



**MISUSED INVENTION: PEOPLE LINKED TO THE
PRODUCTION OF ZYKLON B IN BOHEMIA
(CZECH REPUBLIC) DURING WWII**

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ZYKLON B

- Granular diatomaceous earth saturated with hydrogen cyanide, from which hydrogen cyanide gas (HCN) began to be released when the package was opened. Its original intended use was for disinfestation.
- From 1941, it began to be used as an instrument of genocide in the gas chambers of the extermination camps during World War II, primarily in the Auschwitz-Birkenau and Maidanek camps.
- The key man tasked with optimizing Zyklon B killing in the extermination camps was German SS officer Kurt Gerstein (1905 – suicide 1945).
- Specifically, it was supposed to increase its deadly effectiveness and shorten both the duration of action and cleaning "after use". Gerstein originally cared about water disinfection and did not agree with mass murder. But as soon as he found out about him, he tried to get this information out of Nazi Germany, specifically to the Vatican to the Pope. Towards the end of the war, he surrendered to the French army and in custody wrote the so-called Gerstein report, which describes in detail the use of the Zyklon B.
- Magazine article Mlýnář 57, 1934, č. 24, s. 277.

Dr. ing. J. Z á k :

Hubení škůdců ve mlýně.

Na toto téma bylo již napsáno mnoho článků v tomto časopise, a stále se musíme k této otázce vraceti, neboť vzhledem k důležitosti věci musí si praxe všimati nových a nových prostředků. I u nás v Československu máme celou řadu přípravků, jež směřují na odstraňování škůdců mlýnských, v první řadě pilouše a mola moučného. Bylo zde již psáno o prostředku Calandrolu Z, dále Granasolu a Granolu. V poslední době objevily se na trhu z cizích prostředků: zamlžování způsobem Parex, dále aktivní kyselina křemičitá Naaki. Továrna pro zpracování draselných luhů v Kolíně upozornila v poslední době na to, že se opět zabývá výrobou kapalného kyanovodíku a zavádí opět způsob, známý pod jménem C y k l o n B. Svěho času bylo již o tomto způsobu psáno, ale ježto jedná se o domácí výrobu, pojednám, pokud moje informace stačí, o této výrobě a prostředku.

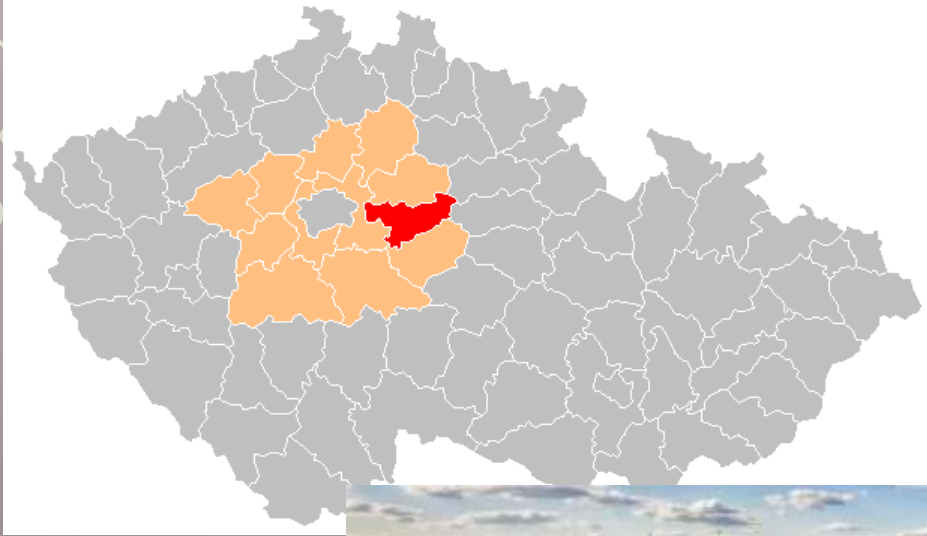
Kolínská továrna prováděla v dobách válečných a v prvních letech poválečných čištění mlýnů kyanovodíkem podle staré metody kádové, při čemž této metody používala též na desinfekci bytů. Používání kyanovodíku bylo pak opuštěno, a dnes se továrna opět k němu vrací. Vyrábí se kyanovodík zkapalněný, jehož výroba jest chráněna československými patenty č. 15.928, dále 26.297, 29.176, 37.131 a 53.260. Kapalný kyanovodík se nassaje do absorpční látky za přimíšení určitého dráždidla. Přichází pak v plechovkách, jež obsahují různá kvanta kyanovodíku, a to: 100, 200, 500, 1000 a 1500 g kyanovodíku. Kapalina jest dokonale nassáta, takže po otevření krabice nevytlévá se žádná kapalina. Kyanovodík jest látka krajně jedovatá a proto čištění mlýnů tímto způsobem jest vázáno na zákonité předpisy a smí se prováděti jen koncesovanými společnostmi za všech bezpečnostních opatření. V první řadě jest nutno vypočísti kubaturu mlýna, aby se vědělo, jaké množství Cyklonu B bude zapotřebí. Dále nutno věděti, který škůdec se bude

