

INDUSTRIAL RUBBER

WHAT IT MEANS

BY

S. V. LATHIA

B. Sc. (Hons), L.I.R.I. (London) J.P.



Published by

LATHIA INDUSTRIAL SUPPLIES COMPANY PRIVATE LTD.

Manufacturers of Industrial Rollers, Rubber Blankets and Rubber Linings

108/110, Naroda Industrial Estate, Naroda (Ahmedabad), Gram : UCANRELY

CERTIFICATE OF HONOUR RECEIVED BY US FROM (ERIE U.S.A.)



This

Certificate of Honor

is presented to

LATHIA INDUSTRIAL SUPPLIES COMPANY (P) LTH

S.V. LATHIA, President

• • *In recognition of 16 years of
continuous manufacturing operation ...
with full realization and deep apprecia-
tion of the economic significance of this
16th anniversary to the community.*

MANUFACTURERS ASSOCIATION OF ERIE

Howard L. Kelly SECRETARY *William E. Valley* PRESIDENT

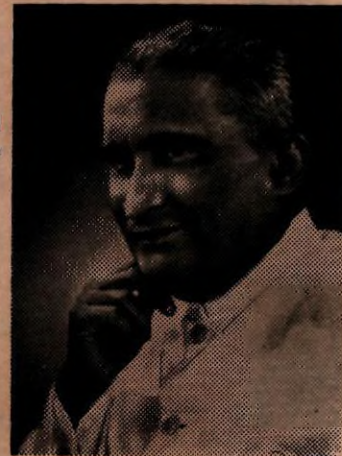
October 6, 1968
DATE

6 R I I

Lathia Industrial Supplies Company Pvt. Ltd., have pleasure in presenting this booklet on the happy occasion of the inauguration of their new factory at 108/110, Naroda Industrial Estate, Naroda, Ahmedabad, on Sunday the 6th October, 1968, at 9-30 a.m.

We are putting up our plant in Ahmedabad to serve the industries in the State of Gujarat in better way as Ahmedabad is a good Textile Centre. We have utilised all our spare in Bombay and as there are requests from Ahmedabad clients, we are opening our plant to extend better services to our various clients.

Hon. Shri S. K. Patil, our respected National Leader has kindly consented to perform the inauguration ceremony of our factory.



Hon. Shri Hitendrabhai Desai, Chief Minister of Gujarat State, has kindly consented to preside.

Shri Manubhai Shah, Chairman of Gujarat Industrial Development Corporation, has kindly accepted to grace the occasion, as Chief Guest, and address the gathering.

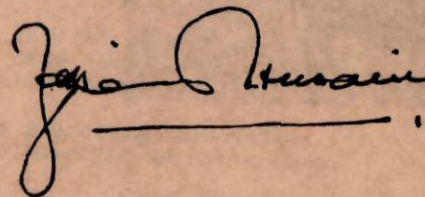




राष्ट्रपति भवन, नई दिल्ली-4.
RASHTRAPATI BHAVAN,
NEW DELHI-4.

August 22, 1968.

I send my best wishes to the
Industrial Supplies Corporation, Bombay,
on the occasion of the inauguration of
its Rubber Plant at Ahmedabad on the 6th
October, 1968.


J. D. Desai



VICE-PRESIDENT
INDIA

NEW DELHI

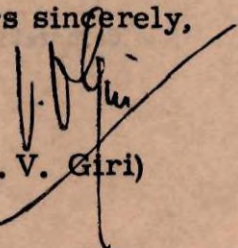
August 25, 1968.

Dear Shri Lathia,

Thank you for your
letter of the 22nd inst.

I am glad to know that
your Ahmedabad Plant will be
opened on the 6th October. I
send my best wishes for the
success of the function.

Yours sincerely,


(V. V. Giri)

Shri S. V. Lathia,
Industrial Supplies Corporation,
Sakinaka, Kurla-Andheri Road,
Bombay. 72 A. S.

Telegram : CONGRESS



Telephone : 45851 (5 Lines)

ALL INDIA CONGRESS COMMITTEE

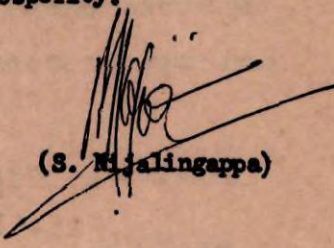
7, JANTAR MANTAR ROAD, NEW DELHI-1

August 23, 1968
G(M) 6571

MESSAGE

I am glad to know that a new Rubber Plant of the Industrial Supplies Corporation will be inaugurated in Ahmedabad on October 6, 1968.

I take this opportunity to send my best wishes for the success of the new plant. I also wish the Corporation ever increasing prosperity.


(S. Nijalingappa)

Shri S.V. Lathia,
Chairman,
Lathia Charitable Trust,
108/110 Naroda Industrial Estate,
NARODA (Ahmedabad)



पेट्रोलियम और रसायन एवं समाज कल्याण मंत्री
भारत

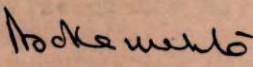
MINISTER OF
PETROLEUM & CHEMICALS and SOCIAL WELFARE
INDIA

नई दिल्ली
NEW DELHI August 13, 1968

M E S S A G E

I understand that a new rubber plant of the Industrial Supplies Corporation will be inaugurated at Ahmedabad on October 6, 1968.

The products of this Corporation have already met with an encouraging response from industries in the Bombay area and it is only appropriate that they are now thinking in terms of securing new and promising export markets. I am sure that the Ahmedabad plant will soon begin to serve the industrial units springing up as part of growth and development in the Gujarat region.


Asoka Mehta

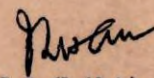


श्रम तथा पुनर्वासिमंत्री
भारत सरकार
MINISTER OF
LABOUR AND REHABILITATION
GOVERNMENT OF INDIA

नई दिल्ली
New Delhi, the August 23, 1968.

I am glad to know that the Industrial Supplies Corporation is setting up a new Rubber plant in Ahmedabad to meet the increasing demand for rubber products of different varieties. It is very creditable that the progress achieved by the Corporation has been all through due to management by Indian technicians and not due to any foreign collaboration. It is heartening that besides keeping the interests of its own workers at heart, the Corporation is devoting funds for the cause of social welfare.

I send my best wishes on this happy occasion.


(J.L.Hathi)



No. 8/MIS/68-3017

मन्त्री
सूचना और प्रसारण
भारत
MINISTER
INFORMATION & BROADCASTING
INDIA


New Delhi
August 14, 1968.

I am glad to know that your new Rubber Plant will start functioning at Ahmedabad in October this year.

Indian Rubber Industry is one of the major industries of India. Industrial Supplies Corporation with a short period of 16 years has established reputation for its products and technical services. I am of the view that manufacture of specialised rubber goods such as rubber rollers, rubber blankets etc. is timely and will substantially contribute to the development and maintenance of chemical industry in the country.

I am sure that the Industrial Supplies Corporation will see to it that the new venture has all the potentialities for not only saving foreign exchange but also earning it by export.

I am very happy to send my good wishes on the opening ceremony of the new Rubber Plant.


(K.K. Shah)

S.V.Lathia,
Industrial Supplies Corporation
Sakinaka
Kurla Andheri Road
BOMBAY - 72.(AS)

Foreword

The starting of a second Rubber Factory by Shri Lathia at Ahmedabad is indeed another milestone in his career and I congratulate him on his enterprising spirit. Within a comparatively short period, I am happy to state, that Shri Lathia has earned for himself an important place in the Indian Rubber Industry. With his background I have no doubt that his new venture at Ahmedabad will be as much a success as his first effort in Bombay.

