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Research paper

Industrial buildings from the 1960s in the context of their potential for reuse. Example of the Warsaw Pump Factory building

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Abstract: Following 1945, industrial construction in Poland was subject to strict guidelines of economic planning. In the period in which the pseudo-classical doctrine of socialist realism was in effect, it represented one of the few exceptions not subject to the mandatory use of decoration that referred to the idea of 'the form and content of socialist realism'. In this context, the industrial buildings erected in the 1950s and early 1960s in Poland stand today as examples of original and modern technical thought. The solutions applied in the buildings often bear the features of an experimental search for new, optimal solutions for the erection of large, single-space halls of production plants. Thus, the period of industrial construction development in the 1950s and 1960s was a time of special and close cooperation between architects and constructors, to which industrial buildings are visible testimony. The ambition of the designers of the time was to arrive at the best possible structural solutions and to make them manifest in architectural form, articulation, and composition, while at the same time ensuring usability – consistent with the purpose of the facility. However, it ought to be emphasised that designers sought aesthetics of the structural solutions that were not reduced to mere technical aspects, but co-created the architecture of the building. The present article attempts to assess the solutions applied in the building of the Warsaw Pump Factory at ul. Odlewnicza in Warsaw. Consideration is given to the validity and potential for protection and re-use of the industrial facility whose production process has been reduced or extinguished. The article contains an analysis of valuable structural and material solutions, which testify to its innovativeness and significance for the development of modern industrial architecture. The premise of the article is to analyse the indicated facility from the point of view of the legitimacy of its protection or reuse to formulate conclusions for wider application in facilities of this type.

Keywords: industrial architecture, post-industrial heritage, load-bearing structure, modernism, adaptive reuse, reinforced concrete

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1. Introduction

Industrial buildings constructed in the first two decades after World War II in Poland were a manifestation of modern and innovative technical thought in the area of industrial construction. They provided an example of modern architecture by combining modern construction with functional aspects and contemporary aesthetics. At the time, industrial buildings were grouped in accordance with the 'Athens Charter' [1]. Industrial districts provided better spatial organisation and a proper functional dimension to industrial complexes [2].

Following 1945, industrial facilities in Poland were seen as a special area of the state economy and as such were subject to strict planning and detailed guidelines by The State Economic Planning Commission [3]. Industrial architecture, therefore, had to be subject to economically rational principles of shaping the spatial layout so as to ensure that buildings were structurally optimised. Therefore, architects and constructors sought spatial forms and functional solutions with which to shape spatial solutions as efficiently as possible.

The value of industrial construction after 1945 should, therefore, be considered not only from a purely functional point of view. These buildings offer a unique testimony to the pursuit of excellence in the aforementioned aspects. The structural solutions used in these buildings were often individually designed and constituted prototypes; they often were unique and singular construction systems not found in other developments. Indeed, the fact that these solutions did not come in series determines the fact that today they are seen as experimental, precursory (Fig. 1), often representing a key turning point in the process of designing structural systems and optimising solutions with a wider impact [4].

Fig. 1. View of the hall of the Warsaw Pump Factory, photo: M. Czarnecki, 2017

The present research consists of distinguishing key and valuable features of the object and their carriers, determining the state of preservation and completeness of the substance, and indicating how the object could be used in the situation of loss of production function. Analyses were conducted to distinguish valuable solutions that are evidence of precursor solutions in the design process of an industrial facility. The facility that was analysed as a case study was the Warsaw Pomp Factory (WPF), whose deteriorating building is located at ul. Odlewnicza in Warsaw.

2. Materials and methods

2.1. Subject literature on the Warsaw Pump Factory and issues of industrial architecture

The analysis of the state of research should commence with the key publication, namely the collective work entitled 'Construction and Architecture in Poland 1945-1966'. The publication is divided into thematic subsections, the most noteworthy being a chapter by J. Dumnicki and M. Pietraszun in which the construction of industry and transport in the first two decades after World War II [2] is discussed in detail.

