



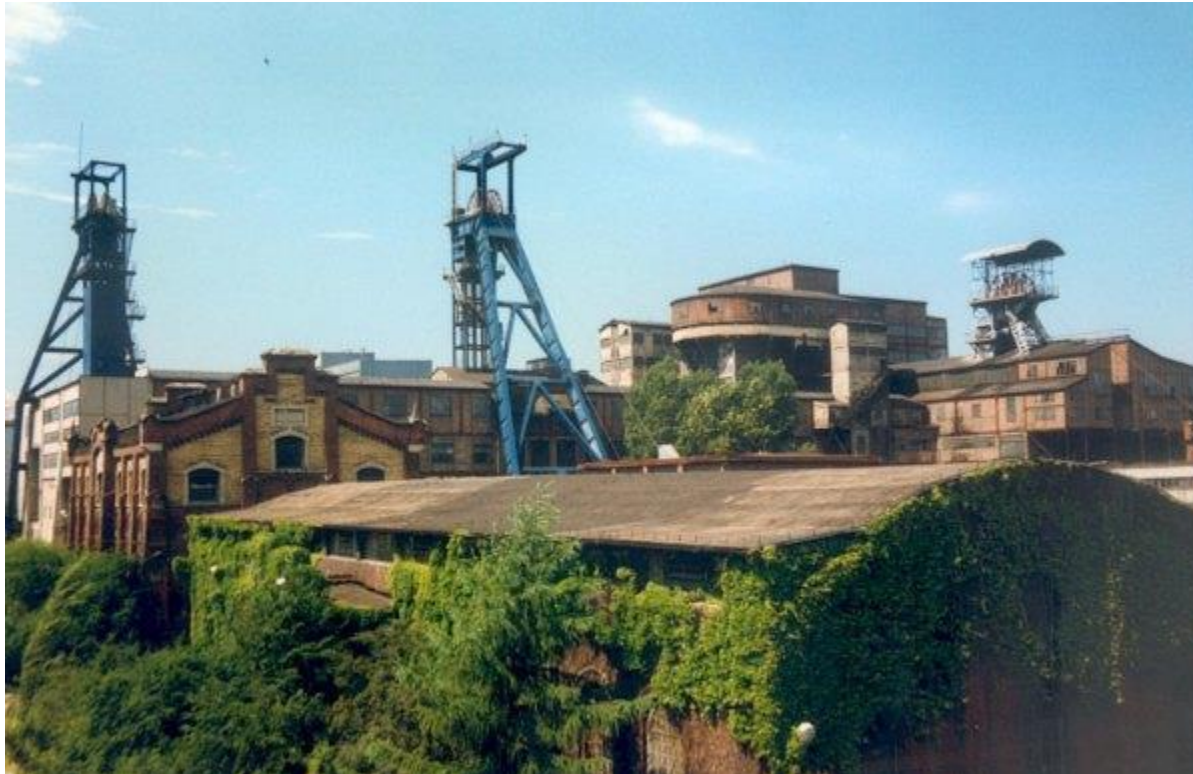
*Installation power cable and Multiple
Casualty Accident
(3 deadly, 1 severely injured)*

26th August 2013

*THE „MYSŁOWICE-WESOŁA” UNDERGROUND COAL
MINE in MYSŁOWICE in SILESIA AREA, POLAND*



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The „Mysłowice-Wesoła” Underground Coal Mine placed in Mysłowice, belongs to Katowicki Holding Węglowy S.A. in Katowice – one of the leading mining companies in Poland



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Characteristics of the mine

- Mining works are carried out in the range of depth between 465 m – 865 m.
- There were about 4600 workers employed (3000 – underground) in 2013.
- Average daily output – **16,3 thousand** tons.
- Mine field - 57,45 km²



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It took place in the cage shaft "Piotr". Depths of shaft is 895,3 m. Diameter of shaft is 7,5 m. Power cable installation was carried out from August 24, 2013.

Installation of cable had to be made between the surface level and the level of 865 m. Accident occurred at a depth of 320 m.

There were 4 workers in the zone of the direct threat.

1 worker became injured in the result of this event.

3 workers were fatally injured.



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Protective roof



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The rescue action focused on the region cage shaft "Piotr". Because it was limited by the localization of cage, the following rescue parties participated in it:

- rescuers from the „Mysłowice-Wesoła” mine,
- representatives of the Central Mining Life-Saving Station from Bytom,
- representatives of the Regional Life-Saving Mining Station from Jaworzno.



