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SUPERIOR SCHOOL OF TEXTILE INGENIERIA (ESIT) OF INSTITUTO
POLITECNICO NACIONAL (IPN)

"THE RELATIONS BETWEEN PROTO-INDUSTRIA And MODERN INDUSTRY,
SPECIFICATIONS OF USE OF The LOOMS OF The FLAT WEAVE FACTORY OF The
SUPERIOR SCHOOL OF TEXTILE INGENIERIA OF NATIONAL INSTITUTE
POLITECNICO, FOR MAXIMUM EFFECTIVENESS EDUCATIVE OF WEAVES OF
PLANE."

1, INTRODUCTION

So that to speak of the old textile manufacture the "Casa Posadas" so that the Superior was born here of School Ingenieri'a Textil (ESIT) of Instituto Polite'cnico Nacional (IPN), that was the first school of textile engineering and is oldest in Mexico and Latin America, in addition to being at the most important present time of superior studies of textile engineering of Latin America.

want stands out like peculiar data, in addition of which it is not common that an historical crossover of great magnitude occurs like which it occurred with the "House Put" with the ESIT. By a side when east building was constructed its first use was the one of a textile manufacture and that peculiarly four centuries later would settle down in this premises in the years 20's Technical the Federal School of the Textile Industries no. 2, and that but ahead in the years 30's becomes the Superior School of Textile Engineering, and that during many years in this which it was premises of the ESIT is well-known like "Casa Posadas". On the other hand the historical crossover that was had with the social movement in our country with strike which they made the textile workers of the factory of spinings and weaves of the Blanco River, Veracruz, in where the ESIT was born, with the history of "Casa Posadas".

In order to continue with the second part of this article, it will begin speaking on history of the old textile manufacture "House Put", from its construction and in its different historical stages from this building, I consider important to know the antecedents of very brief way, from the conquest and that belonged east estate to him.

Thus to be able to understand and to include/understand the importance of the incalculable value that it has "Casa Posadas" not only for the community of the ESIT (academic, administrative students, withdrawn) but also for all the textile community and to all those that to them east subject, since interests this building is part of the history of Mexico and the development of the textile industry in Latin America.

2, FOUNDATION OF THE SUPERIOR SCHOOL OF TEXTILE ENGINEERING (ESIT) OF INSTITUTO POLITECNICO NACIONAL (IPN)

In order to continue speaking of “**Casa Posadas**” on its history it is of extreme importance of making a parenthesis on the development that has had the textile industry, in addition is necessary to remember that the initial use of this building was a textile manufacture, and in the years 30's, 40's and 50's was host of the Superior School of Textile Engineering in where the first Mexican Textile Engineers left.

The Union movement of the textile factory of "Blanco River, Veracruz" happened the 7 of January of 1905, during the government of Don Porfirio Diaz, and who culminated with a strike in the factories of Puebla and Tlaxcala. The first center of qualification for textile workers is born in this social movement and this factory (18 years later it would become the Superior School of Textile Engineering of the IPN).

In 1933, in the government of general Abelardo Rodriguez, being Minister of Public Education the Lawyer Narcissus Bassols, head of Technical Education the Engineer and Lawyer Luis Enrique Was mistaken and like assistant manager the Engineer Carlos Vallejo Márquez, is carried out, by request of the working class, the creation of Textile the Federal Schools of the Industry number 1 in Blanco River, Veracruz and number 2 in Villa Obregón Mexico, Federal District; for this school the academic technical personnel was provided by the Secretariat of Industries, designated for such effect to Engineer Genaro Montiel Olvera, adviser of Technology Textile of this Secretariat.

The 16 of May of 1933 the Federal School of Textile Industries in the house was inaugurated Technical number 23 of the street of the Tree in Villa Obregón, Federal District. Being carried out a selection of workers pertaining to textile unions of the zones of industrial development in this matter, of the states of Puebla, Tlaxcala, Jalisco and Nuevo Leo'n. One was integrated with a student population of 28 students, distributed in two groups with 14 students each, under the direction of same Engineer Montiel Olvera.

The place where it was installed this house of studies, it did not reunite the space requirements nor it covered the particular necessities with the establishment, thus it was transfer, in February of 1934, to the street of the arenal number 36 in Chimalistac (house Posadas), of the municipality of Coyoacán.

