

Tinius Olsen

Deluxe Super "L" Series

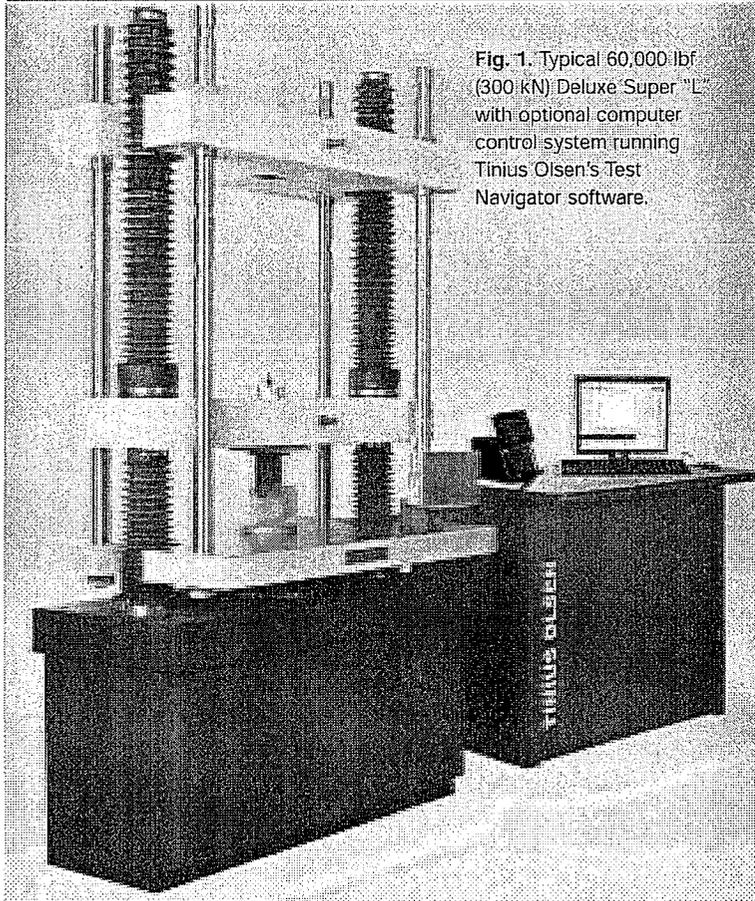


Fig. 1. Typical 60,000 lbf (300 kN) Deluxe Super "L" with optional computer control system running Tinius Olsen's Test Navigator software.

Deluxe Super "L" machines have extra-large testing clearances and include an adjustable upper cross-head. They are available in 60,000 to 400,000 lbf (300 to 2,000 kN) versions. These machines have closed crossheads with crank operation of rack and pinion grips and a solid compression plate as standard. Grips are optional.

Tinius Olsen will customize any Deluxe Super "L" to your needs. Available options include: extra-length screws and columns; tooling for tension, compression, shear, flexure, and other tests; accordion-type, non-metallic screw covers; semi-open crossheads and manually or hydraulically-powered lever grips for

machines of 200,000 through 400,000 lbf (1,000 through 2,000 kN) capacity; choice of high or low base for machines of 200,000 through 400,000 lbf (1,000 through 2,000 kN) capacity; broad range of strain measuring instrumentation; low-capacity load cells; tee-slotted table (front to back) for locating and securing tooling; closed-loop servo control; software and computer systems; and furnaces for temperatures to 2200° F (1204° C).

Test frames feature a patented dual-pressure hydraulic loading system and a new space-saving console.

All Super "L" systems are guaranteed to meet ASTM, ISO, and

other national and international specifications for accuracy. Accuracy is within +/- 0.5% of applied force from 0.2% to 100% of the frame capacity.

Easy-to-use testing software.

Tinius Olsen has a wide range of software that can be added to the Super "L" for data acquisition and for computer-assisted control of the testing machine (for machines equipped with the optional servo control).

Testing control with handheld controller.

For manual control and convenient operation each Super "L" includes as standard a handheld controller with an LCD and an extended cord. A portion of the LCD reads force in either lbf, N, or kgf in 10 mm high numbers. In addition to displaying force, it can be optionally equipped with appropriate instrumentation and signal conditioners to display position and strain. If the position instrumentation (high resolution encoder) and signal conditioning module are ordered, speed will also be displayed.

Optional servo control.