Characteristics cable holder

- producer – **CARBOMECH Ltd. Company**
- typ – **3-211.2**
- diameter of cable – **74÷83 mm**
- load allowable/maximum – **933 /2880 kG (9150/27458 N)**
- weight – **1,59 kg**
- product material - **stainless steel X6CrNiTi18-10 (1.4541)**
- load - $6\text{m} \times 16,21 \text{ kg/m} \times 9,81 \text{ m/s}^2 = 954 \text{ N}$
- test load - **1200÷6013 N (average 3887 N)**

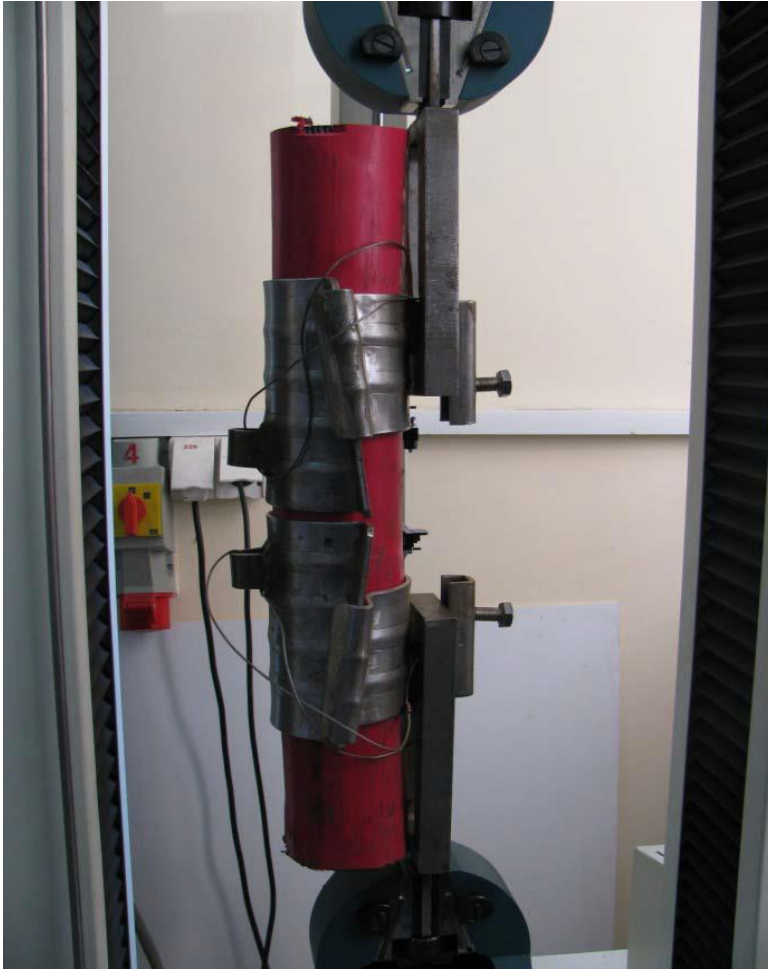


Characteristics of the power cable

- producer – **TELEFONIKA KABLE Ltd. Company**
- typ – **YHKGXSecFoyrn 3x185/30 3,6/6kV**
- diameter of cable – **78,85÷81,20 mm, (average 80,15 mm)**
- weight – **16,21 kg/m**