The Indian Rubber Industry has escaped the recent countrywide depression. During 1967-68 practically all rubber factories worked at almost their full installed capacity and have made considerable progress in their expansion plans. While the consumption of rubber during 1967-68 was of the order of 109,704 Tonnes consisting of 74,518 tonnes of Natural, 23,324 Tonnes of Synthetic and 11,862 Tonnes of Reclaim, the estimate of consumption for 1968-69 is of the order of 130,000 Tonnes which will represent an increase of over 18% in a single year. The grades of rubber that are expected to be consumed in 1968-69 are as follows:—

Natural Rubber	...	...	...	...	...	83,000 Tonnes
SBR	...	...	...	...	...	29,000 „
Special Purpose Rubber	...	...	...	...	...	4,000 „
Reclaim Rubber	...	...	...	...	...	14,000 „

I have no doubt that the Indian Rubber Industry is entering an era of great progress and it will need the services of many technicians and entrepreneurs of the calibre of Shri Lathia so that opportunity may be taken of the immense possibilities opening out in this sphere of the industrial life of our country.

K. M. PHILIP

Chairman (Bombay Branch)

INSTITUTION OF RUBBER INDUSTRY—INDIAN SECTION

A Short History of our Progress

We started INDUSTRIAL SUPPLIES CORPORATION at Bombay on 15th August 1953 at Lamington Road with old machines for manufacturing Rubber/Ebonite rollers with a capital of only a few thousand rupees by Shri S. V. Lathia.

Slowly and steadily manufacture of new rollers, rubber-lining of tanks and moulded articles were added. In 1957 the whole lot of machines belonging to M/s. Modern Rubber Mfg. (J. K. Group of Industries) was purchased and incorporated in the factory. In 1957 we started the production of moulded articles, rubber bags (Hot Water Rubber bags). In 1958 land for our new factory was purchased and orders for new machines and testing equipments were placed with foreign countries. We were lucky enough to have our new factory at Sakinaka inaugurated by Hon. Shri S. K. Patil on 17th May, 1959.

After 1959 we added large number of machineries imported as well as indigenous. Today it is a matter of great satisfaction that we are one of the leading manufacturers of Industrial Rubber articles and our factory is equipped with all modern machineries as well as modern testing equipments for quality control. We started Rubber Lining Division in 1962 and in 1965 we added some more imported machines in order to have fully equipped factory to cater for the industrial expansion and development of our Country.

The final extension of INDUSTRIAL SUPPLIES CORPORATION was inaugurated by Hon. Shri S. K. Patil on 23rd October, 1966, and the function was presided over by Hon. Shri D. S. Desai, State Revenue Minister. Shri G. L. Mehta, Chairman of I.C.I.C.I. had graced the occasion. We started the production of

Rubber blankets for Cluett approved and controlled compressive shrinking range for the first time in our country. We are very happy that the function was a grand success and was well attended by large number of clients, well-wishers and elders.

We have made a steady progress and whatever we have achieved is only with the kind co-operation of our large number of well-wishers, friends, patrons, valued clients who have always given us their full support. It is our earnest desire to help our clients and to extend better services. It is a matter of satisfaction that we are supplying our products throughout India.

We are now happy to start our factory at Ahmedabad as we have no space available in Bombay, for expansion. The State of Gujarat is developing very fast and there is a very rapid industrialisation. Large number of clients and well wishers have expressed their desire that we should put our plant in Ahmedabad in order to cater for the requirements of State of Gujarat. We are looking forward to make better things in our country with the kind co-operation of our valued clients.

We are happy to start our factory at Ahmedabad having a built-up area of approx. 3,000 sq. meters (27,000 sq. ft.) with modern machines and testing equipments. The factory has been designed to meet the requirements of our clients. Whatever we have achieved is by the grace of God and blessings of elders, friends and clients and by sincere, honest, and hard work. The foresight of our elders, blessings of well-wishers and valued support of our clients have helped us to reach this unique stage.

Dear Sir,

I know you will be interested in knowing what we have been able to achieve because of your valued co-operation and patronage in the past.

This little book which I am enclosing tells you the history of our firm. It is certainly a story of progress and matter of satisfaction. Satisfaction more to you than to us because without your assistance and blessings such a progressive result would never have been possible. It is only 16 years ago we sought your support and within this period of 16 years it is our good fortune that we are able to assure you that we are the kind of an enterprise which you always wanted us to become; in the matter of quality and in the matter of service.

At the time of commencing our new factory in Bombay we prayed for courage and your valued support so that we may be able to serve you and other concerns to the entire satisfaction. It is a matter of satisfaction that after opening our new factory, I was fortunate enough to visit all the foreign countries 6 times to study the latest technical developments in rubber technology, also to purchase latest modern machines and to explore the possibilities for export of our products.

Some of our clients have requested us to start our factory in Ahmedabad. Taking into consideration the request of our well wishers and as we have utilised the entire space in Bombay, we have decided to start our industry in Ahmedabad and we are looking forward for the bright future.

At the time of opening of our Ahmedabad factory, we are also arranging a small exhibition of our products and inspection of the same will convince you of the technological ability which has been responsible for such a diversification of our production. This technological ability as you will see

from the modern factory is ably assisted by a fully equipped Laboratory and well qualified staff and experienced workers.

I would like to add here that I have visited 1200 industries in India. I have also visited more than 300 factories in foreign countries manufacturing industrial Rubber articles, Laboratories and Textile machinery manufacturers. We are fortunate to get sound experience as well as technical know-how and it is our earnest desire to meet all the requirements of our clients in best possible way.

We are grateful to you for the excellent help rendered from your end. Words are inadequate to express our thanks to you and all our friends who have always encouraged us to reach this position.

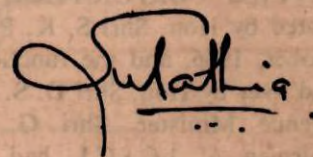
We always believe in tackling difficult problems with your kind co-operation. All our products are manufactured by us without any foreign technical know-how and we stand guarantee for the satisfactory performance.

I have already requested you to attend the inauguration ceremony of our new factory in Ahmedabad by sending you an invitation. I am requesting you once again with this booklet to grace the occasion as to have you with us at the time of inauguration of our factory would certainly add to our pleasure.

Looking forward to having you with us at the inauguration ceremony.