The 1964 magazine 'Architektura' [5] with an article by one of the co-authors of the project, is another publication in which the facility is presented with drawings and technical details. In books written by C. Bąbiński [6], Z. Arct [7] and P. Szafer [8] authors extensively describe the issue of industrial facilities in Poland.

In the contemporary literature on the subject, numerous publications by T. Bardzińska-Bonenberg can be found. These concern such issues as the industrial architecture of the post-war period [9, 10]. The author emphasises the importance of industrial buildings of the 1960s as examples of innovative technical thought in architecture.

Of the studies addressing the topic of industrial architecture and its significant impact on 20th and 21st-century art, two key items should be mentioned. P. Winskowski's book [11] holds a significant position in the literature addressing the issues at the junction of technology and art. The author emphasises the influence of technology, industry and, in particular, industrial architecture on architecture and art in the broad sense. Another important publication is the collective work [12] edited by I. Kozina, which comprises a collection of articles addressing the relationship between art and industry, as well as inspiration and close cooperation between the two fields in the 20th century.

An article by A. Gzowska offers an important voice in the discussion on the significance of industrial construction for the development of innovative ideas in architecture after the Second World War [13]. The author draws attention to the role played by laboratory research of new construction solutions, conducted since the 1950s, in the development of modern architecture of the second half of the 20th century. The importance of unusual, experimental and pioneering solutions is also highlighted in her article.

In an issue of the monthly magazine Architektura-Murator [14], the Warsaw Pump Factory was presented as Poland's first 'Glass factory', which resulted primarily from the full glazing to part of the façades of the halls.

2.2. Methods applied in the work

The research was based on the photographic documentation collected and field studies conducted during the site visit in 2021. Thematic queries were performed on industrial construction and on the building in question, namely the Warsaw Pump Factory, as a case study.

The following research questions were formulated for the section of the study dealing with issues of shopfloor reuse:

– Is it possible to reuse industrial facilities with large heights for functions other than industrial ones?
– What are the possibilities for the use of large glazing in the reuse of a production hall?
– How can standards for post-industrial heritage be formulated in order to consider it as an important cultural element?

3. Industrial architecture as legacy of innovative construction thought

3.1. Modern industrial architecture in Europe and worldwide

In the post-war period, numerous plants and industrial complexes were erected in Poland, Europe and worldwide. Many of them were exemplary in terms of the development of modern production technology. These solutions were constantly being improved and perfected. This had a direct impact on shaping the architecture of these facilities and affected the solutions used by the designers of subsequent industrial plants. Industry and modern industrial architecture contributed important social values and played an important role in the transformation of modern society [15].

A key role in the implementation of industrial facilities was played by constructors, who developed innovative technical and construction solutions. Among the best-known designers in Europe were Robert Maillart and, later, Pier Luigi Nervi, both of whom were the pioneers of advanced reinforced concrete structures. In North America, on the other hand, Felix Candela was active. These individuals made great contributions to the development of unique reinforced concrete structures, realising increasingly large reinforced concrete roofings in industrial and sports facilities. These two types of facilities offered the greatest opportunities to undertake new and spectacular challenges in the execution of atypical structures dedicated to specific, singular implementations [16].

In Poland, Wacław Zalewski, the author of numerous structural solutions, was such a pioneer and undoubtedly a leading figure. He participated in such projects as the design of structural solutions for significant facilities, including the hall of the Plush Factory in Kalisz and the Furniture Factory in Wyszków [17].

3.2. History of the Warsaw Pump Factory at ul. Odlewnicza 1, Warsaw

The history of the foundation of the Warsaw Pump Factory dates back to the 19th century, the period of industrialisation of Warsaw's Praga district. At that time, the metallurgical industry was being developed the most. Initially, the factory was located at ul. Aleksandrowska (today's Aleja Solidarności), and after Poland regained independence in 1918, production was moved to the plant at ul. Grochowska. The Second World War halted further development of the factory. After the war, due to high demand, the factory resumed production. In 1950, under the law on state ownership, the plants of the Warsaw Pump Factory located at ul. Grochowska 314 were nationalised as they were deemed to be among the main branches of the national economy.