hubiti. Ve mlýnech se předpisuje na hubení všech škůdců, čítaje v to moly, pilouše, myši atd., koncentrace 1.5% kyanovodíku, t. j. 1.5 kg kyanovodíku na 100 cbm. Doba působení záleží od druhu stavby a pohybuje se v rozmezí 4—24 hodin. Místnosti desinfikované musí se dobře utěsniti. Okna, dveře, ventilace, různé otvory, se utěsní přelepáním proužků papíru, stroje se otevřou, případně rozeberou, aby plyn měl dokonalý přístup. Po zjištění, mnoho-li krabic jest zapotřebí, se krabice otevírají na volném prostranství před mlýnem. Jakmile se otevrou, t. j. plech se odřízne, uzavřou se krabice pryžovou čepicí, jež jest při každé krabici. Otevřené krabice, ovšem utěsněné vložkou, jež se dá rychle odstraniti, se odnesou na nosítkách do mlýna, a desinfektor, opatřený plynovou maskou s vložkou pro kyanovodík, rozsype rychle obsah krabic na podložené staré pytle. Krabice předeem ovšem se rozloží po celém mlýně, aby způsob rozsypaní byl rychlý. Pryžová vložka se sejme a obsah krabice se vysype. Takovýmto způsobem zaplní se mlýn rychle a nakonec se uzavře východ. Zkapalněný kyanovodík vře již při 26 st. C. Na to nutno pamatovati. Čím teplota se blíží tomuto bodu, tím rychleji přechází v plyn. Proto se doporučuje, aby teplota místností desinfikovaných byla mezi 15—20 st. C. Pro bezpečnost nutno všechny přístupy k desinfikovaným místům nápadně označiti varovnými nápisy. Drážďeci přiměs ke kyanovodíku způsobí intenzivnější dýchání škůdců a tím větší účinek kyanovodíku a krom toho jest varovným prostředkem pro větrání. Po skončeném vyplynování se při nasazené masce místnosti větrají a chemicky vyzkoušejí, zda není přítomen ještě kyanovodík. Teprve pak se pracovní prostory uvolní a nejedovaté zbytky se vynesou na starých pytlích a zakopají. Při použití Cyklonu není ohrožena jakost zrna nebo mouky. Poukazují na své dřívější články.

ORIGIN AND PRODUCTION OF ZYKLON B

- Zyklon B was invented by Dr. Walter Heerdt, Director of Degesch (Deutsche Gesellschaft für Schädlingsbekämpfung), owned the trademark and the right to manufacture it
- Degesch was founded in 1920, 100% owned by Degussa, which later played an important role in production in Czechoslovakia
- In the business year 1924/25, the factory Dessauer Werke für Zucker und chemische Industrie (DZR) started the first industrial production of Zyklon B at the instigation of Degesch - until the first half of the 1930s it was the only producer of this gas
- In the 1930s, gas production also started in France - the Sofumi company in Villers-Saint-Sépulcre

KOLÍN



- Kolín is a city in the east of the Central Bohemian Region
- It has approximately 33,000 inhabitants and has an area of 35 km² with an average altitude of 220 meters.
- It lies about 60 km east of Prague on both banks of the Elbe River.
- Kolín was probably founded before 1261 by King Přemysl Otakar II, the well-preserved historical core is protected as a city heritage reserve.
- In 1845, Kolín was connected to an important railway between Prague and Olomouc, this fact is very important for the further prosperity of the city, and from the second half of the 19th century the city underwent rapid industrialization.
- The chemical, automotive, engineering, food, printing and metallurgical industries are represented here.
- In honor of the local music composer František Kmoč, the Kmočův Kolín international wind music festival is taking place in Kolín.

HISTORY OF THE FACTORY IN KOLÍN

- **1907 – Joint-stock company for the processing of potassium lye was founded in Kolín**
- **In the 1920s, it already figured as Kaliwerke Aktiengesellschaft, generally called "Draslovka"**
- **Degussa owned 6.7% of the shares 1932 – member of the board of directors of "Draslovka" Hermann Schlosser, member of the board of Degussy**
- **1938 Schlosser vice chairman of the board of directors of "Draslovka" and 1939 chairman of the board of Degussy, since 1933 member of the NSDAP**
- **1935 – start of production of Zyklon B in Kolín**
- **The initiator of the production was the director of Draslovka. Max Stöcker**
- **Production increased during the occupation: used to disinfect military equipment, barracks, prison camps and concentration camps**
- **The rate for a one-kilogram can of Zyklon B was RM5**

PROMOTION OF GAS IN THE PRESS AND AMONG LOCAL PEOPLE



- **Advertisements offering the direct sale of gas or the assistance of experts in its use for the disinsection of clothing and bed linen were published in the local press between 1936 and 1942**
- **Wagons with modified air-tight superstructures drove to towns and villages, where things for de-lice and de-worming were put**
- **The cans are equipped with a warning message and a warning component, alerting people to the danger of releasing the gas into the air, causing mucous membrane irritation**
- **Cans delivered to concentration camps during the war did not have a warning message or a warning component based on the customer's requirements**