Thanking you for all consideration and always at your services,

Yours sincerely,

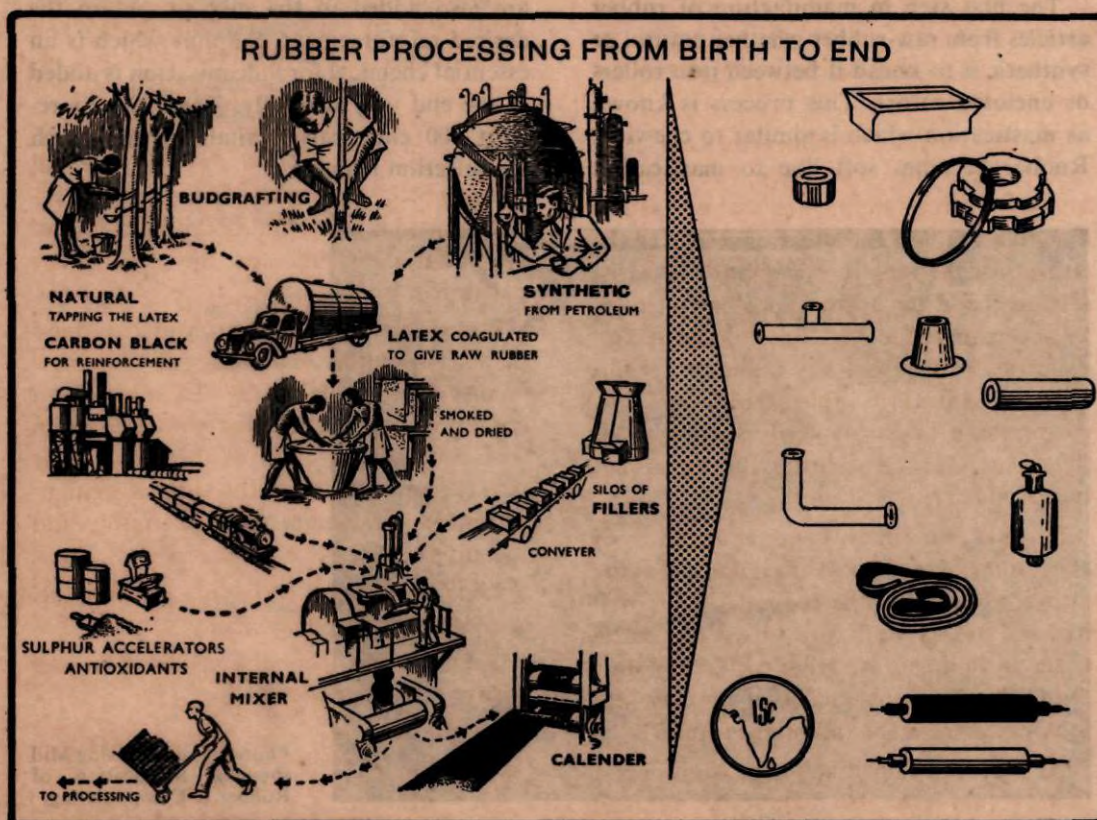


(S. V. LATHIA)

INDUSTRIAL RUBBER WHAT IT MEANS TO YOU

RUBBER TECHNOLOGY:—Rubber is common household word used since more than a few centuries. It is obtained from the milky juice known as latex. The drawings give an illustration in stages, production of rubber and its processing together with a few of the many articles manufactured by us from Rubber.

gulum is passed between rollers to squeeze out most of the residual serum, leaving a tough white sheet which after drying becomes a pale crepe (which is very commonly noticed with shoes) or smoked sheet if the drying is done in a smokehouse. The yield of rubber has increased recently by the method of budgrafting in plantation;



Most of the latex tapped is from the soft inner bark of a common plant known as *Hevea Brasiliensis*. Latex is coagulated with acid, usually in vats. The junket like coa-

Synthetic Rubber of many types are the rubbers made by man from various chemical compounds. Synthetic Rubbers are produced in U.S.A., U.K., Russia and Ger-

many. Recently we have also installed a plant in Bareilly where Styrene Type rubber is manufactured. Most of the synthetic rubbers are manufactured from petroleum products, alcohol and acetylene. Mostly all begin as an aqueous emulsion of the parent compound, whose molecules are induced to link and lengthen within microscopic drops by the method of polymerisation. These drops remain as minute particles of rubber in milky dispersion which is known as Synthetic latex. Synthetic rubber is produced out of Synthetic latex.

The first step in manufacture of rubber articles from raw-rubber whether natural or synthetic is to knead it between iron rollers or enclosed rotors. This process is known as mastication which is similar to chewing. Rubber becomes soft due to mastication

and it becomes plastic as the nerves are reduced. Thereafter the soft rubber will readily absorb fillers and necessary chemicals such as Clay, Lithopone, Zinc Oxide, Titanium Dioxide, Carbon Black, Stearic Acid, Antioxidants and Accelerators, Plasticizers, Softeners, Paraffin Wax are added for compounding of the rubber to meet the exact service conditions. A small quantity of chemicals known as antioxidants are added to prevent the oxidation together with organic accelerators which accelerate the vulcanization. Zinc Oxide and Stearic Acid activate and assist the action of accelerators. Carbon Black and Silica fillers are also added in the mix to obtain the desired reinforcement. Sulphur which is an essential chemical for vulcanisation is added at the end very carefully. There are more than 500 chemicals available from which the selection is made.



Photograph of Mixing Mill showing Mastication of Rubber & Compounding.

The compounding of rubber is an art and rubber technologist produces a desired compound at a competitive rate to meet the service condition. In our factory we are

using more than 1000 formulae and each formula is different from the other as each of the formula is based to meet a specific service condition. The compounded rubber

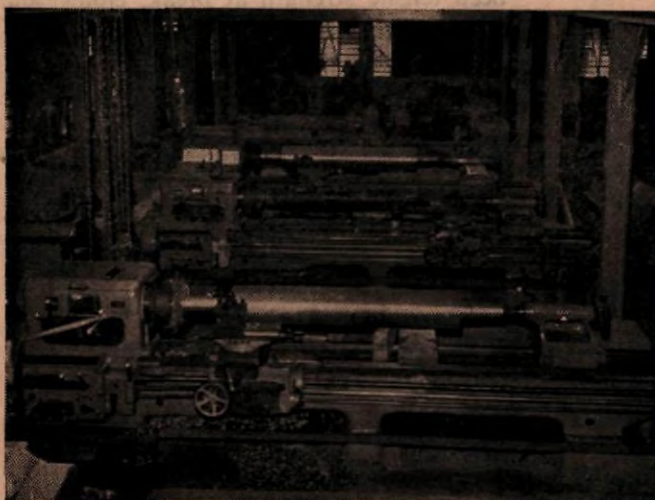
is made into thin sheets, further cooled and then taken for use. Mixing Mill or internal mixer of Banbury type are essential machines for mastication and compounding. The formulation of rubber compounding of mix will depend on the service requirements and it is similar of the Doctor's prescription using the various ingredients in the mix.

The most important machinery for rubber industry is a calender machine. Some of the manufacturers avoid this process of calendaring in order to save the cost but for a quality manufacturer calender is very essential machine and it is difficult to take out quality products without a calender. Calender is a precision machine to make fine sheets or rubber coated fabric. By taking thin sheets from the calender, it can be ensured that there is no defect such as air bubbles, blisters etc.

In the moulding department compounded rubber is pressed between mating steel dies in whose cavities it is simultaneously shaped due to flow of rubber by action of heat and vulcanised under pressure and heat so that it may emerge as finished products such as rubber bags, ebonite articles and rubber bushes. Presses are used for vulcanisation of moulded articles.

In case of rubber rollers also we differ in basic process with most of the other manufacturers. It is our practice that whenever we get old rollers for recovering, we completely scrap the old rubber, new threads are put throughout the shell to increase the surface and then they are sent for sandblasting to clean the metal surface. After sandblasting, the rollers are cleaned with chemical and petrol to remove any impurities and then they are coated with special layer of chemical bonding agents to obtain desired bonding strength between metal and rubber. It is difficult to get desired bonding strength between metal and rubber if proper care is not taken. In our case we are able to get perfect bonding as we do the job on scientific principles. After application of bonding agents, the rubber is applied in thin layers and desired thickness is built up by accurately calendered sheets on automatic roller Production Machine and in the same machine the rollers are wrapped under pressure by tape or newar.

After building of the roller, the roller goes to the vulcaniser. The steam is given from 8 hours to 100 hours depending on the size, weight, diameter, the thickness of rubber and the hardness required.



Our Lathe Dept. showing Modern Imported Automatic Lathes.

Big vulcanisers are used for vulcanisation of rollers as well as for rubber lined vessels. After the rollers are vulcanised, the rollers are allowed to cool down to normal temperature and then they are finished on Roll Grinding machines. We are much more advanced than most of the other manufacturers as all our rollers are finished on imported precision and automatic machines. These machines are very costly but they do a precision job as ultimate result of the rollers will depend on the finishing of rollers.

In case of Textiles, ultimate finishing or dyeing will depend to great extent on the rollers and the same thing is true for paper industry. If the roller is smooth and uniform in dia. the result will be satisfactory and uniform.

The boiler is required for the supply of steam which is essential for vulcanisation.

We are processing all sorts of Synthetic Rubber such as Neoprene Rubber, Styrene Butadiene Rubber, Hypalon Rubber, Butyl Rubber. We are in a position to make any product made out of any kind of rubber to meet the requirements of our clients. Taking into consideration the service conditions, we are deciding the formulations based on selection of chemicals.

