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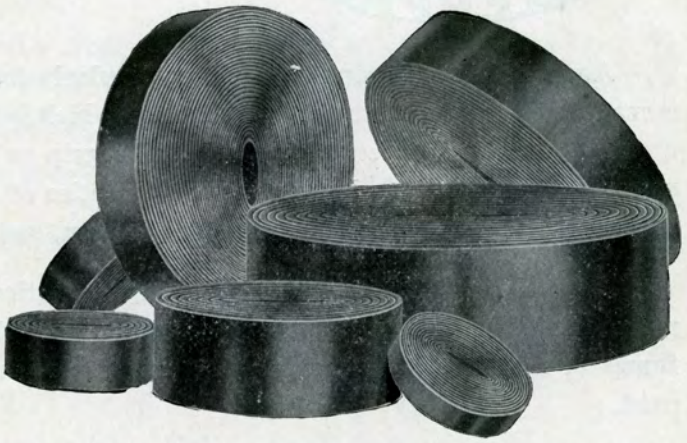
Bulletin No. 41

LUFKIN FOUNDRY & MACHINE COMPANY
LUFKIN

Sable Waterproof Leather Belting

ESPECIALLY ADAPTED TO

SAW AND PLANING MILLS

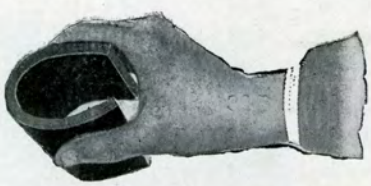


The leather used in Sable Rawhide Leather Belting is made from carefully selected heavy packer steer hides. It is tanned by special process, originated and used solely by the Shultz Belting Co., since 1877, which produces a belting leather of unequaled strength, pliability and consequent pulley grip. Every process from raw material to the finished product receives careful supervision by skilled workmen.

The special tanning and currying of Sable Rawhide leather gives a surface that conforms to the slightest inequality of the pulley. It leaves natural long fibres, unbroken and unseparated that makes the leather tough and pliable and retain the original strength of the rawhide below the surface where there is the strain of severe service.

Sable Waterproof Leather Belting, because of its kidlike surface, grips the pulley firmly and transmits a maximum of power. It is particularly adapted to main drives, motor and generator drives, difficult corner turn drives, high speeds over small pulleys where the load varies and changes suddenly, or other drives that requires a belt of unusual strength and pliability.

Sable Rawhide Leather Belting is made in all widths and plies, and is heavy, medium or light weights. Sable Waterproof Belting will wear longer, transmit more power with less tension and consequent reduction of friction loss and with greater economy than any Oak Tanned Leather Belting. It is particularly adapted to saw and planing mills wherever moisture, water or damp climate conditions, high speeds and heavy loads.



This is easily done with Sable Belting of double thickness. If you think it is just as easily done with the same thickness of oak-tanned belting, try it.

You will find that it takes considerable force to bend a double-thick, oak-tanned belt even to this slight extent.

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Shultz "Aqua" Chrome Tanned Belting

Aqua Belting is manufactured particularly for use under unusual operating conditions. It is made from a special tannage of leather which insures great tensil strength, unusual pliability and elasticity. This enables the belt to grip pulleys firmly. Furthermore the special tannage of the leather and the resistent qualities of the cement used, enables Aqua Belting to successfully resist the action of water, steam, acid fumes and friction heat to a great extent.

Aqua Belting, like our Sable Belting is particularly adapted to use in saw and planing mills, also paper mills, textile mills or any other plant where the atmosphere is laden with fumes or moisture, extremes of temperature or where other unfavorable operating conditions exist.

To prove this, soak, boil, or steam a piece of "Aqua" along with some other so-called water proof belting, and then test both specimens by jerking, pounding, pulling, twisting, or bending each. The plies of "Aqua" will not separate, nor will the leather lose any of its strength and pliability.

"AQUA" is the belt to use where the temperature changes are extreme, in paper or textile mills where the atmosphere is laden with fumes or moisture, in mines where water comes in contact with the belt, or in places where acid fumes disintegrate an oak tanned belt.

"AQUA" will transmit more power and out-wear many times over any rubber, canvas, or oak-tanned belting, which has been water-proofed by doping with some dressing which soon wears off.

