

**ROBINSON
MANUFACTURING**
COMPANY INCORPORATED

MANUFACTURING SINCE 1954

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ROBINSON MANUFACTURING
COMPANY INCORPORATED

PRODUCT WARRANTY

Robinson Manufacturing warrants products manufactured by Robinson Manufacturing to be free of defective material and workmanship for one year from the date of shipment by Robinson Manufacturing. The liability of Robinson Manufacturing for defective equipment during the warranty period shall be limited to the repair of such equipment or replacement thereof without charge for parts or labor provided by Robinson Manufacturing. Robinson Manufacturing shall be so liable only if Robinson Manufacturing is contacted in regard to such defect immediately after its discovery

Buyer should return the defective product under warranty to Robinson Manufacturing only after receipt of Robinson Manufacturing's specific permission to do so. This warranty does not extend to any Robinson Manufacturing product which has been subject to misuse, neglect, accident, modification or improper installation, or any product which has been repaired or altered by persons not expressly approved by Robinson Manufacturing. Robinson Manufacturing will not be liable for damages, loss or expense directly or indirectly arising from the use of the products or for any liability from their use either separately or in combination with other equipment or material or for any other cause.

MERCHANDISE RETURNS

No goods should be returned to Robinson Manufacturing without specific authorization. All authorized returns for merchandise shipped by Robinson Manufacturing less than 6 months previously which are returned for any reason other than valid warranty claims will be charged a 15% restocking charge plus any expense necessary to place the merchandise in saleable condition. The restocking charge shall be 25% for goods shipped by Robinson Manufacturing more than 6 months but less than 1 year previously. No returns for credit will be accepted after 1 year from original Robinson Manufacturing shipment. Returns should be shipped freight prepaid.



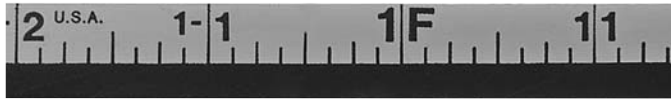
GAUGING TAPES



TAPES, Gauging

Oil gauging tapes, one-half inch wide made of steel. Tapes come complete with frame and lock-handle. Graduated in feet, inches and 1/8 inches.

BLADE STYLES



Chrome-Nubian Combination "Double Duty"



Chrome Clad



Nubian

Chrome-Nubian Combination	Chrome	Nubian	Length Feet
401B000	401B007		18
401B001	401B008	401B015	25
401B002	401B009		33
401B003	401B010	401B017	50
401B004			66
401B005			75
401B006			100

REFILLS

Chrome-Nubian Combination	Chrome	Nubian	Length Feet
401A021	401A028		18
401A022	401A029	401A036	25
401A023	401A030		33
401A024	401A031	401A038	50
401A025			66
401A026			75
401A027			100

TAPES, Gauging-10ths and 100ths

Oil gauging tape, one-half inch wide made of steel. Tapes come complete with frame and lock-handle. Graduated in feet, 10ths and 100ths.

Chrome-Nubian Combination

Complete Tape	Refill	Length Feet
401B042	401A046	50

Chrome

Complete Tape	Refill	Length Feet
401B391	401A392	100

TAPES, Gauging-Stainless Steel

Oil Gauging tape, one-half inch wide made of stainless steel. Tape comes complete with frame and lock-handle. Graduated in feet, inches and 1/8 inches.

Complete Tape	Refill	Length Feet
401B049	401A054	33
401B050	401A055	50

TAPES, Gauging - Metric/English

Oil gauging tape, one-half inch wide made of steel. Tapes come complete with frame and lock-handle. Graduated in meters, centimeters and millimeters/Feet, inches and 1/8 inches.

Chrome-Nubian Combination	Refills	Length	
		Meters	Feet
401B059	401A068	15	50
401B060	401A069	20	66
401B061	401A070	30	100

OUTAGE TAPES

Used for outage measurement. The outage tapes are the same as the inage tapes except that the zero point is on the inside of the swivel hook.

When using the outage gauging tapes, the tape is lowered into the tank until the plumb bob just penetrates the liquid. The tape is then read at the reference point of the tank. The tape is rewound and the liquid level is read directly from the plumb bob. The reading on the plumb bob is added to tape reading, giving the total outage gauge.