Rubber Science:—The tough colourless crepe rubber of a shoe is an example of commercially pure natural rubber known to everyone. It is highly unsaturated hydrocarbon having the composition of isoprene units: C_5H_8 . The molecule is a long chain of isoprene units: $(-CH_2-C(CH_3)=CH-CH_2)_n$, where n is of the order of 5000 or more.

Thomas Hancock was the Father of Rubber Industry. He was the first to start manufacturing rubber articles. Charles Goodyear discovered in 1839 the method

of vulcanisation which is the foundation upon which the rubber industry is built up. Today more than 11,000 different items are manufactured from Rubber and it goes into the production of cast and complex variety of manufactured goods vital to the existence of modern society. Indian Rubber Industry is one of the major industries of India. We have today about 950 licensed manufacturers employing over 60000 people and producing goods worth about 170 crores. The present consumption of natural rubber is 98000 Tons, Synthetic Rubber 25000 Tons and reclaim rubber 13000 Tons.

Rubber Physics:—Rubber has good physical properties such as elasticity, resilience, high tensile strength, high elongation, great range of properties from soft and hard rubber, good capacity of absorbing energy, good abrasion resistance, good electrical properties and excellent water-proofing properties. Its most characteristic properties are softness and reversible extensibility. All these properties of rubber have helped the industries and mankind towards better comforts and better services.

Physical Testing of Rubber:—Since many years the outstanding tests of rubber have been tensile strength at break, elongation at break on normal and aged test pieces. Bonding strength is necessary for metal to rubber bonded articles. Further tests are also carried out for abrasion resistance which gives an idea how the rubber is wearing out compared to other type of rubber. Resilience is also important as it gives idea about the ability of rubber vulcanisation to return the energy used into deform it. In case of ageing tests, the rubber is heated for 150 hours at $60^\circ C$ and the tensile strength and elongation at break are checked up before ageing and after ageing to give an idea as to how the rubber will behave in atmospheric condition and

the depreciation value after ageing should not be more than 20%. Hardness is very important and the hardness is determined in various methods. Usually shore 'A' hardness tester is used for measuring the

correct hardness of rubber rollers. For most of the paper industries the hardness is determined by P. & J. Meter with 1/8" ball. Permanent set, tear resistance, flexing test are the main physical testing of rubber.



TENSILE TESTING



ELASTICITY TESTER



ABRASION TESTER

Photographs showing our Testing Machines at our Laboratory.

Spark testing is very important in case of rubber lining. The rubber lined articles are tested with spark tester at 20000 volts in order to ensure that the product is without any defect. This test shows even the pin holes, or leakages in the lining which is impossible to see with naked eye and this test gives a leakproof product.

Our Industry:—Our Industry is connected with the manufacture of Rubber/Ebonite rollers complete with shell or recovery, Rubber sleeves for curved bar expander, Evaset Rubber sleeves, complete curved bar expanders with rubber sleeves, moulded

rubber articles, Rubber lining of tanks, vessels and pipes, metal to rubber bonded parts. We are also happy to announce the manufacture of Rubber Blanket for Cluett approved and controlled compressive shrinking range for the first time in our Country. In future we are thinking to make Printing Rubber blanket to meet the requirement of textile industries. The manufacture of Rubber/ebonite rollers requires very high technical skill, good experience and personal supervision. The textile industry, Paper industry, Rayon industry and chemical industry are the largest consumers of rubber covered rollers, rubber lining etc.

The hardness and other characteristics of roll covering compounds are determined with various factors such as pressure, speed of rolls, chemical and temperature resistance, abrasive properties of product, service conditions.

The compounding of rubber will decide the life and the efficiency of the roller. A cheap roller made with clay and whiting will have less life than a roller made with proper compounding. All the rolls must be balanced properly to decrease vibrations because of high speed. In case of rollers, the price is not the only criterion but the performance of the rollers is much more important as the finish and life of the rollers will depend on the quality. Four main principles should be observed in connection with the industrial rollers.

1. Manufacturing of rollers properly engineered for the specific work should be entrusted to the qualified and expert manufacturers.
2. Make sure that the rubber rollers in your plant have a place on your maintenance programme.
3. Always specify your requirement precisely in order to manufacture the right type.
4. We ask 15 questions in our questionnaire to decide your requirement.

Finally the rollers are finished on accurate Grinding machine which gives high precision to meet the requirement of clients.

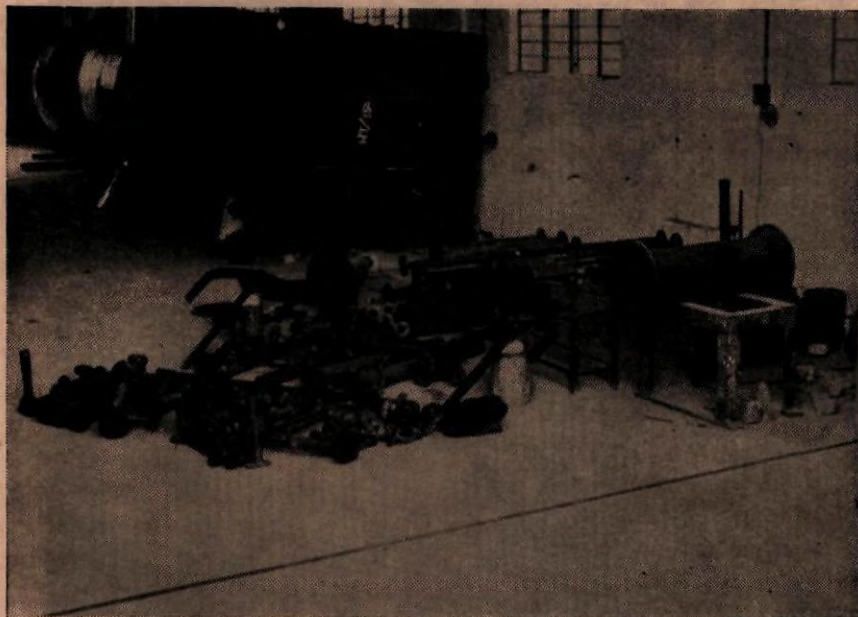
OUR INDUSTRY (R. LINING)

The Importance of Rubber in Rubber Lining:—Rubber is playing an outstanding and a very vital role in chemical industries. Its performance is to withstand the chemical actions and it is very essential in the manu-

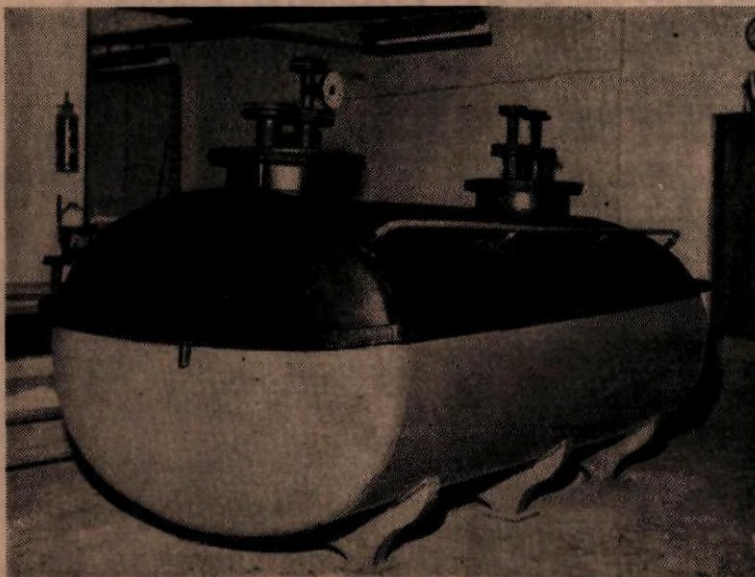
facture of various products. There are wide range of rubber such as Natural rubber, Neoprene Rubber, Styrene Butadiene rubber, Butyl and Hypalon rubber. These rubbers are used according to the service conditions. Hypalon rubber has a very good abrasion resistance and it can withstand the action of many chemicals even at high temperature. There are various advantages in rubber lining compared to stainless steel or monel metal. By using steel frame work the technicians have at their disposal material which can be put for any use. Freedom from leakage, mixing resistance, abrasion & corrosion resistance can be obtained by rubber lining. It is also possible to rubber line at site certain important equipments such as Bleaching Towers or big pickling tanks which cannot be transported.