After the war, the plant saw a dynamic increase in production, which led in 1957 to the adoption of a postulate to build a new plant in the Żerań district of Warsaw. The general designer of the plant was Metal and Electrotechnical Industry Design and Construction Enterprise – Chemical Industry Design Office 'Prochem' and the design team: architecture – Z. Pecyński, construction – R. Peszel, A. Plenkiewicz, T. Młynarz, Z. Sieczkowski, L. Tomaszewski. The factory was located at ul. Odlewnicza 1 and was completed in 1963. The designed hall was the main production facility of the plant. [18]

3.3. Architectural analysis of the Warsaw Pump Factory building

At the time of the design of the production hall for the Warsaw Pump Factory, as Dumnicki and Pietraszun point out, two design trends prevailed in Poland. The first trend was for hall structures and hall shell roofs to be made of monolithic reinforced concrete using shuttering of sliding roof formwork. The second was the prefabrication of structural elements and their assembly using special construction cranes [2]. In the new hall, the designers used prefabrication of the structural elements. The plant consisted of two interconnected building blocks arranged perpendicular to each other. From ul. Odlewnicza, a two-bay hall building with an office area was situated (Fig. 2) and further, perpendicular to it, was a four-bay production hall building with an internal courtyard. The naves of the halls were supported by columns, 6 m apart, and covered with 4 m long prefabricated shells (Fig. 3). This unusual roofing allowed the introduction of natural light into the production halls, which was innovative for the time. The triangular girders served also as the structure for the skylights. Between the posts, arched prefabricated short shells of 12 cm thick lightweight belite-rich concrete were stretched. Owing to this unusual solution i.e., the elevation of the skylights above the roofline, the assumed height of the hall and the construction of the prefabricated roof surface elements – the designers decided to dispense with the thermal insulation of the roofing [5, 14].

Fig. 2. Production hall building – view from outside, photo: M. Czarnecki, 2021

Fig. 3. Detail of glass façade and roof structure from outside, photo: M. Czarnecki, 2021

Not only the topping of the girders was innovative for the time, but so was the use of fully glazed north-eastern walls and the design of the drainage through a system of drainpipes on the exposed and strongly accentuated exterior façades. The solution was in the spirit of the

industrial trend, as it is defined today. The combination of the structure, the thin shells covering the roof and the triangular skylights, together with the drainage, provided an interesting industrial and dynamic visual effect.

At the time of its construction, the building made a significant contribution to the development of industrial construction with its unusual roof made of short shell panels which were made in such a way that, while covering the large span of the hall's naves, they allowed the interior to be lit by longitudinal skylights implemented on the steel girders. Both of these solutions (glazing of the walls and innovative roofing) complemented each other, forming an integrated system enabling the illumination and roofing of a large production area.

The literature on the subject, the preserved archival photographs and the project documentation indicate that the glass façade was the most significant element of the architectural composition. The other elements harmoniously complemented the composition of juxtaposing the two building masses with a rhythmic pattern of window openings [2, 8].

The social and office part was placed at ul. Odlewnicza not only for functional reasons but also so as not to disturb the uniform shape of the glazed wall on the east and north sides. For the designers, it was important to accentuate the industrial function of the building by making the installations along the external walls more legible, in juxtaposition with the glass facades. In those years, rational use of building materials was also vital, and this significantly influenced the design decisions.

As the company developed, the Pump Factory underwent significant and numerous transformations and functional changes due to the necessary adaptations to the production requirements of the time. Among the changes introduced was the partial covering of the external walls with corrugated sheet metal cladding (Fig. 4) bearing insulation to increase thermal comfort. The extension of the production part with a new hall adjacent to the existing complex was another important modification, as a result of which part of the glass façades needed to be covered or removed.

