„Jan Kanty" Mine – closed hard coal mine located in Jaworzno, Silesia Voivodeship.

History

In the "Jaworzno III" mining area operations were already carried out in 1832-40 ("Fortuna" Mine) and 1868-1880 (by dips). In some surveying and geological documentation of the "Jan Kanty" Mine, as early as 1805 is given as the beginning of exploitation. At that time, the exploitation was carried out to a depth of several meters, usually by opencast method. In 1920, dispersed mining dips were merged into one enterprise (company) under the name Jaworznickie Komunalne Kopalnie - "Jan Kanty" Mine. At that time, the first (non-existing) shafts "Artur" and "Jan", which gave rise to the deep mine, were explored. The mine operated during the war under the name "Dachs". In 1945 it was attached to the "Jaworzno" mine. From 1954, among others together with the "Leopold" shaft it existed under the name "Paris Commune". In the last period of mining activity, the mine returned to the name "Jan Kanty". Due to the exhaustion of resources, mining exploitation in the mine was completed on July 31, 2000. The mine was liquidated in the years 2001–2002.

Geology

Quaternary and Triassic deposits in the north-eastern part of the area lie inconsistently on the Carboniferous ground. Stratigraphically, the Quaternary is formed by the sediments of the Holocene River Accumulation, Glacial Formations and Pleistocene Hydrocarbon. The thickness of Quaternary deposits in most parts of the documented area ranges from 2-10 m. In the north, west and south-west parts of the mining area the thickness of the Quaternary increases to 50 m. Triassic deposits lie in the north-east and east part of the mining area "Jan Kanty". Their thickness ranges from 0 to 185 m. Spreading to the east and south-east of the Mining Area borders, the Triassic fills the Długoszyńsko-Wilkoszyńska Basin. Stratigraphically, Triassic sediments belong to the strata of shell limestone (*wapień muszlowy*) and variegated sandstone (*pstry piaskowiec*). Under the Quaternary and Triassic sediments, carboniferous deposits are found: in the south-eastern they are the Łaziskie layers with a thickness of up to 200 m, throughout the whole Mining Area the they are Orzeskie layers with a thickness of 400-650 m are almost fully developed, in the western part of the Ruda layers reaching thickness 140 m, which is reduced eastwards to 40 m, and very reduced Siodłowe layers with a thickness of 10 to 30 m. Carboniferous strata are monoclinic, with an extension generally running in the SW-NE direction and dip in the SE direction. The hard coal deposit is cut by a network of faults what result in block construction of the deposit. The fault course is generally arranged in two directions N-S and W-E. The mining area is intersected by two principal, approximately parallel N-S faults, both dropping to the west:

- "Jan Kanty-Bory" with throw of 240-280 m in the eastern part of the area,
- "Przemsza" with throw of 130-180 m w In the western part.

These faults naturally divide the mining area into three almost equal sized parts: A, B, C. The second group of faults with a direction similar to W-E is more numerous but the faults have smaller throws.

Mining

In the mining area of the "Jan Kanty" Mine seams 214, 301, 302, 303, 304, 312, 318, 324, 334 were exploited in all periods of activity of various mining enterprises in the depth zone

from 0 to 350 m below sea level. The thickness of the seams and extracted coal varied from 1.5 to 4 m.

Sinkhole threat

Exists on the surface in the areas where the coal was extracted in the depth raging from 0 to 100 m. Such exploitation was carried out in seams: 214 (Łaziskie layers), 301, 302, 303, 304, 312, 318, 324, 334 (Orzeskie Layers). The greatest threat exists in the central-eastern part in the lane running SW-NE and central-western part of Mining Area where exploitation was carried out in the shallowest seams: 2014, 301, 302, 304. There were numerous surface deformations in the past.