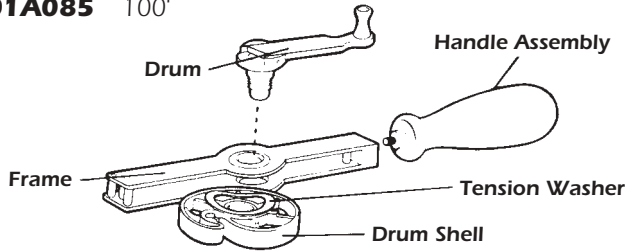
Chrome Complete Tape	Refills	Length Feet
401B393	401A394	50
401B395	401A396	66



REELS—Complete Frame

Order frame for mounting the length of tape needed.

- 401B083** 18' - 33'
401B084 50' - 75'
401A085 100'



PARTS—Gauging Reels

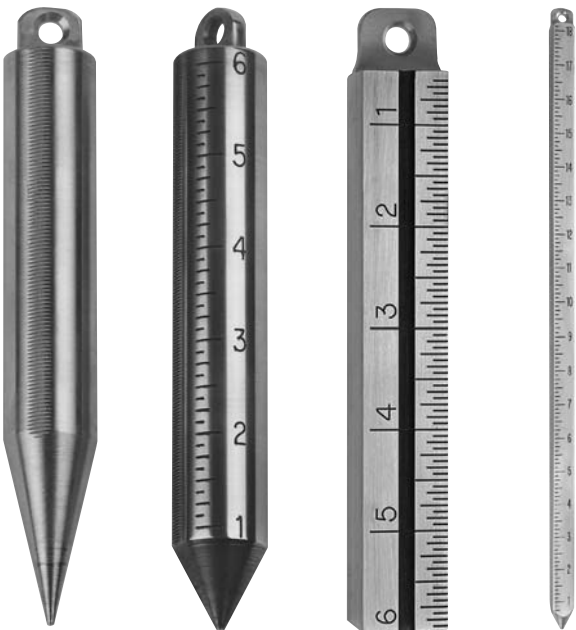
Catalog Number	Description
401B086	Handle
401A087	Washer, Tension
401A088	Drum Shell
401B089	Drum 18' - 33'
401B090	Drum 50' - 75'
401A091	Drum 100'
401B092	Frame 18' - 33'
401B093	Frame 50' - 75'
401A094	Frame 100'

ACCESSORIES - GAUGING TAPES

Plumb Bobs

- | Catalog Number | Description |
|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 401A096 | Plumb Bob - brass, one inch round, 6 inches long, 20 oz, with long tapered point and serrated on one side. |
| 401A097 | Plumb Bob - stainless steel, one inch round, 6 inches long with long tapered point and serrated on one side. |
| 401B098 | Plumb Bob - brass, one inch round, 6 inches long with short tapered point with removable screw tip point of Ampco metal, which is similar to brass but harder, serrated on one side. |
| 401A099 | Plumb Bob - brass, one inch round, 6 inches long, 21.5 oz., graduated in inches and 1/8 inches, short tapered point and serrated on one side. |
| 401A100 | Plumb Bob - brass, one inch round, 6 inches long, 21.5 oz., graduated in 10ths and 100ths of a foot, short tapered point and serrated on one side. |