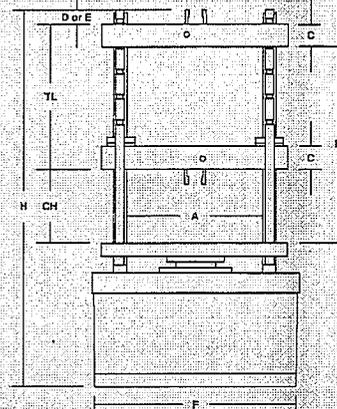
As dependable as the basic manually controlled Super "L" is, the rate at which load is applied is determined by the operator. Therefore, as an option, the Super "L" can be supplied with closed-loop servo control capability. This closed-loop control system constantly monitors the test in progress and regulates the testing rate to maintain preset conditions. This option enables you to conduct compression tests and flexure tests automatically, and ensures consistent testing control, free from operator variability. Also, this valuable feature can be easily added to the machine at a later date with hardware and software options.

MODEL		60D	120D	200D	300D	400D
CAPACITY	lbf	60,000	120,000	200,000	300,000	400,000
	kN	300	600	1,000	1,500	2,000
	kgf	30,000	60,000	100,000	150,000	200,000
MACHINE SPECIFICATIONS	Stroke in mm	9 229	12 300	12 300	12 300	12 300
	Testing Speeds in/min mm/min	0-3 0-76	0-3 0-76	0-35 0-85	0-3.5 0-85	0-3.5 0-85
	Adjustable Crosshead Speed in/min mm/min	12 305	12 305	12 305	12 305	12 305
LOAD FRAME DIMENSIONS 1	(A) Clearance Between Screws 7 in mm	30 762	30 762	30 762	30 762	30 762
	(B) Standard Opening in mm	43.25 1099	66 1676	86.5 2197	94.25 2394	94.25 2394
	(C) Crosshead Thickness in mm	5 127	6.5 165	8 203	10.5 267	10.5 267
	(D) Grip Guard Thickness in mm	2.25 57	3.5 89	2.75 70	3.56 91	3.56 91
	(E) Lever Height in mm	— —	— —	8.75 222	10.75 273	10.75 273
	(F) Width 3 in mm	44 1118	42.5 1080	44.125 1121	49.5 1257	49.5 1257
	(G) Depth 3 in mm	20 508	25.25 641	30 762	34 864	34 864
	(H) Height 2, 4 in mm	81.75 2077	112.5 2858	129 3277	137 480	137 3480
MACHINE WEIGHT 1	Net lbs kg	5700 2586	7500 3402	11,000 4990	16,400 7440	16,400 440
	Gross lbs kg	6200 2812	8200 3720	12,000 5475	18,200 856	18,200 8256
NOMINAL MAXIMUM SPECIMEN SIZES 2	Max.-TL Rack & Pinion in mm	36 914	48 1219	76 1930	80 2032	80 2032
	Max.-TL Lever Grips in mm	— —	— —	72 1829	72 1829	72 1829
Tension Lengths	Width in mm	2 51	2.5 64	3 76	4 102	4 102
	Thickness in mm	1.75 44	1.75 44	2.625 67	2.875 73	2.875 73
	Diameter in mm	1.125 29	2.25 57	2.15 64	3.75 83	3.25 83
Compression Height	Max.-CH Rack & Pinion in mm	36 914	48 1219	74 1880	72 1829	72 1829
	Max.-CH Lever Grips in mm	— —	— —	74 1880	72 1829	72 1829

Contact Your Local Representative:

Standard Super "L" UTMs Console Dimensions

MODEL		60D	120D	200D	300D	400D
Width	in	36	48	76	80	80
	mm	915	1219	1930	2032	2032
Depth	in	31	31	72	72	72
	mm	788	788	1829	1829	1829
Height	in	40	40	129	137	137
	mm	1016	1016	3277	480	3480



- Notes:
1. Approximate
 2. Additional height clearances can be provided
 3. Dimension of footprint base; overall dimensions will depend on options selected
 4. Add D or E as applicable and add stroke 5. With full stroke remaining
 5. With full stroke remaining
 6. These machines can be floor or pit-mounted to meet customer testing requirements; pit mounting may require additional components
 7. Specifications subject to change without notice

Fig. 4. Schematic of load frame. Refer to table at left for actual dimensions.