Fig. 4. The original hall covered with sheet metal cladding, on the right the adjacent new hall building, photo: M. Czarnecki, 2021

3.4. State of preservation of the Production Plant of the Warsaw Pump Factory at the time of the study

At the time of the study, there were several buildings on the site premises that did not represent significant architectural values. An office building was located on the side of ul. Marywilska. Its shape indicates that it was erected in the 1990s and does not belong to the original complex. On the side of ul. Odlewnicza, there was the administration building, which housed the main entrance to the complex. After a thorough analysis of photographs from 1964 [5] and a comparison with the present state, it should be concluded that this building, after years of use, has significantly deviated from the original design assumptions. The shape of the façade, the arrangement of the windows and the architectural detail have been completely changed. The same applies to the façade of the production hall from the side of ul. Odlewnicza. The facade of the social area of the building has been clad in blue corrugated sheet metal, and the longitudinal windows arranged in a rhythmic pattern of the 1960s have been replaced with standard PVC windows. The same applies to the facades on the west and north sides [5], clad in corrugated sheet metal in an intense blue colour for thermal reasons.

Fig. 5. Reinforced concrete columns carrying steel trusses which provide the support structure for prefabricated thin-walled shell panels, photo: M. Czarnecki, 2021

Fig. 6. Interior of the original production hall, photo: M. Czarnecki, 2021

The difficulty of maintaining the necessary thermal conditions for work prompted the factory owners to cover the surface of the glass facades partially. The glass façade, innovative for the time of its creation, unfortunately, proved not very functional in use. In winter, due to the large area of heat loss through the glass partition, it necessitated much greater energy expenditure to heat the building.

It should be noted here that the height of the larger of the production halls far exceeded the requirements of the production that took place in these facilities most recently (Figs. 5, 6). In the summer, on the other hand, the high insolation through the huge planes of glazing made it impossible to ensure an adequate room temperature.

In the interior, the structure and skylights were preserved; in some parts of the shells, corrosion was visible at the junctions between the skylight structure and the vault shells. Additionally, the aforesaid shell roofing constituted a major problem relating to the safety of use and the need for incurring high costs. The regulations require snow clearance in winter, which, with the curved shape of the roof slope, was extremely difficult, very costly and risky for safety reasons.

In addition, it should be noted that the legally required snow clearing of the roof involves the physical movement of snow along the curved roof elements towards the edge of the roof with snow shovels, which contributes to additional damage to the outer roof planes and skylights.

The building has undergone significant modifications as a result of its expansion; changes in the production profile and the gradual degradation of the buildings occurred. However, the original solutions have been partially preserved. Their evaluation and state of preservation are presented below in the Table 1:

Table 1. Evaluation of the value and state of preservation of key spatial solutions

Spatial solution	**State of preservation**	**Technical condition**	**Value assessment**	**Work required**
Reinforced concrete poles	complete 100%	good (serves a load-bearing function)	innovative solution for the construction system	concrete protection and preservation
Steel trusses with skylights	complete 100%	medium (partial corrosion, partial glass replacement)	innovative solution for the construction of a roof with lighting	anti-corrosion protection, replacement or restoration of glazing
Reinforced concrete roofing panels	complete 100%	medium (visible outline of reinforcement due to frost)	innovative covering solution of thin-shell panels	concrete protection and maintenance, sealing of expansion joints, waterproofing
Glass curtain walls	partial <20%	bad (large losses due to expansion, partial replacement)	Innovative courtain wall and lighting solution	impossible to reconstruct due to the extension and change of the spatial structure of the facility
Flooring	partial 70%	bad (partial loss, damage)	low-value solutions	necessary replacement of damaged flooring
Doors/ gates	unpreserved 0%	–	–	–
Equipment/ machines	partial <20%	good (in use)	secondary equipment	large cranes can be preserved

At the time of the study, the facility presented an overall good technical condition. The structural solutions were in good condition (Fig. 7). The original innovative load-bearing structure was complete and, together with the canopy and overhead lighting, served a load-bearing function (Fig. 8). The state of preservation of the glass curtain walls was a debatable issue. They had survived to a small extent, thus that the original creative idea had been blurred. As such, the object was not complete in its original form, and therefore its inclusion in conservation protection was questionable. From a functional point of view, however, the building was suitable for reuse and adaptation to a new function.