In our case we are doing the rubber lining on very scientific principles. We are doing rubber lining in Natural hard, soft rubbers, Neoprene Rubber, Nitrile Rubber, Hypalon Rubber to meet various service conditions. Our method of rubber lining is based on a very scientific basis and our rubber lining is comparable to any foreign make. In our case the work is carried out under the personal supervision of foreign trained technicians.

1. Metal preparation is very important and this is one of the basic methods required to have good rubber lining.
2. Using good bonding agents to obtain satisfactory bonding strength between metal and rubber.
3. The sheets are applied in plied up construction.
4. Vulcanisation in autoclave to obtain good result.
5. Testing with high voltage unit of 20,000 volts to ensure that there is no defect in the rubber lining or any leakage.



Photograph showing various types of odd size pipes and bends rubberlined.



Photograph showing road carrier for HCL duly fabricated and rubberlined by us outside surface is also rubberlined to protect against corrosion.



Photograph showing Hon. Shri S. K. Patil and Hon. Shri Balasaheb Desai, Maharashtra Minister, who had graced the occasion on 23rd October, 1966, with Shri S. V. Lathia, Managing Partner of Industrial Supplies Corporation, Bombay.



Photograph showing: Hon. Shri S. K. Patil addressing the gathering at the time of opening ceremony of the Final extension of Industrial Supplies Corporation, Bombay, on 23rd October, 1966.
Left to Right: Shri Babubhai Chinoy, M.P., Shri Prabhu Mehta, Shri S. V. Lathia, Hon. D. S. Desai, Shri G. L. Mehta.

We have been fortunate to carry out any complicated job either in Rubber lining or any of the rubber items successfully and we are in a position to tackle any different problems.

Rubber Blankets as used on Cluett approved and controlled shrinking Ranges:—

This item is very complicated and only manufactured by few firms even in the World. We are fortunate enough to manufacture this item **FIRST TIME** in our Country. It is a matter of satisfaction that the performance is quite satisfactory. Quality is quite good and price is reasonable than imported one.



Photograph showing various types of Rubber rollers made from Natural Rubber, Neoprene Rubber and Nitrile Rubber. The top 4 rollers are showing various types of scrolls made by us. Photograph also shows the expansion of our factory indicating that our future depends on your valued co-operation.

We are the first to make many things in India . . .

Not only saving Foreign Exchange but trying to earn the same by exporting our products.

PROUD ACHIEVEMENTS.....

- We are also happy to manufacture EVASET RUBBER SLEEVES FOR SHRINKING RANGES.
- It is a matter of satisfaction that we are recovering SUCTION PRESS ROLLS FIRST TIME IN INDIA HAVING 1,55,000 HOLES, ACCURATELY DRILLED AS PER REQUIREMENT.
- A paper mill in East India was urgently in need of rubber lining for its Bleaching Tower supplied from Germany. The height of the tower is about 9,500 mm. (75 ft.) and the diameter is 2,500 mm. (10 ft.) There is a smaller tower inside it which is 9,500 mm. (65 ft.) and 1,525 mm. (5 ft. dia.) in diameter.

Our technicians and engineers worked hard to do a job that had seldom been carried out in our country. The work was completed efficiently and received considerable praise from the paper mill.

- A similar assignment was one of rubber lining the pickling tanks at the Indian Tube Co. Ltd., Jamshedpur. There were six such tanks, each $8,700 \times 1,800 \times 1,225$ mm. (28' \times 6' \times 4') and two storage tanks of 2,500 mm., (10 ft.) diameter 3,800 mm. in (15 ft.) height. The client expressed complete satisfaction with the work.

Both these jobs were done at site and tons of rubber were consumed. The climate at both places is very hot in summer and humid during the monsoon. As such, correct compounding of the rubber was of vital importance and was carried out with great skill by our specialists.

MATTER OF SATISFACTION.....

- We are proud to manufacture Rubber Blanket for Cluett approved and controlled compressive shrinking range. This is very complicated item and made by only a few firms in the World. Very rare products made in our Country are available at reasonable price than imported one. We are meeting the entire requirement of our country and saving considerable foreign exchange. We are also happy to export this product for the first time in history of our country earning foreign exchange.

INDUSTRIAL SUPPLIES CORPORATION AND LATHIA INDUSTRIAL SUPPLIES COMPANY PVT. LTD., are Indian-managed organisations and are making various industrial articles, comparable to any being manufactured in foreign countries. We have been able to tackle large number of problems successfully. We always believe in scientific approach for any problem.

INDUSTRIAL SUPPLIES CORPORATION is serving the Nation for the last 16 years by supplying various rubber articles and now LATHIA INDUSTRIAL SUPPLIES COMPANY PVT. LTD., will also serve the Nation in its best way. We always believe in taking initiative and lead to solve any problems and to make new things in our Country. We intend to extend same type of service from Ahmedabad to various industries and we are sure with the blessings of all we will be able to fulfil our aim.

A RELIABLE RUBBER INDUSTRY SERVING THE NATION FOR THE LAST 16 YEARS UNDER FULL TECHNICAL SUPERVISION.

Sharing Our Prosperity . . .

WE ALSO BELIEVE IN SERVING OUR PEOPLE AND SOCIETY and we believe in sharing our prosperity for our people. During our last opening at our Bombay factory, we have declared Patil Bonus to our staff members and workers in order to encourage their efforts for doing job in better way. Uptill now we have made various donations for charitable causes as under:—

1. Donated a large sum by our Family for Hospital in the name of Late Shree Vasanti Purshottam Lathia Sarvajanik Hospital at Medarda. (Gujarat)
2. A donation of Rs. 11,000 by our Family for Keshod T. B. Hospital.
3. A donation of approx. Rs. 20,000/- was handed over on our behalf by Hon. Shri S. K. Patil to various social, Educational and deserving institutions on 23rd October, 1966.
4. A donation of Rs. 4,000/- was handed over on our behalf by Mr. A. E. McCall, Head of Sanforized Service, Bombay, for Koyna Relief Fund and other deserving institutions on the occasion of get-together on 20th January, 1968.
5. A donation of Rs. 2000/- to Bihar Relief Fund was sent by us to help our people.
6. We are sending regularly our various donations to Children's Orthopaedic

Hospital, Indian Cancer Society, Manav Seva Sangh, Chhas Kendra and other deserving institutions.

7. We are very small but we have a desire to do our best for our people. On the happy occasion of opening of our new factory we have decided to request our Chief guests to hand over a donation of Rs. 10,000/- to the various deserving institutions and to have blessings of God. Out of Rs. 10,000/- we have decided to give a donation of Rs. 5,001/- to Chief Minister's Relief Fund in Gujarat to help our suffering brothers in the recent Gujarat floods as our humble contribution. It is a matter of satisfaction that Hon. Shri Hitendrabhai Desai has done his utmost to give immediate relief to the victims for which he deserves highest respect and regard.

To serve our people and to share our prosperity, we have also established LATHIA CHARITABLE TRUST for helping the deserving people in their difficulties.

On this glorious occasion we also pledge ourselves again to serve with all our might the industry and the prosperity of our great nation. We also intend to make many new things in our Country and we are sure with the encouragement of our valued clients, we will be able to serve the various industries in the State of Gujarat in better way.

Our Sincere Thanks . . .

