1. Selected recent CHPP projects

2. Recent coal projects in Mongolia

Owner‘s Engineering for the expansion of CHPP from 4mtpa to 6 mtpa

Client: Confidential, Siberia Russia (2018-2019)

Description of Project and Services:

DMT was assigned to provide the consulting service as an owner’s Engineer for the CPP expansion from 4mtpa to 6mtpa for a coking coal project located near to Novokuznetsk, Russland. The project consists of several subsequent phases:

- Engineering Support during the construction and commissioning of Coal Handling and Processing Plant (CHPP)
- Identification control for the equipment of the coal processing plant and the components correspond to the planning;
- Quality control of the chief assembly, commissioning, trial operation of the equipment for the coal processing plant in all operating modes.
- Control of the construction and assembly work with regard to compliance with the execution plan;
- Control of the operational equipment assembly with regard to operational reliability, robustness, stability and longevity;

Consultancy for the expansion of CPP of PG

Client: PG Silesia coal, Poland (2014-2015)

Description of Project and Services:

DMT was assigned to review the CPP expansion project of PG Silesia in the Upper Silesia Coal Region. The project consists of several subsequent phases:

- HM vessel for the coarse coal >20mm
- HM cyclone for the fines 20-6mm
- Treatment of water and slurry circuit

DMT reviewed the proposed technology and made recommendations for adjustment. DMT provided advise to the Client with regard to

- implementation of the project
- Process guarantees and penalties
- Commissioning

The CPP is designed for a capacity of 550 t/h steam coal

Basic Engineering for a Coking Coal Preparation Plant in

Client: Confidential, Siberia Russia (2015-2018)

Description of Project and Services:

DMT was assigned to prepare a basic engineering for a coking coal preparation plant for a name plate capacity of 5 mtpy equivalent to 840 tph. The basic requirements of the client were to design

- A most economic process with an organic yield of >98%
- A process which allows to reach 7% in moisture of the final concentrate to avoid thermal drying
- A process plant including state of the art automation & monitoring systems
- A process plant which can cope with a harsh environment from +40° C to -50° C.
- A process which allows for utmost flexibility in order to procuce concentrates between 7 and 9 % of ash.

The work was carried out in collaboration with GiproUgol, where DMT was responsible for the Main Plant while GiproUgol was responsible for the bulk material handling and auxiliary items.

Coal Beneficiation of ROM Coal of SVEA NORTH

Client: Svea North, Norway, 2010 – 2011

Description of Project and Services:
Store Norske Spitsbergen Grubenkompani (SN) is facing drastically changing ROM coal qualities at their operation Svea North. SN intends to introduce coal beneficiation at Svea North to ensure contracted qualities to existing suppliers and to stabilise coal supplies for the future. In order to implement optimised beneficiation technology SN has requested DMT to provide consulting services with regard
to coal beneficiation. Services and site visits will include several packages regarding:

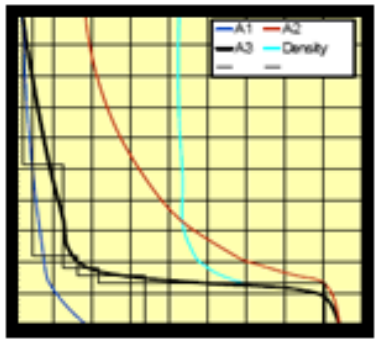
- ROM Coal Analyses
- Implementation of an ash monitoring system
- Computer Simulation for different Process variants
- Site visit
- Detailed flow sheet
- Basic Engineering & Tender design
- Project Management services

Beneficiation options of LVHRC Coal of Jharia Coalfields

Client: India, 2008 - 2011
Partner: DMT Consulting Private Limited, India

Description of Project and Services

Under the Technical Assistance for EU-India Action Plan Support Facility Programme (APSF) - Energy Component – the consultant is implementing a Study on beneficiation options for low volatile high rank coking coals (LVHRCC) from the Jharia coalfields to contribute to the coke and coking coal demand of the Indian steel industry with LVHR coals from indigenous resources. Services include laboratory test and analyses of the coal, design of optimised washing circuit and flowsheet as well as engineering for a pilot plant and a processing plant with an output of 0,7 Mio. t/a of coking coal supplying the steel industry.



Geotechnical study on an Open-pit Coal Project

Client: MAK, Ongoing

Description of Project and Services:

MAK has requested DMT to conduct a geotechnical investigation for the its open-pit coal mine in southern Mongolia.

Scope of Work:

- Preparation of a geotechnical investigation and drilling program
- Training of the staff in geotechnical core logging on new drilled cores and face mapping in existing open pits
- Training of the staff in the collection of core samples for laboratory testing
- Field data processing, database creation, and geotechnical analysis.
- Design of the pit slope angles for the different homogenous areas.
- Geotechnical recommendations and risk assessment as well as advice of further works and optional geophysical measurements

Due Diligence on an Open-pit Coal Project in Mongolia

Client: MAK, 2018-2019

Description of Project and Services:

DMT has been commissioned by MAK to provide the service in connection with Due Diligence and Data Acquisition for the Coal deposit in southern Mongolia.

Scope of Work:

- General geological review
- Geological model review
- Hydrogeological review
- Mine planning review
- Gas review
- Financial model review
- Drill and blast optimization

Geotechnical workshop for the mining companies in Mongolia, in collaboration with “Mongolian Coal Association

Client: 60 participants from 18 mining companies, Aug. 2019

Description of Project and Services:

DMT organized the two days comprehensive geotechnical workshop in collaboration with Mongolian Coal Association for the 18 different mining companies in Mongolia including major state-owned companies as well as leading private companies particularly from coal industry.

Independent Lenders Engineer's due diligence for Baganuur and Shivee ovoo coal mines for power station fuel supply

Client: Confidential, 2018

Description of Project and Services:
This project includes the development, design, financing, engineering, construction, commissioning, testing, ownership, operation and maintenance of a greenfield, coal fired combined heat and power generation plant in Mongolia. The Project will also include ash transportation and disposal facilities, operation of trains on the plant boundary rail network, treatment of plant related waste water treatments on site, power connection to the national grid and heat connection to the Ulaanbaatar District heating Network. The fuel for the power station will be supplied by two large existing coal mines, the Baganuur and Shivee-Ovoo Mine. DMT has visited both operations and assessed their technical ability for producing coal from these mines.