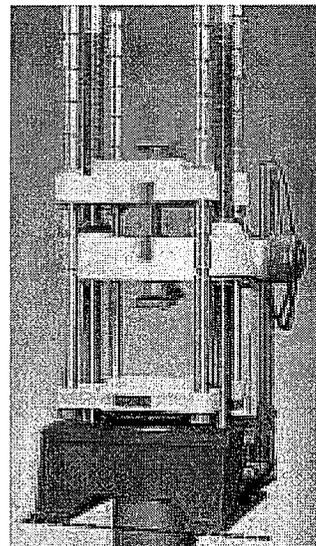


Fig. 2. Typical 400,000 lbf (2,000 kN) Deluxe Super "L" load frame with a low base and recessed cylinder.

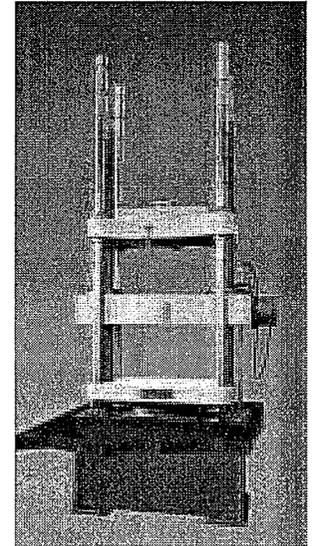
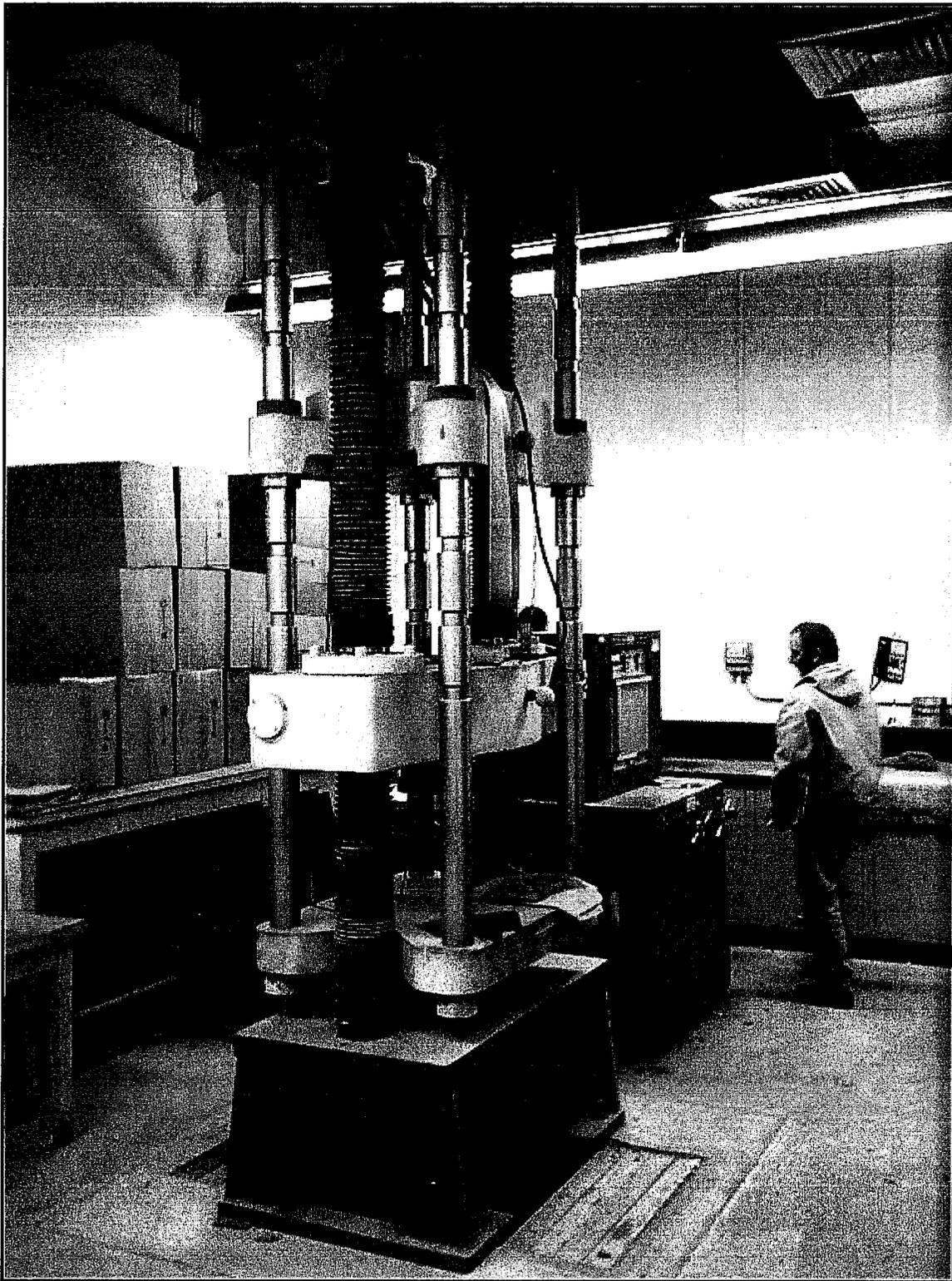