The Management takes pleasure in conveying sincere thanks to Hon. Shri S. K. Patil for performing the inauguration of our factory coming all the way to encourage our efforts and Hon. Shri Hitendrabhai Desai for presiding over the function. Hon. Shri Patil Sahib had been kind enough to perform all our inaugurations and we are deeply grateful to him for performing even the inauguration of our Ahmedabad factory sparing his valuable time to bless us. We are very fortunate to have his blessings always for which we are deeply grateful to him. The Management is also grateful to Hon. Shri Hitendrabhai Desai who has been kind enough to preside over the function by sparing his valuable time inspite of his various other engagements. The Management is also thankful to Shri Manubhai Shah, Chairman of Gujarat Industrial Development Corporation, for gracing the occasion as Chief Guest coming all the way to encourage our efforts. The Management conveys sincere thanks to Hon. Shri S. K. Patil, Hon. Shri Hitendrabhai Desai, Hon. Shri Jassubhai Mehta and Shri Manubhai Shah for encouraging our efforts.

We are also deeply grateful to Shri Prabhubhai Mehta, Shri N. R. Shah, Shri D. M. Parekh, Shri S. J. Mehta, Parekh Bros. & Kothari Bros. of C. I. E. Group, Shri H. N. Trivedi, our friends, well-wishers, and elders, who have helped us for making this function a great success.

Shri Prabhubhai Mehta has been very kind to us and has always helped us in all our difficulties. We are fortunate to have his blessings and guidance. We are able to adopt certain principles of quality control, establishing modern equipped laboratory and to extend better services because of the encouragement and guidance we received from him from time to time.

We are also thankful to 'Sanforized Service,' New York and Mr. McCall, the Head of Sanforized Service of India and his staff for rendering excellent assistance and encouraging our industry.

We have also great pleasure in conveying our sincere gratitude for the patronage received from various clients, elders, friends and well-wishers, suppliers of our requirements, our agents and consumers of our products.

We also thank all our Family members, staff members, workers who have helped us for making better progress. We have a very good team work in Ahmedabad as well as in Bombay and all the members working in our organisation are treated as family members and there is no dispute among us since the beginning of the factory till today.

On this great occasion, we also convey our sincere thanks to State Government of Maharashtra and Gujarat Office of Director of Industries, Gujarat Industrial Development Corporation, Gujarat State Financial Corporation, for their excellent co-operation and valuable assistance extended to us. We are also grateful to the Directorate General of Technical Development (Rubber Division), Office of Textile Commissioner who have also helped our Industry.

It is a matter of satisfaction that very good relations are existing between the management, staff members and workers. Due care for all members who are working in the factory is taken.

By the grace of God and with the blessings and co-operation of all we have reached this present stage and we assure all that on our part we shall always do our best to satisfy our clients in all respects and shall extend better help in the coming years. Any suggestion for improving the quality or service, will be highly appreciated.



'SANFORIZED' SERVICE

Parijat, Marine Drive, Bombay-2 • Tel. No. 241395

Post Box No. 6099, Bombay, 5 • Telegrams: "SANFORIZED" Bombay.

September 4, 1968

**Mr. S.V. Lathia
Industrial Supplies Corporation,
Sakinaka,
Kurla-Andheri Road,
BOMBAY 72 AS**

Dear Mr. Lathia,

**Thank you for your letter of July 30th,
1968 advising us of the inauguration of your new
plant in Ahmedabad to take place on October 6, 1968.**

**The establishment of this factory in
Ahmedabad is of interest and importance to the textile
industry in Gujarat, and we wish you and your firm all
success in this new venture.**

Sincerely,

Arthur E. McCall
ARTHUR E. MCCALL

Maschinenfabrik
Briem Hengler & Cronmeyer H.G.

415 KREFELD. 5th, 9, 1968

GESCHÄFTSLEITUNG

Messrs.

Industrial Supplies Corpn.

Sakinaka, Kurla - Andheri Road

Bombay - 72 S.A. - India

Dear Sirs,

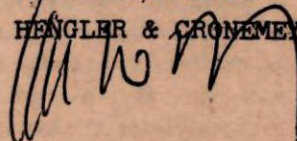
We have been informed that the inauguration of your new Rubber plant in Ahmedabad, will be performed by your National Leader, Hon. Shri S.K. Patil, former Union Railway Minister, Government of India, on October 6th, 1968, at 9.30 a.m. and the function will be presided over by Hon. Shri Hitendrabhai, Desai, Chief Minister of Gujarat State.

We know that in this time of keen competition special efforts were needed both to build up and maintain satisfactory sales, and to bring your products to the extent of that high technical level they have reached now.

We, therefore, take the liberty in submitting you our best wishes to the final extension of your factory, and shall be pleased to be of service to you at any time.

Yours faithfully,

MASCHINENFABRIK
BRIEM - HENGLER & CRONMEYER KG



LONDON OFFICE
22 GREAT SMITH STREET S.W.1

HOME BRANCH OFFICES

Belfast	Glasgow
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Mather & Platt
LIMITED

ENGINEERS
PARK WORKS · MANCHESTER 10

TELEGRAMS:
MATHER, MANCHESTER 10
OR
SPRINKLER, MANCHESTER 10

TELEX: 88103

TELEPHONE: COLlyhurst 2381

YOUR REF

OUR REF GM. DIVISION/HE/JP.

EXTENSION 263.

15th August, 1968.

Mr. S. V. Lathia,
Industrial Supplies Corpn.,
Sakinaka,
Kurla-Andheri Road,
Bombay - 72 A. S.,
India.

Dear Mr. Lathia,

It is with pleasure I read in your letter of August 8th that your new rubber plant in Ahmedabad will be opened on 6th October. The eminent visitors show that its importance is not underrated and in such capable hands as yours both the inauguration and the operation of the plant should have great success. Certainly success will be deserved after the initiative and energy which you have displayed.

May I offer hearty congratulations and a wish for wide and satisfying success to you and your workers.

Please do not hesitate to write as it is a pleasure to help you.

Yours sincerely,

Harry Ellis

H. Ellis.

Radhakrishna R. Ruia

TELEPHONE NOS.
RESIDENCE:- 32345
OFFICE:- 257833 256558

State Bank Bldg,
Bank St., Fort,
Bombay, I.

14th August, 1968

Dear Shri Lathia,

I thank you for your letter dated 6th August, and am very glad to learn that your new Rubber Plant will be inaugurated by Shri S.K. Patil on 6th October at Ahmedabad.

It is really gratifying to note that from a small beginning, the Industrial Supplies Corporation has made tremendous progress, during the last 16 years, in making rubber rollers, rubber blankets etc. and it has now been possible to start a new modern factory without any foreign technical collaboration. Another important aspect of your company's progress is that you have succeeded in entering foreign markets and earn valuable foreign exchange, after meeting the full local demand. This speaks for the dynamic and wise leadership of the management.

I also very much appreciate your starting a Charitable Trust to serve the people in need of help and for sharing your prosperity with others.

I am sure, under your wise leadership, the company will achieve still greater success.

I send my best wishes for the grand success of the Inaugural Function and also for the prosperity of your new venture.

With kind regards,

Yours sincerely,

Radhakrishna R. Ruia

(Radhakrishna R. Ruia)

Shri S.V. Lathia,
Industrial Supplies Corporation,
Sakinaka,
Kurla-Andheri Road,
Bombay-72 AS.

Sohrab K. Khan J.P.



P. O. NO. 1291-BOMBAY
TELEGRAMS: UNITEX-BOMBAY
TEL. { OFF. 1 222001/22
 RES. 1 211077
NO. 3, CUFFE PARADE,
COLABA, BOMBAY 5.

16th August, 1968.