Standard Price List Per Running Foot on Leather Belting

½	in.....$0.12	2½	in.....$0.60	6	in.....$1.44	15	in.....$3.60	32	in.....$ 7.68
⅝	in..... .15	2¾	in..... .66	6½	in..... 1.56	16	in..... 3.84	34	in..... 8.16
¾	in..... .18	3	in..... .72	7	in..... 1.68	18	in..... 4.32	36	in..... 8.64
⅞	in..... .21	3¼	in..... .78	8	in..... 1.92	20	in..... 4.80	40	in..... 9.60
1	in..... .24	3½	in..... .84	9	in..... 2.16	22	in..... 5.28	46	in..... 11.04
1¼	in..... .30	3¾	in..... .90	10	in..... 2.40	24	in..... 5.76	48	in..... 11.52
1½	in..... .36	4	in..... .96	11	in..... 2.64	26	in..... 6.24	50	in..... 12.00
1¾	in..... .42	4½	in..... 1.08	12	in..... 2.88	28	in..... 6.72	52	in..... 12.48
2	in..... .48	5	in..... 1.20	13	in..... 3.12	30	in..... 7.20	60	in..... 14.40
2¼	in..... .54	5½	in..... 1.32	14	in..... 3.36				

Double Belts are twice the price of above list. In effect November 21, 1906.

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Mechanical Rules Regarding Leather Belting

Rule No. 1.—To find the belt speed in feet per minute, multiply the diameter of the pulley in inches by 3.1416 and again by the number of revolutions per minute of the pulley, and divide by 12 to get the number of feet per minute.

Rule No. 2.—To find the H. P. belting will transmit when the drive is open (without idlers) and the pulley diameters are nearly even.

Single Belts.—Multiply the belt speed in feet per minute by the width of the belt in inches and multiply that product by 55. Divide this product by 33,000. The quotient will be the number of H. P. that any good single belt will transmit safely.

Double Belts.—Multiply the result obtained above by 1.6 for horse power wanted.

Three Ply Belts.—Multiply result obtained for single belt by 2 for H. P. wanted.

Rule No. 3—To find width of belting: Multiply the given H. P. by 33,000 and divide this product by the result obtained multiplying the belt speed in feet per minute by 55 for single belts, by 88 for double belts, by 110 for 3 ply belts. The quotient will be the width required.

Mechanical Rules Regarding Belting When Both Pulleys Are Not Equal or Nearly So

Rule No. 4.—To find the arc of contact on smaller pulley when the drive is open and without idlers:

The number of degrees in arc of contact can be arrived at by multiplying the difference between the diameters of the pulleys in inches by 4.75, dividing the product by the distance between the pulley centers in feet and subtracting the quotient from 180. Where an idler is used it will be necessary to lay out sketch of drive to scale in order to find arc of contact.

Rule No. 5.—To find effective pull where arc of contact is not 180 deg. Multiply the arc of contact (See Rule 4) by 55 and divide this product by 180 for single belts. For double belts multiply by 1.6. 3 ply by 2.

Rule No. 6.—To find H. P. belting will transmit under any condition: Use Rule No. 5 and No. 2 substituting rules for 55 in Rule No. 2 for single belting. For double belting multiply the results obtained above by 1.6. For 3 ply by 2.

Our Records Will Show An Enviable Rep for LONG LIFE Belting

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Lace Leather, Glues, Etc.

Shultz Rawhide Lace Leather remains soft and pliable without regard to climate and it always retains its original strength. It is made from the best green packer steer hides. The sides are carefully trimmed and full measurements absolutely guaranteed.

We also make an Indian Tan Lace Leather which is also an exceptionally high quality lace.

Put up in 10 and 20 lb. Cans.
Price per lb.....$ .40

Sable Waterproof Cement is put up in 1, 2 and 5 lb. Cans
Price per lb.....$2.00

Shultz Regular Cement is put up in 1, 2 and 5 lb. Cans
Price per lb.....$1.00

5 lb. Cans.....$ .32
10 lb. Cans..... .26
1 lb. Sticks..... .40

Lufkin Foundry & Machine Company

LUFKIN AND BEAUMONT, TEXAS