Fig. 3. Typical 400,000 lbf (2,000 kN) Deluxe Super "L" load frame with a high base (can be arranged for floor or pit mounting).



World Headquarters:
 1065 Easton Road, Horsham, PA 19044 USA
 (215) 675-7100 • Fax (215) 441-0899
 www.TiniusOlsen.com • info@TiniusOlsen.com

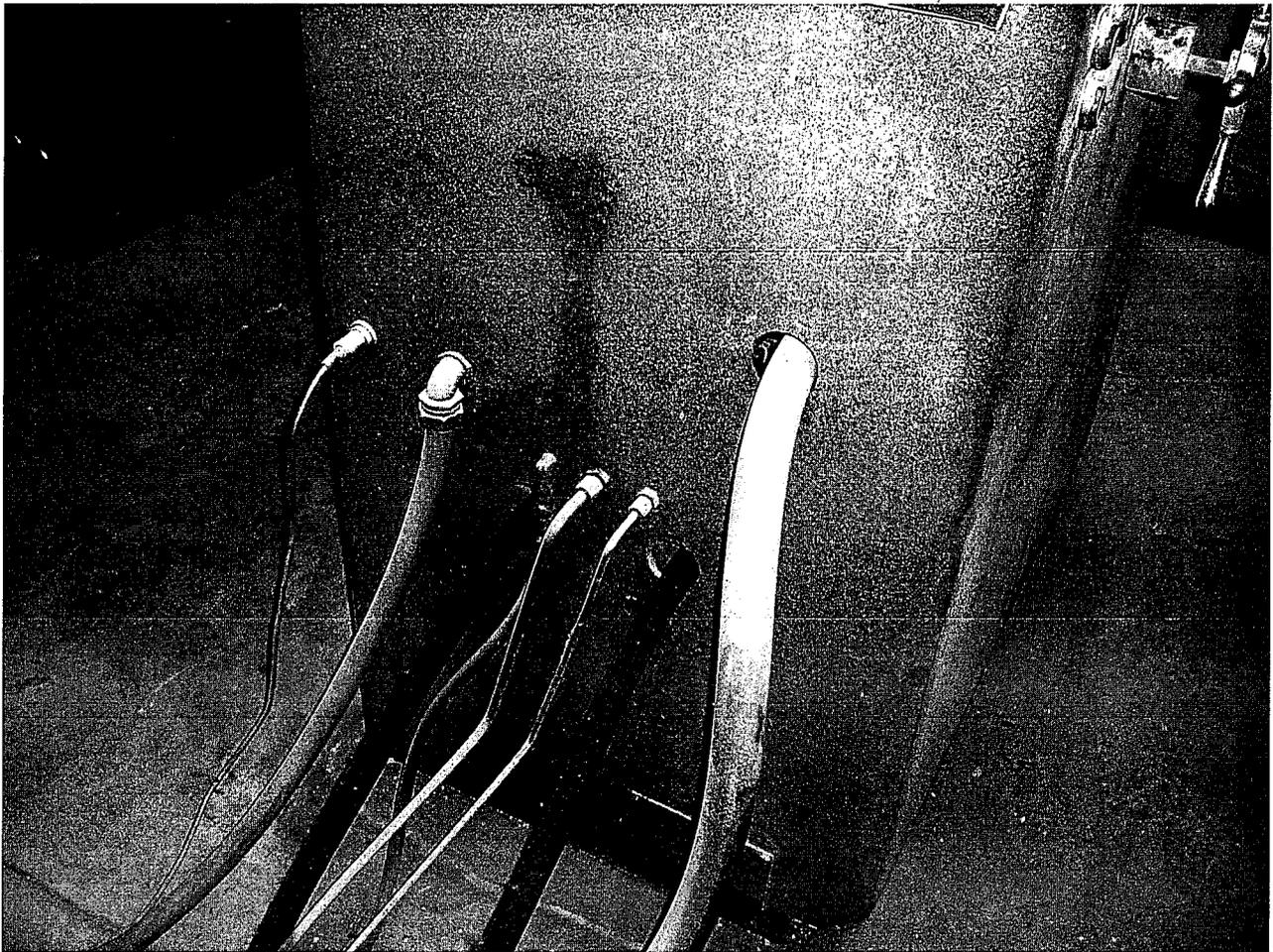
European Headquarters:
 6 Perrywood Business Park, Honeycrock Lane,
 Salfords • Redhill, Surrey RH1 5DZ England
 ++44 (0) 1737 765001 • Fax ++44 (0) 1737 764768