Fig. 7. The junction between the old and new production hall, different types of construction are visible, photo: M. Czarnecki, 2021

Fig. 8. Detail of the system of hall structures and illumination, photo: M. Czarnecki, 2021

3.5. Opportunities and possibilities for reuse of the site in view of the state of preservation at the time of the study

From the point of view of the protection of industrial architectural heritage, the preferred course of action is to protect the integrity of the industrial complex and preserve its original production function [19, 20]. Preserving the integrity of the building complex plays an imperative role and requires relevant actions involving the evaluation of the existing substance to identify the phases of construction, which determines the most valuable elements of the complex [21]. In the case of large and complex facilities, this is a labour-intensive and multi-stage process involving detailed analyses of individual buildings, their parts, as well as movable and immovable equipment (Fig. 9). In the case of industrial facilities, factories, steel mills, shipyards and production facilities of other kinds, production machines and equipment are a vital element to be protected as well (Fig. 10). These should be protected and preserved in situ as an integral part of the industrial complex.

However, when the preservation of the production function requires the modernisation of the machinery stock, the replacement of equipment and the relocation of old machinery (e.g. for preservation, display in a different location or placement in a museum of former industry or other industrial heritage institutions) is acceptable.

Fig. 9. Preserved working equipment used in the production conducted in the last years of the factory's operation, photo: M. Czarnecki, 2021

Fig. 10. One of the cranes used in production, photo: M. Czarnecki, 2021

When, on the other hand, the preservation of further industrial production is not possible, e.g. when a plant goes into liquidation or the existing business profile changes, the function of the industrial site can be changed. In such a case, consideration should be given to how to reuse existing buildings and adapt them to a new function while retaining the most valuable original structural elements and equipment. The adaptation should take into account protecting and emphasising the preserved original buildings under legal protection as an overriding consideration. If these buildings remain under legal protection, this is an obligatory requirement.

Example 1. Henry Ford factory in Dearborn, Michigan, USA

The preserved industrial halls of the Ford factory in Dearborn (Fig. 11), excluded from active automotive production, have been converted into an automotive museum with an exhibition of vintage Ford vehicles. This is a model example, as museum objects previously manufactured in the former manufacturing halls are on display. In this case, the adaptation involves preserving the cultural context of the building. By introducing an attractive exhibition function, the economic basis of the facility and its self-financing have been ensured. The Ford Museum in Dearborn is a well- functioning centre for comprehensive research into the history of the Ford factory and its production. The facility is visited by approximately 1.8 million visitors annually and is among the leading cultural institutions in the USA [22].

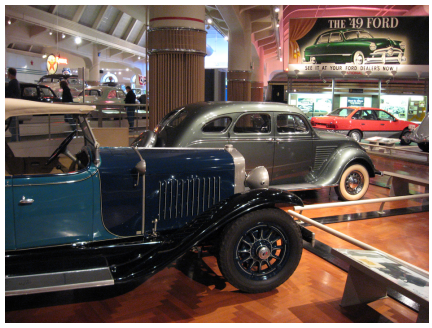

Fig. 11. Henry Ford Museum at the former Ford factory, Dearborn (MI), USA, photo: M. Czarnecki, 2007

Example 2. Norblin factory in Warsaw, Poland

Metal product factories operated in production for 100 years (1882-1982). During this time, the ownership structure and production profile changed several times. When the production ended, the building was temporarily adapted as a branch of the Museum of Technology and part of the premises was used for artistic activities as a theatre stage. In 2009, Grupa Capital Park S.A. became the building's new owner. The investor commissioned the PRC Architekci studio to design the adaptation of the building for the purposes of a multifunctional service and office centre. Between 2011 and 2021, comprehensive conservation works were performed on the historic buildings, as well as on the construction of underground floors and partial superstructure of the building (Fig. 12). The factory lost its original function and was adapted for commercial use. It should be highlighted that the preserved machines have been conserved and are now on display at the site. [23]