In September of that year director of the ESIT was named Rescuing Engineer Tolentino Lavat, graduated in the Superior School as Spinnings and Weaves for Engineers of Mulhouse, France; immediately, when assuming the direction, it came to the reconstruction of the training programs, as well as to the reorganization of directors and university professors.

In 1939 the School of Textile Industries number 2, adopts the name of Superior School of Textile Engineering and 12 pasantes withdraw like directors of textile factories, five in preparation of spinnings and seven in weave preparation; that same year withdraws the first generation of Textile Engineers, constituted by the pasantes: Joaquín Zepeda Ortega, José Cárdenas Trujillo, Crescencio Dávila Gonzáles, Juan Juárez Flores, José Luna Sánchez, who emphasized by the efforts obtained in their professional life in different fields from the textile industry, as well as in its school, and they are remembered by the later generations like the "Quintuples", like significant memory of our foundation.

In 1956 the ESIT is transferred to the Polytechnical Unit, where they were installed most of the superior schools, and it was inaugurated with the reason for XXV the anniversary of its foundation.

An historical summary appeared of “HOUSE POSADAS” in where not only fasten with the history of Textile Engineering and the Textile Industry in Mexico and the history of the Mexicans.

4. CITY POLITECNICA

The 5 of June of 1950 to the south of the City of Mexico, the first stone in the pedregal of San A'ngel is placed, the Modern University City (C.U.). Años back the university authorities developed this ambitious project, since the UNAM obtained their autonomy. The University did not count on own resources to be able to make this ambitious project therefore it required of the economic support of the federal government to be able to make specific it.

The Lawyer

Miguel Alemán Valdés President Constitutionalist of the United States Mexican and withdrawn of the UNAM, taking advantage of that Mexico happened with an excellent economic growth, I transform the well-known zone like the Pedregal, in an educative installation kit. Under the European model polis occurred him to the name of City creating true, around the university faculties but in Mexico it had a variant, single were constructed scholastic buildings with all its services but without their zone habitacionales, like it was common in some developed countries to around locate to futures the addresses of students and teachers.

The IPN would not remain back and made the managements pertinent so that the government also constructed his Polytechnical City to him in the environs of the facilities of the Helmet of Santo Tomás.

By presidential decree in 18 of December of 1945 (Official Darío of the 24 of January of 1946 p.9) the expansion of expropriation of of you vary apples until the line of the railroad of Cuernavaca, with some spaces towards the south and denominated Plutarco Elías Calles.

5. ZACATENCO AND TICOMAN.

The name of Zacatenco has two versions, one that means place of dry Zacate and the second zācatl - zacate and tentli - borders, that it means: In the border of marijuana; on the other hand, Ticomán, in agreement with the codex of Santa Isabel Tolá, means: hill handmade.

6. THE TREMBLING OF 1957 IN THE CITY OF MEXICO.

In the City of Mexico it happens a trembling the 28 of 1957 July. In the modern Polytechnical City (Santo Tomás) some buildings were being constructed, among them the superior School of Engineering and

Arquitectura (ESIA), today is the Superior School of Infirmary (ESEO), is damaged the building.

Zacatenco it begins to be a reality, and the one of 1958 specifies: "the units programmed for the Polytechnical City are being constructed in Ticomán and Zacatenco, with a budget of 20 million weights.

7. THE SUPERIOR SCHOOL OF TEXTILE INGENIERIA IN ZACATENCO IT COMPLETES And PRESENT SEAT.

At the beginning the restlessness was mentioned that some of the schools with greater antiquedad in the IPN had rambled in his to exist by several addresses, having begun to concentrate them with the project Polytechnical City, so that own building in a professional unit had each one, for that reason the Superior School of Ingenieri'a Textil (ESIT) had assigned a building within that project that never got to conclude.

The ESIT went transfers of Santo Tomás a Zacatenco in 1962, but a year was inaugurated later, the 27 of July, then number eight occurred him, but when the other aligned buildings were constructed to the seven (8 and 9) lost the number and I stay as ESIT.