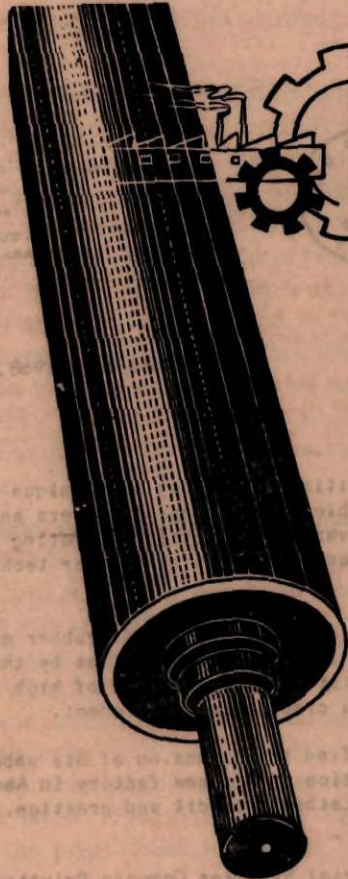
Shri S. V. Lathia is a citizen of Bombay with unique attainments but, above all, he is a person of affable nature, genial manners and enthusiasm and energy to serve various causes in various capacities promoting the welfare of the people, apart from his professional interest to further technological development in business.

Shri Lathia has to his credit development of rubber material supplies required by a large number of industries, as well as by the public, and in the development of such manufacture, he has availed of high technology and modern techniques, which has been a creditable achievement.

So it is but natural to find the expansion of his unbounded enthusiasm and efforts in the inauguration of his new factory in Ahmedabad. Such expansion will also enhance Shri Lathia's credit and prestige, of which I feel assured.

I wish the Lathia Industrial Supplies Company Private Ltd., Ahmedabad, all success and prestigious progress.

Personal best wishes for Shri S. V. Lathia are conveyed.



INDUSTRIAL ROLLERS

our NATION
needs
PRODUCTION

I.S.C. reiterates its promise to look
after INDUSTRIAL ROLLERS.

1) If rollers are WORN OUT or
need RECONDITIONING I. S. C.
will Rerubberise them to make
them SERVICEABLE again.

2) IF NEW ROLLERS are required
I.S.C. manufactures according to
SPECIFICATIONS using PLY UP
construction of Rubber Sheets taken
out from imported CALENDER and
wrapping on automatic roll produc-
tion machine and finishing on
Imported Roller grinding machines.

3) WE ALSO UNDERTAKE:
grinding & Polishing of Rollers
and Bowls of any type on
automatic drossfield Grinding
machines.

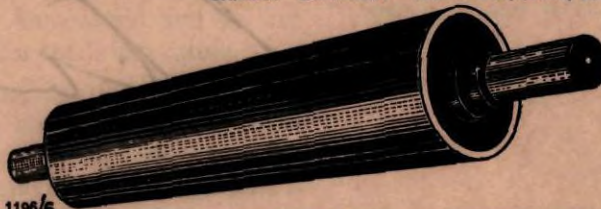


FOR HONEST & EFFICIENT
SERVICE

Contacts:

INDUSTRIAL SUPPLIES CORPORATION

SAKINAKA, KURLA - ANDHERI RD., BOMBAY-70
GRAMS: "UCANRELY" TELE: 51530, 55630, 55670.



RPC 1196/5



TELEGRAMS MANAKSANTHA
TELEPHONE 27 36 11
(10 LINES)

भारतीय मानक संस्थान

INDIAN STANDARDS INSTITUTION

MEMBER ISO & IEC

YOUR REF
OUR REF CDC 6/G
SUBJECT -

MANAK BHAVAN
9 BAHADUR SHAM ZAFAR MARG
NEW DELHI 1

26 August 1968

Dear Shri Lathia,

I have learnt with great pleasure from your letter dated 7 August 1968 that your new rubber plant in Ahmedabad will be inaugurated shortly by Shri S.K. Patil. I wish the occasion a great success.

The Indian rubber industry has made great strides during the last two decades and your new enterprise will be another land-mark in furthering the progress of this industry. I am particularly happy to know that for this new rubber plant you have utilized the indigenous technical know-how.

I also take the opportunity on this happy occasion to extend to you our fullest co-operation in furthering the progress of your new endeavour. You have been associated with the activities of this Institution for a very long time and I can now expect your further co-operation in our activities in a much wider field.

With my personal regards,

Yours sincerely,

A.N. Ghosh

(A.N. Ghosh)

Shri S.V. Lathia,
Industrial Supplies Corporation,
Sakinaka,
Kurla - Andheri Road,
Bombay-72 A.A.

m/

BRANCH OFFICES

NOVELTY CHAMBERS, GRANT ROAD
5 CHOWRINGHEE APPROACH
INDUSTRIAL ESTATE ADMN BLDG, SANATHNAGAR
117/4188 SARVODAYA NAGAR
54 GENERAL PATTERS ROAD

BOMBAY 7
CALCUTTA 13
HYDERABAD 16
K A M P U R
MADRAS 2

TELEPHONE 37 97 29
TELEPHONES 23-16 23, 23-56 60, 23-78 14
TELEPHONE 3 82 29
TELEPHONE 3 76 95
TELEPHONES 8 71 76, 8 72 76, 8 75 08

TELEGRAMS
MANAKSANTHA

CABLE ADDRESS: "MEIJIRUBBER TOKYO"

Meiji Rubber Co., Ltd.

ESTABLISHED 1900



PLANT
SHINAGAWA PLANT : SHINAGAWA-KU, TOKYO.
KANAGAWA PLANT : KAISEIMACHI, KANAGAWA-KEN

MARUNOUCHI-YAESU BLDG.,
MARUNOUCHI, TOKYO.
TEL (281) 3803

August 23, 1968

Mr. S. V. Lathia
Industrial Supplies Corpn,
Sakinaka, Kurla-Andheri Road,
Bombay-72 A.S.

Dear Mr. Lathia:

It is my great pleasure and happiness to know that your new rubber plant in Ahmedabad will be inaugurated by your National Leader, Hon. Shri S.K. Patil, former Union Railway Minister of Government of India, on 6th October, 1968 and the function will be presided over by Hon. Shri Hitendrabhai Desai, Chief Minister of Gujarat State.

I believe it quite natural that you gained your present high position by the grace of God as a pious intelligent person like you duly deserves it. I hope you will make further efforts in contributing to the industrial development of your country.

When you visited Japan last year, I was favored with a chance to personally talk with you over Industrial Rubber Goods from various points of view. Now I recollect with pleasure that I was deeply impressed at that time by your noble spirit as well as by your intense enthusiasm for the undertaking. I am proud that our company is one of the leading manufacturers of industrial rubber goods in Japan, and at the same time, I firmly believe that the friendly relations we have with your firm which is the most progressive in your country will not only contribute to the promotion of better relations between Japan and India but also prove very significant to the development of the Asia.

Wishing for your good health and the prosperity of your firm,

Sincerely,

H. Matsumura, President
Meiji Rubber Co., Ltd.



DENA BANK LTD. DEVKARAN NANJEE BUILDINGS, HORNIMAN CIRCLE, FORT, BOMBAY 1
TELEGRAM: DENABANK-TELEPHONE: 255111

PRAVINCHANDRA V. GANDHI
CHAIRMAN

31st August 1968

Dear Shri Lathia,

I am glad to know that the Industrial Supplies Corporation is about to add one more laurel to its crown of achievements by installing a new Rubber Plant in Ahmedabad which is to be inaugurated by Shri S.K. Patil. The fact that Shri Hitendra Desai, Chief Minister of Gujarat will also grace the occasion to bless this venture makes it doubly jubilant.

The Corporation has during the decade and a half of its eventful functioning grown into one of the leading manufacturers of industrial rubber articles in the country. What is more noteworthy is that this spectacular success has been achieved through indigenous expertise and know-how and with Indian technicians, labour and management.

A qualified rubber technologist yourself, you have brought together a band of young technologists and businessmen in a visionary venture and through years of toil and sustained effort have succeeded in giving to our country a modern and up-to-date automatic Rubber plant of which our country could be proud.

We need more of such young, dynamic technologists and entrepreneurs who will tread new paths and take bold initiatives to accelerate the pace of our industrialisation and economic growth.

I wish the Industrial Supplies Corporation successful and promising years ahead in the service of the Nation.