- | Catalog Number | Description |
|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 401A101 | Plumb Bob - brass, one inch round, 6 inches long, 21.5 oz., graduated in centimeters and 2 millimeters subdivisions, short tapered point and serrated on one side. |
| 401A102 | Plumb Bob - brass, one inch round, 6 inches long, 21.5 oz., combination English/Metric graduations, inches and 1/8 inches on one side and centimeters and 2 millimeters subdivisions on the other side, short tapered point and serrated on one side. |
| 401A103 | Plumb Bob - brass- outage - for determining tank outage, rather than contents, 7/8 inch square, 6 inches long,, 20oz., graduated in inches and 1/16 inches. |
| 401A104 | Plumb Bob - brass, 5/8 inch square, 18 inches long, 34 oz., graduated in inches and 1/8 inches and serrated on one side the entire length. Note: Tapes can be cut to fit 401A104 bob. Charges given on request. |
| 401A105 | Plumb Bob - brass, outage, for determining tank outage rather than contents, 7/8 inch square, 6 inches long, 20 oz., graduated in centimeters and 2 millimeters subdivisions. |
| 401A296 | Plumb Bob - stainless steel, one inch round, 6 inches long, 20 oz., combination English / Metric graduations, inches and 1/8 inches on one side and centimeters and 2 millimeters subdivisions on the other side, short tapered point and serrated on one side. |
| 401A300 | Plumb Bob - stainless steel, one inch round, 6 inches long, 20 oz., graduated in inches and 1/8 inches, short tapered point and serrated on one side. |
| 401A301 | Plumb Bob - stainless steel, one inch round, 6 inches long, 20, oz., graduated in centimeters and 2 millimeters subdivisions, short tapered point and serrated on one side. |
| 401A304 | Plumb Bob - brass, 5/8 inch square, 18 inches long, 34 oz., graduated in 10ths and 100ths of a foot and serrated on one side the entire length. |



401A096 401A099 401A103 401A104



Catalog Number	Description
401A305	Plumb Bob - brass, 5/8 inch square, 18 inches long, 34 oz., combination English/Metric graduations, inches and 1/8 inches on one side and centimeters and 2 millimeters subdivisions on the other side, serrated on one side the entire length.
401A316	Plumb Bob - brass, extension outage bob, 5/8 inch square, 12 inches long, 23 oz., for determining tank outage rather than contents using a inage tape, graduated in inches and 1/16 inches.
401A341	Plumb Bob - brass, outage, for determining tank outage rather than contents, 7/8 inches square, 6 inches long, 20 oz., combination English/Metric graduations, inches and 1/8 inches on one side and centimeters and 2 millimeters subdivisions on the other side.
401A371	Plumb Bob - brass, outage, for determining tank outage rather than contents, 3/4 inches square, 12 inches long, 32 oz., combination English/Metric graduations, inches and 1/16 inches on one side and centimeters and 2 millimeters subdivisions on the other side.
401A373	Plumb Bob - brass, outage, for determining tank outage rather than contents, 3/4 inches square, 12 inches long, 32 oz., English graduations, inches and 1/16 inches subdivisions.
401A374	Plumb Bob - brass, inage, 5/8 inches square, 12 inches long, 23 oz., graduated in inches and 1/8 inches, short tapered point and serrated on one side.
401A376	Plumb Bob- brass, outage,for determining tank outage rather than contents, 3/8 by 1 inch rectangular, 12 inches long, 21.8 oz., combination English/Metric graduations, inches and 1/16 inches on one side and centimeters and 2 millimeters subdivisions on the other side.
401A377	Plumb Bob - brass, outage, for determining tank outage rather than contents, 3/8 by 1 inch rectangular, 12 inches long, 21.8 oz., English graduations, inches and 1/16 inches subdivisions.
401A385	Plumb Bob - Brass, inage, 1/4 inch by 1 inch rectangular, 25 inches long, 30 oz. graduated in inches and 1/8 inches.
401B388	Plumb Bob - brass, one inch round with short tapered point with removable screw tip point of Ampco metal, which is similar to brass but harder, serrated on one side, graduated combination English/Metric graduations, inches and 1/8 inches on one side and centimeters and 2 millimeters subdivisions on the other side.
401B389	Plumb Bob - brass, one inch round with short tapered point" with removable screw tip point of Ampco metal, which is similar to brass but harder, serrated on on one side, graduated in inches and 1/8 inches.

THERMOBOBS, Inches

A six inch hollowed brass plumb bob graduated in inches and 1/4 inches, with built-in thermometer.

Complete Units

Catalog Number	Temp. Range °F
401B106	-20 to 120
401B107	20 to 180
401B108	20 to 220

Refills

Catalog Number	Temp. Range °F
401B112	-20 to 120
401B113	20 to 180
401B114	20 to 220



THERMOBOBS, Centimeters

A six inch hollowed brass plumb bob graduated in centimeters and 2 millimeter subdivisions, with built-in thermometer.