The description of the building that occurs indicates the following units: a body of square classroom and laboratory with 2 240m, audience with capacity of 170 spectators, laboratory of fibrología, tests and valuation textile, control of quality and textile chemistry; nine theoretical classrooms with capacity for 30 students each one, library with capacity for 75 readers and 15 000 volumes of heap; three halls drawing, fabric analysis and design, technical and administrative direction, offices; body of heavy laboratories with 3 240 square ms, to lodge those of textile elaboration and their necessary services. In that then his capacity it was of 600 students.

In 1968 an extension to the building was done to him and in ochentas it was equipped to him with a new library, extended the laboratories of physical-chemistry and colorimetría, the hall conferences and the warehouse; being increased simultaneously the capacity installed in approximately a 10% of the completely constructed area. Also "projects of extension for the laboratories of finished and to control of quality concluded and the factories of tricots".

Between 1985 and 1986 12 cubículos in the second floor were adapted to him, for the degrees, repaired 8 classrooms, a laboratory, a factory and an

annex, were constructed four walls to separate the factories of printing, preparation, editorial and mechanic, and remodeló the section of graduated. In period 1994 - 1995 a new electrical system in the factory of tricot was placed, terrace floor, drainage, and a line of air in the preparation factory was put.

8. THE RELATIONS BETWEEN PROT – INDUSTRY AND MODERN INDUSTRY. USE SPECIFICATIONS OF THE FLAT WEAVE LOOMS WORKSHOP OF THE SUPERIOR SCHOOL OF TEXTIL INSTUTE POLYTECHNICO NATIONAL, OF THE HIGHEST EDUCATIOL/EFFECTIVENESS OF THE FRETWORRK

The Superior School of Ingenieri'a Textil (ESIT), counts on a flat weave factory, which has been fundamental for the formation of human resources of high quality for Mexican textile industry in the last 70 years for the technological and economic development of Mexico.

One counts on looms of diverse marks and models, with different mechanisms from insertion for plot that goes from shuttles, of swords and projectile, manual, mechanical, electrical, automatic looms, of eccentrics, of maquinilla verdol, strualin and Jacquard.

Grief that the ESIT does not count on the technology of flat weave vanguard it continues being in Mexico and Latin America leader in superior education in textile engineering.

In order to include/understand better all the previous one I present/display two pictures in where they are the technical characteristics of each one of the looms that the ESIT has and thus to understand and to include/understand the relation between the proto-industry and textile modern industry.

CUADRO 1

Relación del taller de tejido de la ESCUELA SUPERIOR DE INGENIERIA TEXTIL DEL INSTITUTO POLITECNICO NACIONAL

CANTIDAD	TELAR	No. DEL TELAR Y MODELO
1	AUTOMATICO RUTI	1 CU11 HS/S
1	AUTOMATICO DRAPER	2 XD
1	AUTOMATICO RUTI	3 BAL
1	AUTOMATICO CROMPTON	4 W-3
1	AUTOMATICO SAURER	5 VERSAMAT
1	AUTOMATICO CROMPTON	6 S-6
1	MECANICO BUTTER WORTH	7 BURNELY
1	AUTOMATICO SULZER	8 85VSN

1	AUTOMATICO DRAPER	9 X2
1	AUTOMATICO DRAPER	10 7311
1	AUTOMATICO KOVO	11 K-58
1	AUTOMATICO SAURER	12 VERSAMAT
1	MANUAL COLONIAL	13 COLONIAL
1	AUTOMATICO IWER	14 1500
1	AUTOMATICO IWER	15 1500
1	AUTOMATICO TOYODA	16 LOOM WORKS

TOTAL DE PIEZAS 16

CUADRO 2
CARACTERÍSTICAS BÁSICAS DE LOS TELARES DE LA ESCUELA SUPERIOR
DE INGENIERÍA TEXTIL DEL INSTITUTO NACIONAL POLITÉCNICO