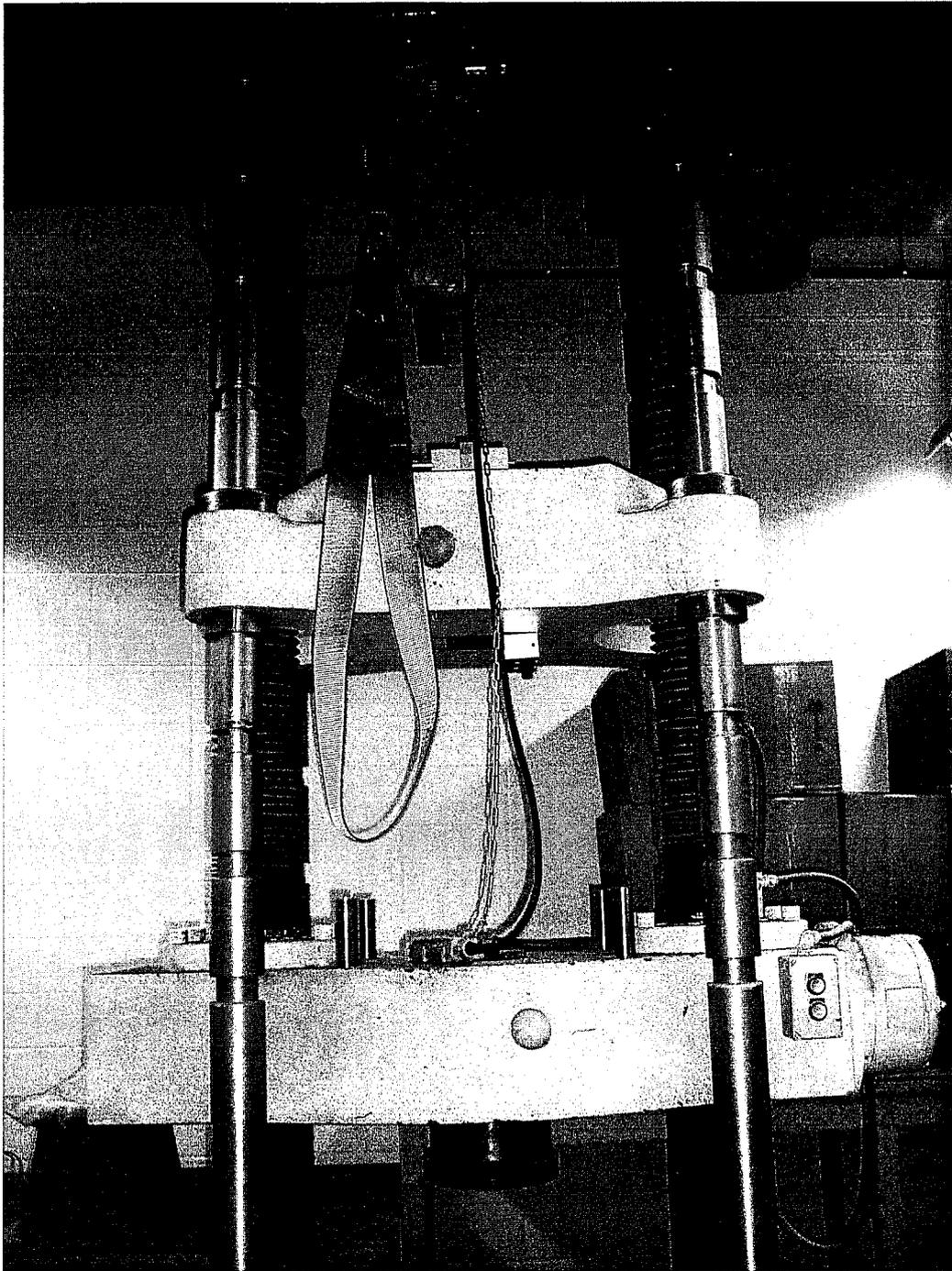
Tinus Olsen Super L UTM (two pieces); located in Kansas City