Complete Units

Catalog Number	Temp. Range °C
401B109	-30 to 50
401B110	-10 to 85
401B111	-10 to 105

Refills

Catalog Number	Temp. Range °C
401B115	-30 to 50
401B116	-10 to 85
401B117	-10 to 105





WIPER-Gauging Tape

- 401A118** "Little Joe"
- 401A193** Rubber cylinder and core.
- 401A194** Rubber cylinder, core, screws and nuts.

GAUGING PASTE



- 401A119** Kolor Kut, water indicating, 12 tubes per case.



- 401A120** Kolor Kut, gasoline indicating, 12 jars per case.

GAUGING PASTE, Modified

Alcohol additives are completely soluble in fuels in all proportions when they are water-free, but relatively small amounts of water can cause separation of alcohol from the fuel. Alcohol prefers water over hydrocarbons and will absorb water to a point that it is insoluble in fuel and cause phase separation. At this point the mixture settling to the bottom of the storage tank is predominantly alcohol. The alcohol in this phase separated solution masks the water from the standard water finding paste.

- 401A397** Kolor Kut, modified water indicating (M-3)
2.5 oz jars, 12 tubes per case.



TANK STRAPPING EQUIPMENT

Item	Catalog Number	Description
1	401A121 (100') 401A122 (200')	Tape, strapping, chrome clad 1/4" graduated in feet and decimal feet. Four arm reel with lock handle.
2	401A124 (100') 401A125 (200')	Refill Refill
3	401A127	Stencils, interlocking 4", 0-9
4	401A128	Stencils, interlocking 4", letters
5	401A129	Stencils, interlocking 2", 0-9
6	401A130	Stencils, interlocking 2", letters
7	401A131	Magnet
8	401A132	Paint, stencil, spray, black
9	401A133	Paint, stencil, spray, red
10	401A134	Paint, stencil, spray, white
11	401A135	Paint, stencil, spray
12	401A136	Handle, tension, tape
13	401A137	Ring, tape
14	401A138	Rule, 6'
15	401A139	Handle, clamp
16	401A140	Awl 6"
17	401A141	Caliper, inside 6"
18	401A142	Caliper, outside 6"
19	401A143	Dividers, spring 6"
20	401A144	Gauge, depth
21	401A145	Trammels 6" pointers
22	401A146	Margin Trowel
23	401A147	Crayon, blue
24	401A148	Tool box, steel

*Strapping pole see 401B200





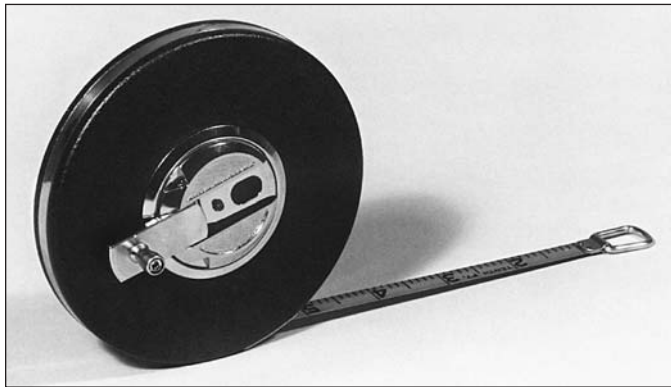
DERRICK TAPE

For measuring castings or pipe standing in a derrick. Chrome clad, 1/4" x 100' tape, graduated in feet and decimal feet. Fitted with hook ring with ribbed face at zero.

- 401A149** Complete tape
- 401A150** Refill
- 401A151** Hook and ring for derrick tape

TAPE, MEASURING, Steel, Chrome Clad

Professional quality tape, 3/8 inches wide, black markings on satin chrome finish, housed in a rugged, vinyl-covered steel case, with easy action metal winding drums.



Tape, Graduated in feet, 10ths and 100ths

Complete tape	Refill	Length Feet
401A152	401A156	50
401A154	401A158	100

Tape, Graduated in feet, inches and 8ths

Complete tape	Refill	Length Feet
401A160	401A164	50
401A162	401A166	100

HOOK, Tape

For above measuring tapes. Easily attached or removed. Zero falls at inside of hook.

- 401A168** Hook for 3/8" wide tape.



DISPENSER, PUMP

For solvent to dilute the oil sample and/or cleaning gauging and testing equipment. 32 ounce capacity.