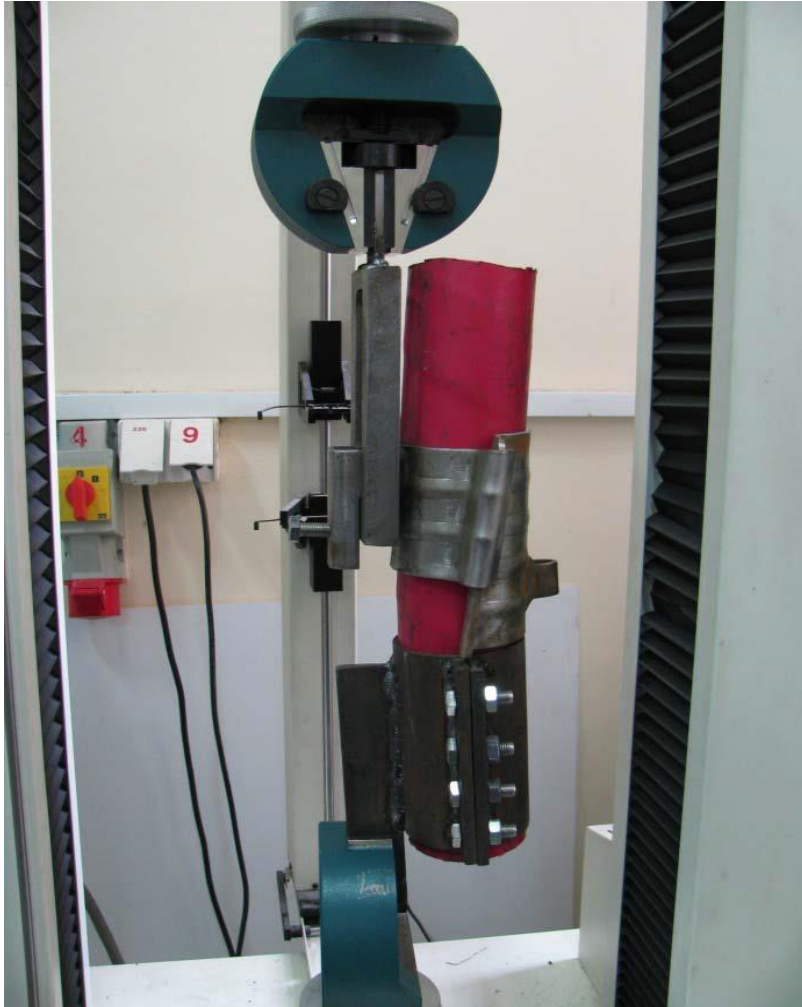


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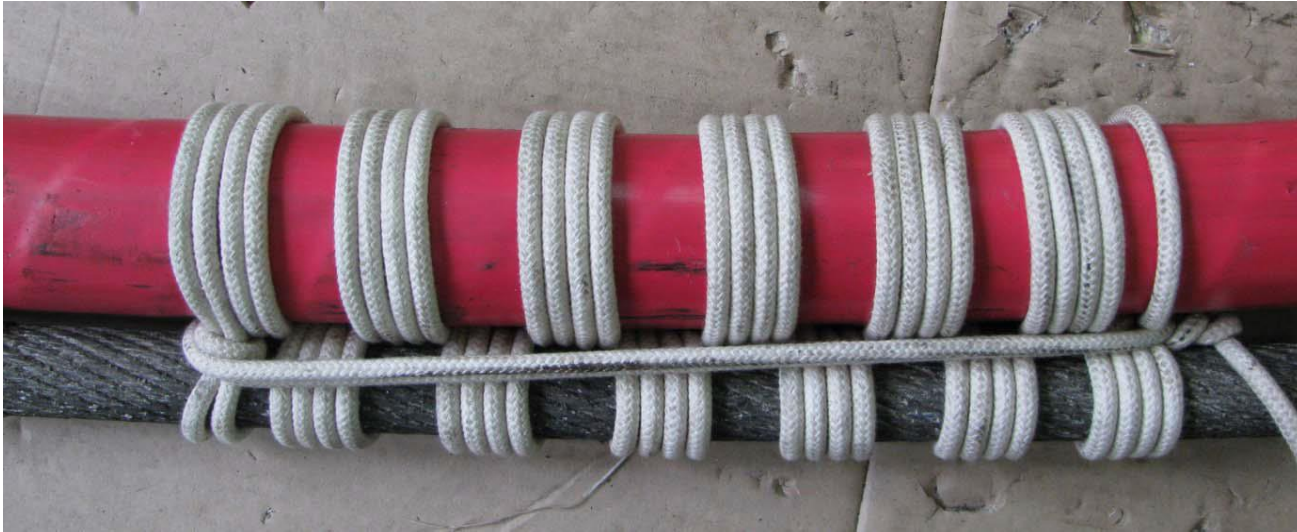


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The site inspection was conducted in the place of the event on 17th of February 2014, in the presence of representatives of State Mining Authority, Specialized Mining Office.



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Work results, studies, expert opinions, witness reports analyses, collected evidence and on-site visits results were useful to determine the causes and circumstances of the occurrence, as well as to draw conclusions in order to avoid such accidents in the future.

The probability causes of the catastrophe were:

- defective cable holders - uncontrolled movement of the cable,
- holders was load weight of the cable and rope,
- not suitable protective roof (14x),
- lack of awareness of risks.



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Thank you for your time and attention

Roman Sasiadek

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the State Mining Authority