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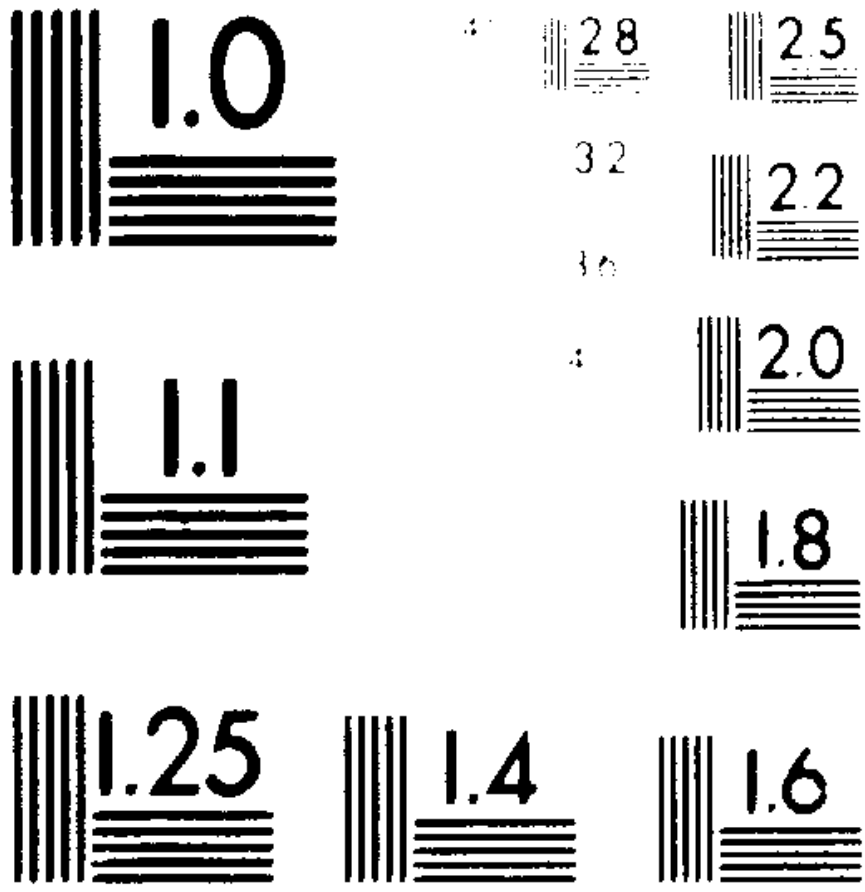

prüfen + messen

FRANK

KARL FRANK GMBH

14259

Ulan-Bator, 21.7.84

Report on the visit of Mr. H.D. Elter of Karl Frank GmbH, Weinheim, FRG, to the Leather Research and Experimental Centre, Ulan Bator

Mongolia PR.

Final Report - Project SI/MON/84/005 - Repair of the Tensile Testing Machine at the Leather Research Centre, Ulan Bator.

During the stay of Mr. Elter from 27.6.84 up to 23.7.84 in Ulan-Bator, the Tensile Testing Machine Type 557/24/74 was checked up in our Institute and repaired. The load and elongation measuring device was modified and newly calibrated. A module measuring device was installed, the machine drive was extended.

Furthermore, one technician and 6 laboratory assistants were trained by Mr. Elter. The Laboratory staff was instructed and got well versed in the working mode of the tensile testing machine.

Tests were executed on different leather fabrics and evaluated by means of the diagram.
Two electricians of our Servicing Department were informed and instructed in detail on the electronic and electrical as well as the mechanical system of the machine.

An operating manual in English with diagram of connections was handed over to us.
In order to guarantee the readiness for use of our tensile testing machine, which is used in our research department, and as there is no possibility to procure spare parts at site, we decided to take over the complete spare parts delivery.

The daily working hours were as follows: on Mondays to Fridays: 8 hours, on Saturdays: 6 hours.

Spare parts list, see page 2

3022

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Maßstab- und Prüfmaschinenbau

Form 043

List of spare parts: UNIDO project No. SI/MON/84/801

For mounting purposes:	1 pc.	HP recorder DIN A 3
	1 "	amplifier MG 3150 S 53
	1 "	power pack (for amplifier)
	1 "	range change-over switch
	1 "	toggle relay RS 4103
	1 "	impedance transformer IW 53
	1 "	power pack +- 15 V
	2 pcs.	zero setting pot. 10 k, 10 steps
	1 pc.	displacement signal transducer pot. 5 k, 10 steps
	1 pc.	relay TEP 3/200
remaining parts	1 "	load cell 10 kN
and consumption	1 "	thyristor drive AEG 220.2
material	1 "	relay TEP 3/200
	2 pcs.	zero setting pot. 10 k, 10 steps
	1 pc.	relay LS/8
	1 "	displacement signal transducer pot. 5k, 10 steps
	1 "	Drive motor 3000 U/min
	60 pcs.	writing pens
	1000 sheets	diagram paper

KARL FRANK GMBH
Meßzeug- und Büromaschinenbau

Technical Report on the repair of the Tensile Testing Machine type 557/24/74, manufacture of KARL FRANK GMBH

UNIDO project No. SI/MON/84/801

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1. Defective parts on the load measuring electronics:
   Load cell, power pack of the load amplifier, recorder and range change-over switch were replaced. The electronic control system was modified and the load measuring ranges were newly calibrated.

2. Defective parts on the elongation measuring device:
   The signal transducer potentiometer was worn out. The complete control system was modified, impedance transformer, power pack, transducer potentiometer, Cardan clutch and trimmer potentiometer were installed. The Instrument was newly calibrated in all measuring ranges.

3. Failure of the machine drive:
   The drive showed mal-function from time to time during automatic return. The electric control system was modified, 2 relays LS/8, 1 relay RS 4103, 1 relay TEP 3/200 and 1 relay RHm 1004 G were installed.
   Recorder operating was checked up and repaired.

4. Recorder control insert:
   Existing contact failures were eliminated, 4 switches were replaced.

5. Module measuring and marking device: Module marking device for important test runs was installed. Parts: rectifier, condenser, pressure key and relay.

6. Maintenance and servicing work was done.

7. Laboratory staff was trained and tests were executed.

8. Service staff (2 electricians) of the Institute were trained and details explained.

KARL FRANK GmbH
Meßzeug- und Prüfmaschinenbau

R E I S E -Aufstellung

Monteur: Elter Woche vom: 25.06. bis 24.7.84

Tag	Fahrt von	nach	Kunde-Ort	km	Fz.:	Az.:
25.6.84	Ulm	Wien	UNIDO,Wien		5,o	4,o
26.6."	Wien	Frankfurt-Moskau			9,75	
27.6."	Moskau	Ulan-Bator	Institut U.Bator		1o,o	2,5
28.6."			" "			8,o
29.6."			" "			8,o
3o.6."Sa.			" "			6,o
2.7."			Institut U.Bator			8,o
3.7."			" "			8,o
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5.7."			" "			8,o
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7.7."Sa.			" "			6,o
9.7."			Institut U.Bator			8,o
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16.7."			Institut U.Bator			8,o
17.7."			" "			8,o
18.7."			" "			8,o
19.7."			" "			8,o
2o.7."			" "			8,o
21.7."Sa.			" "			6,o
23.7."	Ulan-Bator	Moskau			1o,o	
24.7."	Moskau	Frankfurt-Ulm			9,o	

Oberdischingen,25.o7.84

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Maßraum- und Prüfmaschinenbau