401B178



GLOVES

Neoprene coated, knit lined and super-flexible. Dipped rough finish makes handling of wet surfaces safe and easy. Job fitted for handling in oil, solvents, caustics and alcohols.

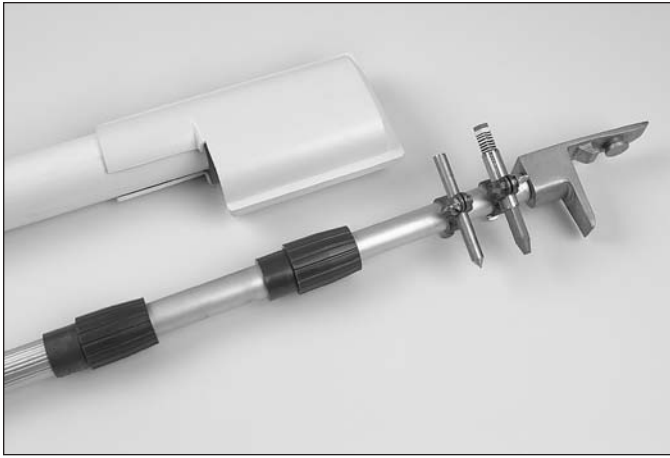
Catalog Number	Size
401A179	Small
401A180	Medium
401A181	Large
401A182	Extra Large



DRAFT SURVEY T-BAR

Used for outage measurements for draft calculations.

401A372



TANK STRAPPING POLE

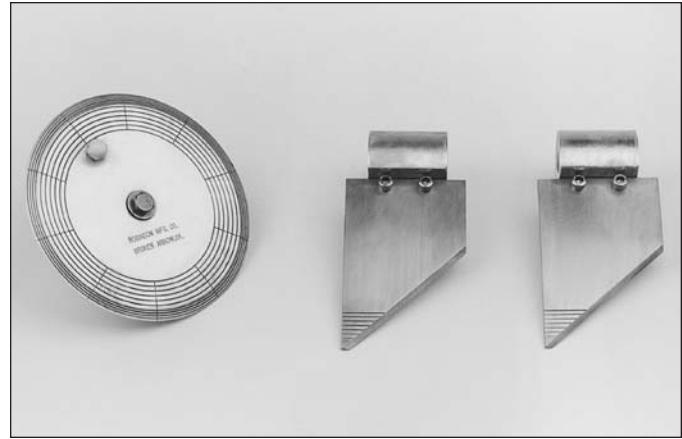
Telescopic pole that requires no assembly. It is constructed of aluminum made up in three six foot sections with the strapping head, scribe and chalk holder attached to the last section. Permits the strapping of the tank from the ground. With the use of the scribe and chalk the height location of each tank ring that is to be measured is marked. The strapping line ring is attached to the strapping head and the strapping line is walked around the tank. The line is then moved into position over the marks with the use of the fingers on the strapping head. Weight 3-1/2 lbs., Length 80".

- 401B200** Strapping pole complete.
- 401B205** Chalk holder.
- 401B209** Scribe holder.

CARRYING CASE, Strapping Pole

Constructed of PVC for easy carrying and storage. Protects the pole from damage. Weight 14 lbs., Length 86".

- 401B201**



INCRUSTATION POLE

For determining the incrustation thickness of crude oil storage tanks. Consists of a strapping pole, rotating disc, and two shears. The rotating disc and shears are constructed of brass. The disc and shears are engraved with 10 depth indicating marks. Starting at the edge of the instrument, 4 marks at 1/16" intervals and 6 marks at 1/8" intervals. The rotating disc and/or shears attach to the strapping pole and are passed over the inside vertical tank walls at various locations. The build-up is recorded and reported as required.

- 401B222** Incrustation Kit, Pole, Disc and Two Shears.
- 401B223** Disc only.
- 401B224** Two Shears only.
- 401B235** Pole only.



GAUGE TAPE VERIFICATION KIT

Used to verify working gauge tapes against a certified gauge tape. One or two tapes can be verified at the same time. It can be a permanent or temporary installation. The kit comes complete with a verified dead weight that is calibrated at 10 pounds with an accuracy of +/- .20 of an ounce. Manual of Petroleum Measurement Standards, Chapter 3, Section 1A.

- Model 401B306**

