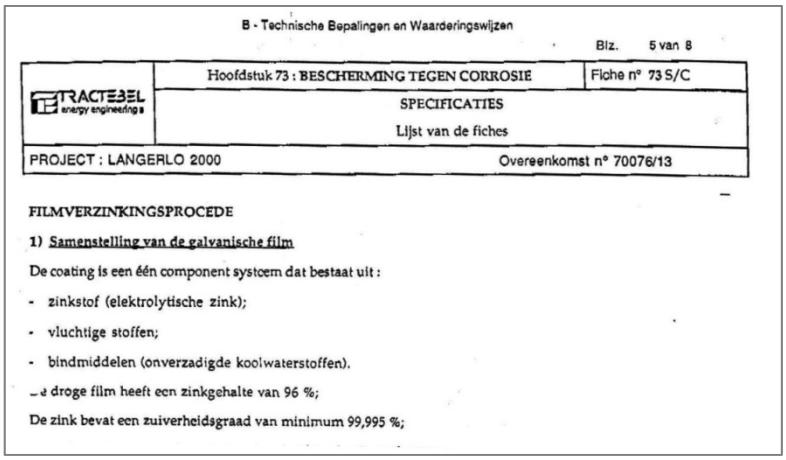
E.ON – POWER STATION - BELGIUM

The power station of Langerlo was built in 1976, with two units powered by fuel oil. In 1986, the power station was converted to a coal power station, due to its proximity to the coal mines located in Genk. Since mining activity in Belgium declined and ceased in 1992 with the closing of the last mine in Zolder, the power station in Langerlo remained the last one driven by coal. In 1997 and 1999 the power station was enlarged. In 1999 the fume and gas purification was expanded and 2 gas turbines were built. Today the power station has a capacity of 556 MW, driven by a mix of coal, biomass (pellets) and gas.

Steel structures coated with ZINGA

The original buildings were set up by Electrabel (called EBES at the time) – the Belgian Electricity company. Due to a commercial agreement, the power station became the property of E.ON, a German energy consult, in 2009.



B - Technische Bepalingen en Waarderingswijzen

Blz. 5 van 8

TRACTEBEL energy engineering	Hoofdstuk 73 : BESCHERMING TEGEN CORROSIE	Fiche n° 73 S/C
	SPECIFICATIES Lijst van de fiches	
PROJECT : LANGERLO 2000	Overeenkomst n° 70076/13	

FILMVERZINKINGSPROCEDE

1) Samenstelling van de galvanische film

De coating is een één component systeem dat bestaat uit :

- zinkstof (elektrolytische zink);
- vluchtige stoffen;
- bindmiddelen (onverzadigde koolwaterstoffen).

De droge film heeft een zinkgehalte van 96 %;

De zink bevat een zuiverheidsgraad van minimum 99,995 %;

For the expansion plans in 1997, ZINGA was prescribed for corrosion protection of 7500 m² construction steel by the engineering company Tractebel.
Even before, ZINGA was already a stock item at Electrabel companies for patch repair. Because of the expansion, several large beams turned out to be too big for HDG at local galvanisers' baths and hence were treated with ZINGA.

Condition in 2014

The beams were treated with 2 x 60 µm DFT after steel fabrication at Victor Buyck to provide a good corrosion protection in a harsh industrial environment.

An inspection in 2014 found the beams in good condition showing no signs of corrosion and with a Zinc depletion of only 20 µm DFT.

System:

ZINGA	2 x 60 µm DFT