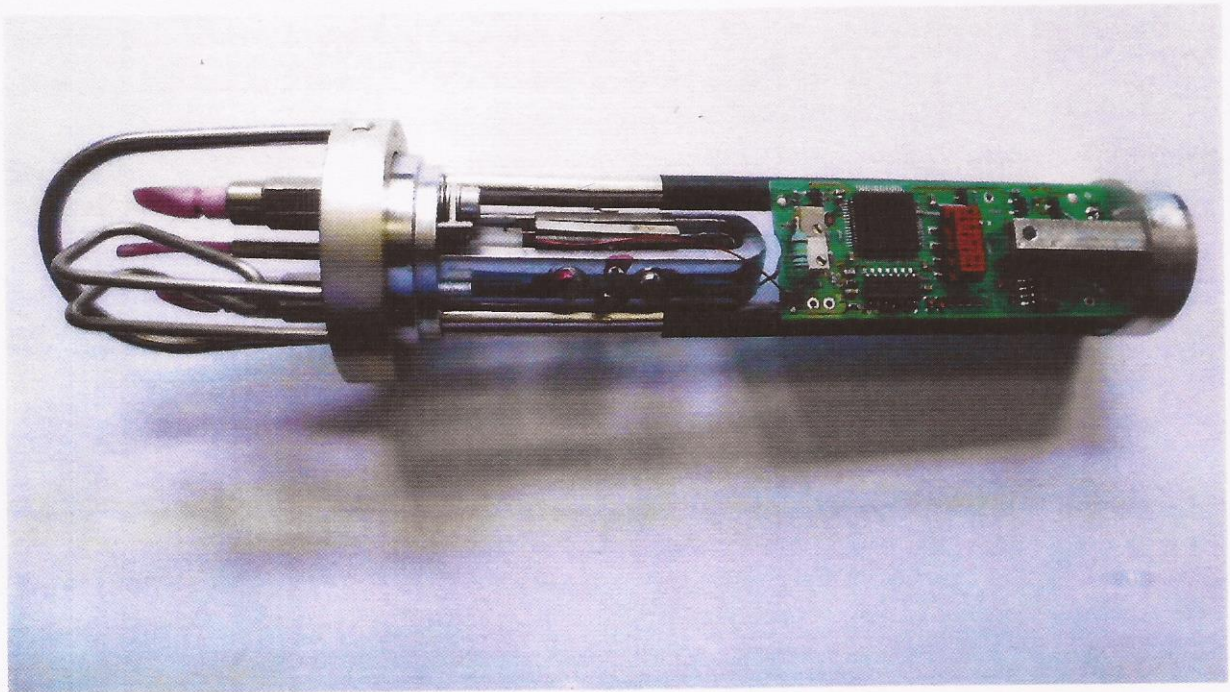
ROTHSCHILD INSTRUMENTS ZÜRICH

FILENAME	MH	DATE	DURATIONMIN	MAX	S	AV	CV	FRQ	
			cN	cN	cN	cN	%	Hz	
110714b_01	1	07:11:2014 / 09:34	0:00:00	1.26	3.26	0.35	2.00	17.66	0.00
110714b_02	1	07:11:2014 / 09:34	0:00:12	0.98	8.21	1.61	2.77	58.19	11.00
110714b_03	1	07:11:2014 / 09:34	0:00:12	1.09	7.97	1.60	2.77	57.78	11.17
110714b_04	1	07:11:2014 / 09:35	0:00:33	0.76	7.84	1.39	2.51	55.30	11.76
110714b_05	1	07:11:2014 / 09:35	0:00:21	0.97	8.32	1.58	2.81	56.14	11.50
110714b_06	1	07:11:2014 / 09:36	0:00:12	0.85	7.85	1.46	2.69	54.22	11.88
110714b_07	1	07:11:2014 / 09:36	0:00:01	1.03	2.81	0.40	1.87	21.21	16.00
110714b_08	1	07:11:2014 / 09:36	0:00:07	0.96	7.94	1.74	3.28	53.02	11.79
110714b_09	1	07:11:2014 / 09:36	0:00:34	0.20	8.91	1.38	2.48	55.62	11.59
110714b_10	1	07:11:2014 / 09:37	0:00:07	1.07	8.09	1.77	3.26	54.17	10.64
110714b_11	1	07:11:2014 / 09:37	0:00:01	1.12	2.80	0.38	1.86	20.63	15.50
110714b_12	1	07:11:2014 / 09:37	0:00:08	1.14	8.24	1.85	3.17	58.41	10.50
110714b_13	1	07:11:2014 / 09:37	0:00:02	1.09	2.75	0.34	1.91	18.03	15.50
110714b_14	1	07:11:2014 / 09:37	0:00:11	0.77	7.88	1.56	2.77	56.44	11.45
110714b_15	1	07:11:2014 / 09:38	0:00:07	1.11	7.62	1.77	3.28	54.03	10.14
110714b_16	1	07:11:2014 / 09:38	0:00:17	0.81	8.42	1.37	2.47	55.51	11.59
110714b_17	1	07:11:2014 / 09:38	0:00:06	1.00	8.83	1.87	3.47	54.02	10.58
110714b_18	1	07:11:2014 / 09:38	0:00:03	1.11	2.89	0.33	1.88	17.35	15.50
110714b_19	1	07:11:2014 / 09:38	0:00:38	0.87	11.38	1.56	2.67	58.32	11.34
110714b_20	1	07:11:2014 / 09:39	0:00:02	1.14	2.72	0.32	1.89	16.99	14.75
110714b_21	1	07:11:2014 / 09:39	0:00:07	1.14	8.61	1.81	3.27	55.33	11.64
110714b_22	1	07:11:2014 / 09:39	0:00:02	1.15	2.80	0.33	1.92	17.40	13.50
110714b_23	1	07:11:2014 / 09:39	0:00:08	1.02	8.53	1.77	3.11	56.83	10.81

FILENAME	MH	DATE	DURATIONMIN	MAX	S	AV	CV	FRQ	
110714b_100	1	07:11:2014 / 09:58	0:00:07	1.10	8.36	1.77	3.30	53.75	11.14
110714b_101	1	07:11:2014 / 09:58	0:00:03	1.09	2.75	0.35	1.93	18.09	16.00
110714b_102	1	07:11:2014 / 09:58	0:00:07	1.14	8.89	1.77	3.30	53.51	11.50
110714b_103	1	07:11:2014 / 09:58	0:01:18	0.93	8.67	1.39	2.58	53.72	11.94
110714b_104	1	07:11:2014 / 10:00	0:00:12	1.11	9.30	1.58	2.78	56.98	11.17
110714b_105	1	07:11:2014 / 10:00	0:00:23	1.03	9.22	1.64	2.83	57.87	11.28
110714b_106	1	07:11:2014 / 10:00	0:00:04	1.02	2.82	0.36	1.94	18.35	15.50
* OVERALL AVERAGE *				1.036	7.067	1.277	2.685	45.29	12.24



Measuring Head 100 cN with built in
ROTHSCHILD ELECTRONIC-TENSIOMETER



Measuring Head 100 cN with built in
ROTHSCHILD ELECTRONIC-TENSIOMETER - open -