ZYKLON B PRODUCTION VOLUME

	Kolín	Dessau
1941	13, 3 t	208, 6 t
1942	30, 5 t	315, 6 t
1943	58, 4 t	399, 2 t

VOLUME OF GAS SOLD IN 1942 AND 1943

Volume of sold Zyklon B from Kolín	1942	1943
To extermination camps	cca 9, 131 t	cca 18, 302 t
From that to Auschwitz	cca 7, 478 t	cca 12, 174 t

THE APPROACHING END OF THE WAR: 1944-1945

- **The Allies did not systematically bomb any of the Zyklon B factories, although they knew what it was used for by 1944 at the latest**
- **On May 28, 1944, American bombers accidentally hit a production hall in Dessau. This accidental raid shut down production until July 14, 1944 August 6 – October 31, 1944 further shutdowns due to lack of raw materials**
- **On January 16, 1945, another raid on Dessau, the factory was also hit**
- **On the night of 7.-8. In March 1945, the factory in Dessau was finally destroyed by Allied aircraft raids Kolín then remained the only manufacturer of Zyklon B**
- **(average gas "consumption" at Auschwitz was 2 tons per month)**
- **At the beginning of the year 1945 a gas chamber was also built in the Small Fortress in Terezín, where gas supplies were supposed to go only from Cologne, fortunately due to the advance of the troops, it was not possible to put it into operation**

JEWSS - EMPLOYEES IN DRASLOVKA AND THEIR FATES

- Official Jílovský – poisoned himself in 1941, when he was to be arrested by the Gestapo
- Technicians from mixed marriages: Dr. Strubel, engineer Vogel, dr. Urlich - to work camps for people from mixed families at the end of the war
- Engineer Viktor Grossmann
- born December 3, 1903
- In the 1930s, a member of the board of directors of Draslovka
- On December 22, 1943, he went to Terezín by transport Cx
- On October 28, 1944, sent by the last transport marked Ev with a number of prominent representatives of the Czech Jewish diaspora
- Immediately after arrival at Birkenau on October 29, 1944, all 2,038 members of the transport gassed

ING. VIKTOR GRAF

(18 OCTOBER 1894 – 31 JANUARY 1950)

- He came from a merchant family
- He graduated from a technical college in Prague Since 1917, an employee of the Joint-Stock Company for the processing of potassium lye in Kolín
- 1920 marriage to Vlasta Jindráková (born 19 May 1896) 1921 son Jiří, 1923 daughter Milena, 1927 daughter Taťána
- From the beginning of the 1930s, chief chemist of the plant, member of the board of directors of a joint-stock company
- 1935 production of Zyklon B started as a means for effective disinfection, disinsection and deratization, i.e. to eliminate pests
- After March 15, 1939, the Nuremberg Laws were introduced in the protectorate and, according to them, he was considered a Jew
- His wife did not divorce him, and therefore he was temporarily protected from deportation only
- in the second half of 1944 did he enter the labor camp in Hagibor and on January 31, 1945 was sent by transport AE 1 to Terezín
- He survived and returned to Cologne on May 10, 1945

ING. VIKTOR GRAF – AFTER 1945



Otec Ing. Viktor Graf (nar. 1894).
Národní archiv

- From 1945 he became the director of Draslovka, then incorporated into the national enterprise Synthesia
- When he realized how Zyklon B had been misused, he suffered from remorse.
- He couldn't bear the idea that he belonged to the people who introduced gas production in Cologne In January 1950, hospitalized in the nervous department of the hospital for severe depression
- On January 30, 1950 he went to work after hospitalization and was found dead on January 31, 1950
- He committed suicide by poisoning himself with a solution of potassium cyanide, which he had prepared himself for this purpose, and with suicidal intent he went to the toilet, where he swallowed the solution

CONCLUSION

- **Production of Zyklon B at the Draslovka Lučební závod in Kolín in central Bohemia continues under the changed trade name Uragan D2. It is stabilized liquid hydrogen cyanide (min. 97.6%), completely absorbed into a porous material, gas-tightly sealed in cans. Stabilization is carried out with phosphoric acid in the amount of 0.1% and sulfur dioxide in the amount of 0.9-1.1%. URAGAN D2 (HCN) is included in the group of highly toxic substances and extremely flammable in the sense of the valid regulations on dangerous substances harmful to health**
- **It is used as a disinfectant and pest control agent during gassing (fumigation), e.g. in agriculture**

The image features a dark gray background with white, stylized circuit board traces in the corners. These traces consist of straight lines and small circles, resembling electronic components or connections. The traces are located in the top-left, top-right, bottom-left, and bottom-right corners, framing the central text.

THANKS FOR YOUR ATTENTION !