With kind regards,

Yours sincerely,

Shri S.V. Lathia)
Industrial Supplies)
Corporation,)
Sakinaka,)
Bombay-72.

Pravin V. Gandhi

J. K. ORGANISATION

KAMLA TOWER . KANPUR

4198



26th August 1968.

MESSAGE.

I am glad to learn that Industrial Supplies Corporation are putting-up a new Rubber Plant which will be inaugurated by Shri S.K. Patil on 6th October 1968. I have noted with interest the service which the ISC is doing in the various fields of its activities. By their integrity, sense of service and utility they have already earned their name. In putting-up indigenous plant they would help to save foreign exchange. The money thus earned, has been ploughed back for social welfare and development through the Charitable Trust established by them. I have every hope that by expanding their industrial activities they would be serving the people more and more.

I wish the Corporation many more years of useful services.

Padampat

(Padampat Singhania.)

Shri S.V. Lathia,
Industrial Supplies Corpn.,
Sakinaka, Kurla,
Andheri Road,
Bombay -72(A.S.)

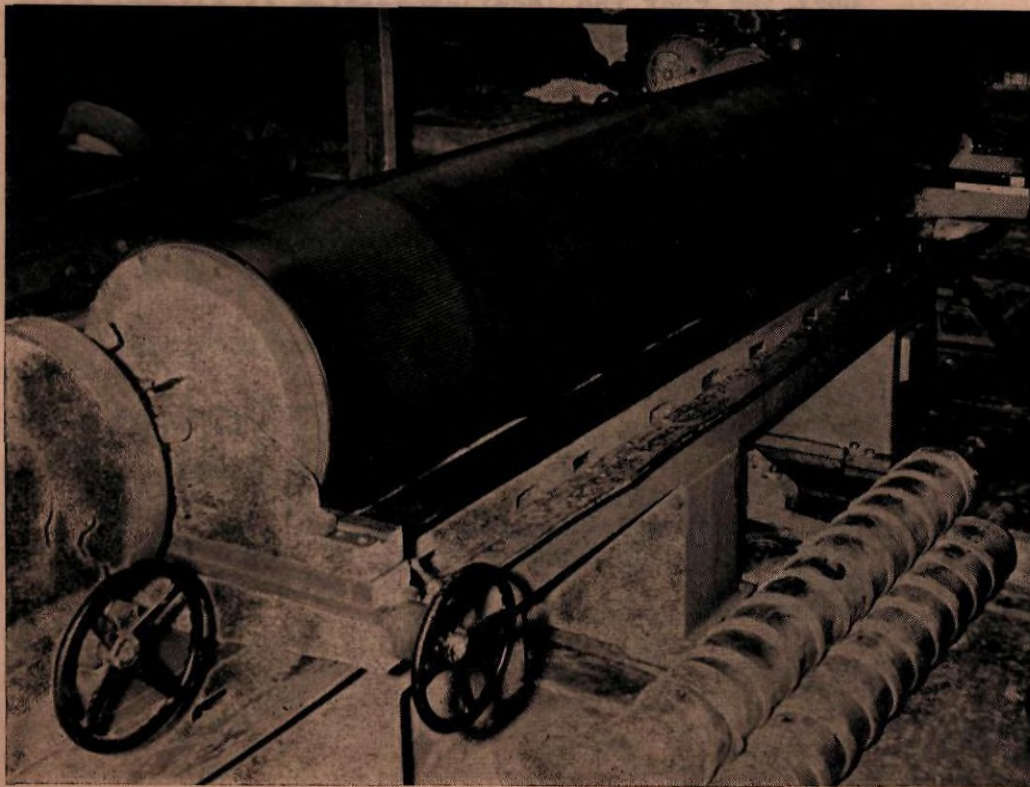
TELEGRAM: "LALJUGGI"

TELEPHONE: NO 39854



Photograph taken on the occasion of get-together held on 20th January, 1968, in honour of Mr. A. E. McCall. Mr. McCall is appreciating the efforts of the firm for making Rubber blankets for cluett. Approved & controlled Shrinking Ranges.

Left to right: Mrs. Sohrab Khan, His Excellency Mr. Tamim, Consul General of Sudan, Mr. A. E. McCall, Mr. S. V. Lathia, Mr. Sohrab Khan, Sheriff of Bombay, Mr. Gangaram Joshi, Smt. Sulochanaben Modi.



Suction Press Roll covered by us first time having 1,55,000 holes in the roll.



No F2161-1102-A/68

औद्योगिक विकास तथा समवाय कार्य मंत्री

भारत सरकार

MINISTER OF

INDUSTRIAL DEVELOPMENT & COMPANY AFFAIRS
GOVERNMENT OF INDIA

नई दिल्ली,

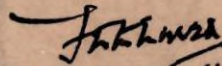
१९६

New Delhi, the 16th Sept., 1968.

Dear Shri Lathia,

It gives me great pleasure to note that your new plant at Ahmedabad for the production rubber components for the Textile Industry will be inaugurated early next month. I am also glad to note from your letter that your customers are happy with these products manufactured by you in your Bombay unit and that the local production is helping to save foreign exchange expenditure; your attempts to export some of these items are particularly welcome in the present context of the foreign exchange position. I wish you every success in your new venture.

Yours sincerely,


(F.A. Ahmed)

Shri S.V. Lathia,
M/s. Industrial Supplies Corpn.,
Sakinaka, Kurla-Andheri Road,
BOMBAY-72.



Babubhai J. Patel

OFFICE OF THE
MINISTER FOR PUBLIC WORKS,
Elec.
PORTS AND CIVIL SUPPLIES,

GUJARAT STATE,

Sachivalaya, Ahmedabad-15

Dt. 13th Aug. 1968

Dear Shri Lathia,

I have received your letter dated
8th August '68 on the 13th instant.

I am happy to note that you are
inaugurating another rubber plant at
Ahmedabad at the auspicious hands of Shri
S.K. Patil under the presidentship of
Shri Hitendrabhai Desai.

Your venture is of great assistance
to the country as well, as it is able to
produce quality goods at lower price so that
the country is able to save foreign exchange
and even more than that to start earning
foreign exchange on this item which has so
far been a matter of import only.

I am glad that you have chosen the
ever industrially expanding city of Ahmedabad
for your new expansion.

Wishing you success,

Yours sincerely,

Babubhai J. Patel
(Babubhai J. Patel)

Shri S.V. Lathia,
Industrial Supplies Corporation,
Sakinaka, Kurla-Andheri Road,
Bombay-72 A.S.

THE SWADESHI MILLS COMPANY LIMITED

(MANAGING AGENTS: TATA INDUSTRIES PRIVATE LIMITED)

KURLA, BOMBAY 70 AS

Phone 521301-02

M/1125

March 30, 1968

1-4

Industrial Supplies Corp.,
Post Box No. 8912,
Sakinaka,
Kurla-Andheri Md.,
Bombay-72 AS.

Dear Sirs,

Re: Rubber Belts supplied by you for our
Cluett Approved Controlled Compressive
Shrinking Range.

With reference to your letter No. TEX-9159:67-68 of
19th instant, regarding the performance of rubber belts of
your manufacture, we are glad to give their performance
report as under:-

The first belt has compressively shrunk upto now
some 96,00,000 metres of cloth, and is still good for some
more metres.

The second belt has upto now compressively shrunk
48,00,000 metres and will give many more metres being
still 2-3/8" thick.

We must say that we have been entirely satisfied with
the performance of your belts, and we have found them, if
not better, at least equal to the imported ones.

We hope that you will continue improving the quality
of your belts to make them even better than the imported ones.

We wish you all the success in your enterprise.

Yours faithfully,


Manager.

SHM:VJC/5

C-c. to Mr. McCall,
"SANFORIZED" services, Bombay House, Bruce Street, Fort Bombay I]
"Parijat" Marine Drive,
BOMBAY.