PAIS	TIPO DE TELAR	MECANISMO DE INSERCIÓN DE LA TRAMA	MECANISMO DE FORMACIÓN DE LA CALADA	MECANISMO DE PICADA	TIPO DE LECTURA DEL PICADO	TIPO DE PARA URDIMBRE	TIPO DE PARA TRAMA	ALIMENTACION DE LA TRAMA	MECANISMO DE LLENADO DE CANILLAS	BAR
SUIZA	AUTOMATICO	LANZADERA	MAQUINILLA	ESPADA	PLASTICO	ELECTRICO	ELECTRICO	FILETA LATERAL	UNIFIL SENSOR LUMINOSO	BOT DE ARR
U.S.A.	AUTOMATICO	LANZADERA	MAQUINILLA	ESPADA	PITONAS	ELECTRICO	MECANICO	FILETA LATERAL	UNIFIL PARA 6 CANILLAS	PAL PAR ARR
SUIZA	AUTOMATICO	LANZADERA	JUEGO DE EXCENTRICOS	ESPADA		MECANICO	MECANICO	BATERIA TIPO REVOLVER PARA 28 CANILLAS	CANILLERA	PAL PAR ARR
U.S.A.	AUTOMATICO	LANZADERA	MAQUINILLA		MECANICA POR MEDIO DE RODAJAS	ELECTRICO Y MECANISMO PARA 4 LANZADERA	CENTRAL MECANICO	BATERIAS DE CANILLAS VERTICAL	CANILLERA	PAL PAR ARR
SUIZA	AUTOMATICO	PINZA BILATERAL	MAQUINILLA		PLASTICO MECANISMO PARA ORILLA FALSA	ELECTRICO	LAMPARAS Y BANDERAS DE INDACACION DE PAROS	FILETA Y MECANISMO PREALIMENTADOR DE TRAMA		
U.S.A.	AUTOMATICO	LANZADERA	MAQUINILLA	ESPADA	MECANICO POR MEDIO DE PITONAS			CAJA PARA 2 LANZADERAS Y BATERIAS PARA 2 LANZADERAS	CANILLERAS	
INGLATERRA	MECANICO	LANZADERA	JUEGO DE EXCENTRICOS	LATIGO O GARROTE			MECANICO Y PALANCA DE PARO Y ARRANQUE			MEC PAL DE ARR
SUIZA	AUTOMATICO	PROYECTIL	RATIERA		PLASTICO MECANISMO DE DISPARO DEL PROYECTIL	ELECTRICO Y MECANISMO PARA 4 LANZADERAS	CENTRAL MECANICO	BATERIA DE CANILLAS VERTICAL		PAL PAR ARR
U.S.A.	AUTOMATICO	LANZADERA	JUEGO DE EXCENTRICOS	ESPADA		ELECTRICO		BATERIA DE CANILLAS TIPO REVOLVER 28 CANILLAS	CANILLERA	PAL PAR ARR
U.S.A.	AUTOMATICO	LANZADERA	JUEGO DE EXCENTRICOS	ESPADA		MECANICO	MECANICO	BATERIAS TIPO REVOLVER PARA 28 CANILLAS	CANILLERA	PAL PAR ARR
CHECOSLOVAQUIA	AUTOMATICO	LANZADERA	MAQUINILLA	ESPADA	PLASTICO	MECANICO	MECANICO	BATERIA DE CANILLAS TIPO REVOLVER PARA 30 CANILLAS	CANILLERA	PAL PAR ARR
SUIZA	AUTOMATICO	PINZA BILATERAL	MAQUINILLA	ESPADA	PLASTICO	ELECTRICO		MECANISMO PARA ORILLA FALSA Y MECANISMO PREALIMENTADOR DE TRAMA		LAM BAN DE INDI DE P
MEXICO	MANUAL	LANZADERA	MAQUINILLA							
ESPAÑA	AUTOMATICO	PINZA SENCILLA	MAQUINILLA JACQUARD	BRAZO MECANICO	PLASTICO	ELECTRICO		FILETA Y MECANISMO PREALIMENTADOR DE TRAMA	FILETA Y MECANISMO PREALIMENTADOR DE TRAMA	BOT DE ARR
ESPAÑA	AUTOMATICO	PINZA SENCILLA	MAQUINILLA JACQUARD	BRAZO MECANICO	PLASTICO	ELECTRICO		FILETA Y MECANISMO PREALIMENTADOR DE TRAMA	FILETA Y MECANISMO PREALIMENTADOR DE TRAMA	BOT DE ARR
JAPON	AUTOMATICO	LANZADERA	MAQUINILLA	ESPADA	MECANICA POR MEDIO DE PITONAS	MECANICO	MECANICO	MECANISMO DE CAJAS ASCEDENTES PARA 3 LANZADERAS	BATERIA PARA 8 LANZADERAS	