Fig. 12. Norblin factory in Warsaw after adaptation to a multifunctional office and service facility, photo: M. Czarnecki, 2023

Example 3. Arsenale in Venice, Italy

The complex of a former shipyard and shipbuilding plant, which had been in operation since the Middle Ages, continued to operate uninterruptedly until the 20th century. It has undergone numerous modernisations and expansions. Eventually, the production activity of the Arsenale ended in 1950. Over the following years, the facility was employed for various purposes, including artistic, exhibition and museum purposes. In 1983, conservation work began on the abandoned buildings. Since the 1980s, some of the facilities have served as a venue for the Art Biennale, the Architecture Biennale and the Arte Laguna Art Festival. In recent years, further buildings have been adapted for exhibition purposes (Fig. 13). The former workshops and industrial halls provide a spacious, multifunctional space that meets the exhibition requirements well and provides a functional and versatile space for a variety of performance activities [24].

Fig. 13. Arsenale in Venice – the interior of one of the former production halls adapted as exhibition space, photo: M. Czarnecki, 2023

The examples discussed above vary in terms of scale, production profile and historical origins. However, the analysis of these examples reveals that post-industrial complexes are suitable for reuse, regardless of the typological or functional differences between them. Irrespective of the size of the facility, it is possible to adapt the new function to the spatial conditions and ensure the preservation of the key carriers of value, such as the building substance, the structure of the facility, its equipment, technical details and numerous other important artefacts.

In the case of the industrial halls of the Warsaw Pump Factory, the essential carrier of value included the buildings of the halls, consisting of the original structure, partially preserved outer glass walls and a roof made using an experimental construction. The cubic capacity of the building offered the possibility to adapt it to various types of new functions. Among the potential options for new use, the following can be identified, as presented in the Table 2.

Table 2. Assessment of the suitability of the facility in the context of a change of function

Type of new function	**Type of use**	**Impact**			**Suitability of the facility**	
		local	city	region	high	low
Cultural	museum (technology, military, aviation, industry)	+	+	+	•	
	art gallery	+	+	+	•	
	exhibition areas	+	+	+	•	
	shows / concerts	+	+	+	•	
	theatre/cinema	+	–	–		•
Sports	gyms	+	–	–		•
	game halls	+	+	–	•	
	cycling/motorbike track	+	+	+	•	

Continued on next page

Table 2 – *Continued from previous page*

Type of new function	Type of use	Impact			Suitability of the facility	
		local	city	region	high	low
Sports	swimming pools	+	–	–		•
	climbing devices	+	+	+	•	
	athletics	+	+	–	•	
Commercial	shopping centre	+	+	–	•	
	large area store	+	+	–	•	
	marketplace/exchange	+	+	+	•	
Other	amusement park	+	+	+	•	
	theme park	+	+	+	•	
	agriculture / vertical farming	+	+	–	•	
	industrial production	+	+	+	•	
	warehousing/ forwarding	–	+	+	•	
	film production	–	+	+	•	

The analysis above indicates the high potential of the site for change of function and reuse. The large spaces of the post-industrial halls offer the possibility to adapt it to a variety of use options. A change of function would require the introduction of solutions to ensure smooth functioning and improved conditions for the use of the facility.

4. Synthesis of research results

The state of preservation of the building deviates significantly from its original shape. This is evidenced by several significant changes to the original shape of the building, including the extension of the production hall on the eastern side. Following thermo-modernisation and adaptation to fire regulations, no large plane of glazed façade has survived, not even in fragments. Fragments of glazing remained only on one façade. The architecture of the buildings complementing the production hall has also been altered. The location of the building is not part of any urban plan.