Tinius Olsen Super L UTM; pumping unit



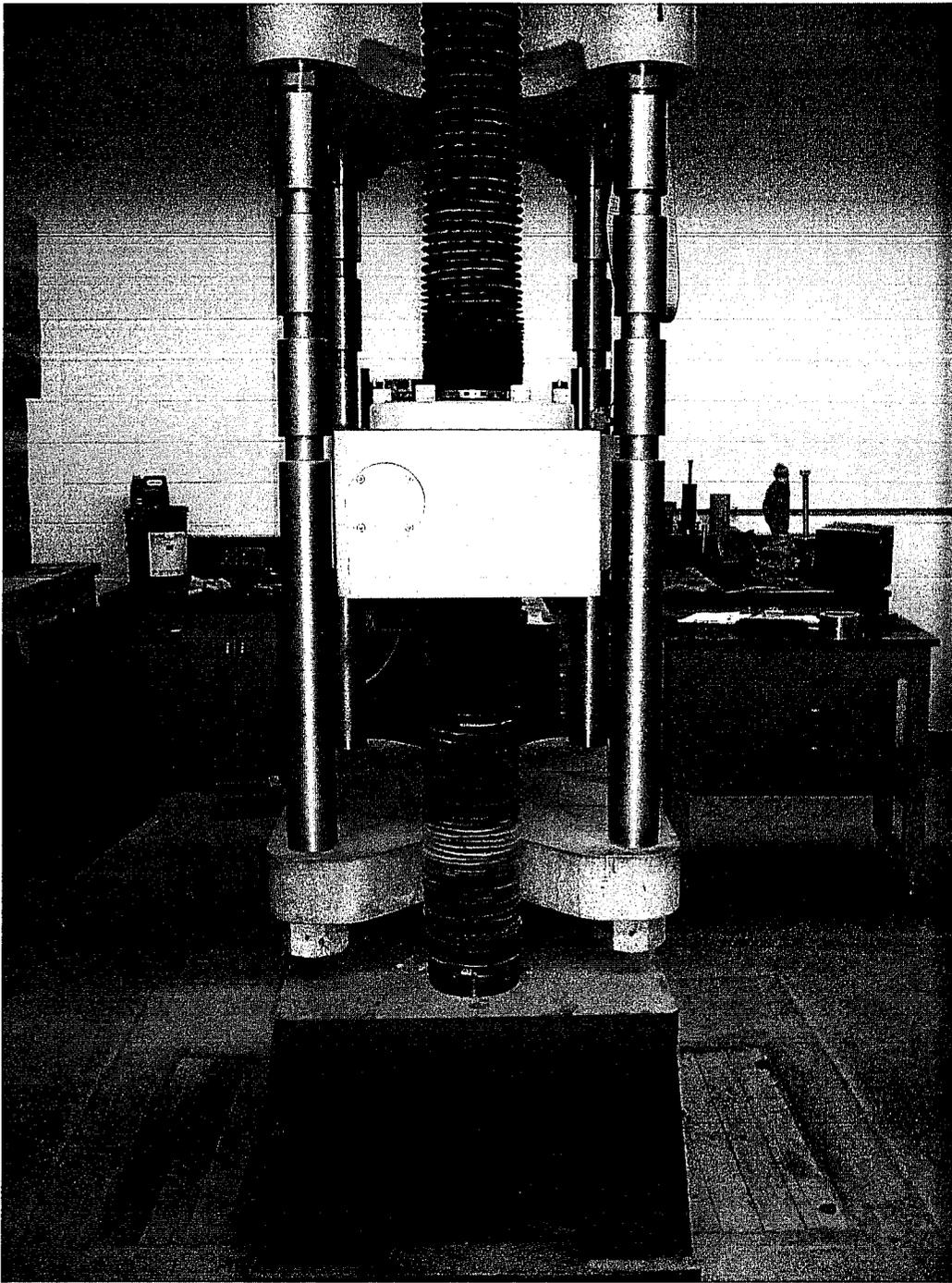
Tinius Olsen Super L UTM; pumping unit



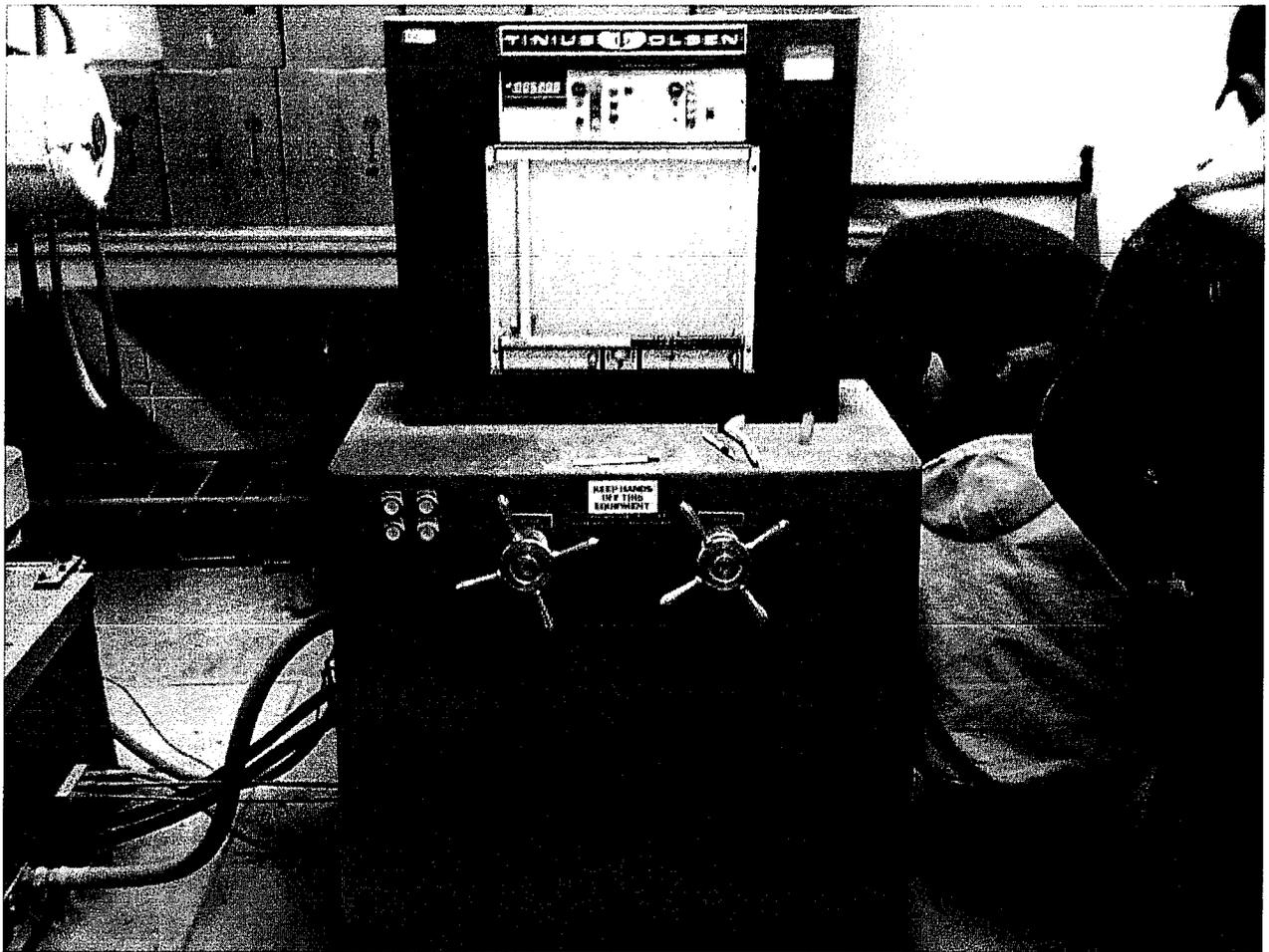
Tinius Olsen Super L UTM



Tinius Olsen Super L UTM base view



Tinius Olsen Super L UTM



Tinus Olsen Super L UTM; pumping unit connection