Significant transformations to the body of the hall and the original elevation solutions, including primarily the covering of a glass wall on ul. Odlewnicza side and the removal of glass walls in the north-eastern part resulted in the loss of the original assumptions of the facility. Thus, it seems possible and reasonable to convert the whole site to other functions, including a change of its use with the adaptation of its form to the new purpose. It seems reasonable to retain the existing structural system and canopy with skylights, on condition that appropriate preservation and renovation works are undertaken.

Possible adaptations of this type of building may include extensive and multifaceted measures to adapt the building to a new function. The facility, despite being preserved in an incomplete state, has the cubic area capacity for reuse.

5. Discussion and conclusions

The problem of the loss of the production function of industrial buildings sparks discussions about the appropriateness of their preservation. In cases where these facilities represent valuable historical objects of great importance for the development of industry and of great architectural and structural significance, such objects should be preserved. Conversely, in the case of buildings that represent only technical value but are suitable for reuse, it is worth considering their continued use, even if this entails a change of function.

Large industrial halls have a high potential for reuse and offer a high degree of flexibility in adapting them to new functions, as exemplified by the complex of the Warsaw Pump Factory. Even in a situation where existing production activities have ceased, the facility can be retained using the existing buildings, which is particularly justifiable from an economic point of view.

Relocation of buildings of high historical value should be avoided, as this may contribute to their damage.

Objects of reinforced concrete construction are suitable for adaptation on the site where they were erected. Facilities suitable for relocation include those whose prefabricated construction has been adapted for easy assembly and disassembly using prefabricated components. These are usually contemporary prefabricated modular buildings [25]. However, it should be remembered that not all buildings made using prefabricated elements are suitable for relocation. This is especially true for buildings in which the prefabricated elements are permanently connected and form a complex layout [26]. The adaptation and reuse of post-industrial buildings is a sustainable, environmentally friendly, and economically viable solution. Such a course of action is consistent with the circular economy.

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Budynki przemysłowe z lat 60. XX wieku w kontekście ich potencjału do ponownego wykorzystania. Przykład budynku Warszawskiej Fabryki Pomp

Słowa kluczowe: architektura przemysłowa, dziedzictwo postindustrialne, konstrukcja, modernizm, reuse, żelbet

Streszczenie:

Budownictwo przemysłowe w Polsce po II wojnie światowej podlegało ścisłym założeniom planowania gospodarczego. W okresie obowiązywania pseudoklasycznej doktryny realizmu socjalistycznego stanowiło ono jeden z nielicznych wyjątków, niepodlegających obowiązkowi stosowania dekoracji odwołującej się do idei „narodowej formy i treści socjalistycznej". W tym kontekście obiekty przemysłowe powstałe w dekadzie lat pięćdziesiątych i na początku lat sześćdziesiątych w Polsce stanowią dziś przykład oryginalnej i nowoczesnej myśli technicznej. Rozwiązania zastosowane w obiektach noszą często cechy eksperymentalnych poszukiwań nowych, optymalnych rozwiązań wykonania dużych, jednoprzestrzennych hal zakładów produkcyjnych. Artykuł podejmuje próbę oceny rozwiązań zastosowanych w obiekcie Warszawskiej Fabryki Pomp przy ul. Odlewniczej w Warszawie. Podjęto rozważania dotyczące zasadności i potencjalnych możliwości ochrony oraz ponownego wykorzystania obiektu przemysłowego o zredukowanym lub wygaszonym procesie produkcyjnym. Artykuł zawiera analizę wartościowych rozwiązań konstrukcyjnych i materiałowych, świadczących o jego nowatorstwie i znaczeniu dla rozwoju nowoczesnej architektury przemysłowej. Założeniem niniejszego artykułu jest przeprowadzenie analizy wskazanego obiektu pod kątem zasadności jego ochrony lub ponownego wykorzystania w celu sformułowania wniosków o szerszym zastosowaniu w tego typu obiektach.

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