

COMPANY PROFILE



Company Reg. No. 2012/215027/07

COMPANY NAME:	CORE MET SERVICES (PTY) LTD
ESTABLISHED DATE:	3 December 2012
VISION:	To maximise mineral resource value extraction
MISSION:	CoreMet is a caring company that will be the market leader within the ultra-fine mineral processing field with our superior technologies and solutions by utilising our innovative workforce to fully utilize the mineral resource of our client.
VALUES:	Accountability Caring Honesty Innovative
PHYSICAL ADDRESS PER LOCATION:	Unit 1 Gamma Park 67 Regency Drive Route 21 Corporate Park Centurion
WEBSITE URL:	www.coremet.co.za
CONTACT DETAILS:	Willie Hefer - Managing Director Mobile: 082 650-0105 E-mail: willie.hefer@coremet.co.za Skype: willie.hefer_coremet Albert Venter - Technical Director Mobile: 072 844 5325 E-mail: albert.venter@coremet.co.za Skype: albert.venter_coremet
PRODUCT RANGE:	Multi Gravity Separator (MGS) Multi High Frequency Screens (Virto) Crushing & Screening (PilotCrushTec) Dense Medium Separation (DMS) Ultra-High Dense Medium Separation (UHDMS) Ultra-Fine Dense Medium Separation (UFDMS) Modular Ultra Fine Mineral (MGS) Plant (Tin, Iron ore, Tantalum, Chrome)

DESCRIPTION OF SERVICES:

Metallurgical Concept, Definitive Feasibility (DFS) & CPR Studies

The focus is on both green and brown field projects to enable the client with a full metallurgical scope of test work, design of the process flowsheets and selection of technologies that is incorporated within a full financial business model that include all operational and capital costing for the valuation (NPV) of projects.

Metallurgical Ore Characterisation

This process is to obtain core information of the ore or mineral type. The data information can be classified into three groups:

Quantitative analysis

Material mass

Material volume

Qualitative analysis

Densitometric analysis (density of particles)

Sieve analysis (Size of particles)

Chemical analysis (XRF, ICP)

Mineralogical analysis (QEM, XRD)

Basis of ore or mineral separation

Size & shape (screening analysis)

Gravity (water based like MGS or spirals)

Density (medium based like DMS)

Metallurgical Test Programme Design & Execution

CoreMet has a very strong ability to define, develop, execute and report on any metallurgical test work of study programme. CoreMet believe to have our client involved from the start of the study to:

Define the test work scoping with client

Test work proposal approved by client

Test work execution to generate needed information like mass splits, recoveries, grades

Technical report

Project schedule management

Project cost reconciliation

Process Engineering Design & Technology Selection

CoreMet can offer our clients a full process engineering solution that include the latest technology:

Process design

Process flow sheet (PFD)

Piping & Instrumentation (P&ID)

Mass balance

Water balance

Equipment lists & data sheets

Modular concept plant design

Mechanical

Finalised plant block plan in line with the PFDs and existing plant infrastructure.

	<p>Develop specifications and criteria in support of equipment procurement. Vendor interface integration of certified vender data (CVD). Integration with process engineering to update the equipment lists. Development of detailed 3D CAD plant models. Platework general arrangement drawings for fabrication. Mechanical general arrangement drawings for construction purposes.</p> <p>Electrical Electrical engineering deliverables include the following: Load list. Single line diagrams. Cable schedules. Racking schedules including bill of quantities (BOQ). Termination schedules. Typical schematics. Substation and motor control centre (MCC) general arrangement drawings.</p> <p>Instrumentation The control and instrumentation scope of work will include the development of piping and instrumentation diagrams (P&IDs) as well as a control philosophy in support of the plant control strategy. An instrument list will be developed together with instrument data sheets in support of the procurement process.</p> <p>Civil The civil engineering includes the following: Foundation design and layout drawings including rebar and bending schedules in support of the 3D plant layouts and structural designs; Concrete slab designs and drawings including rebar and bending schedules.</p> <p>Structural The structural engineering includes the following: Structural steel 3D models for analysis. Processing plant structures and access platform. Steel structures in support of the plant layouts and based on certified vender data received from equipment suppliers. Static and dynamic load assessments of structures based on CVD data Platework designs based on empty and full load conditions. Structural steel general arrangement (GA) drawings.</p> <p><u>Plant Optimisation & Due-diligence Programs</u> CoreMet has a very strong ability to define, develop, execute and report on any optimisation projects specified below:</p> <p>Software programs (Mine Intellect) To develop and manage metallurgical plant standards to improve mechanical utilisation and plant efficiencies.</p> <p>Plant quality assurance & control programs To stabilise process control & product specifications.</p> <p>Plant commissioning or plant audits To reach design capacities, maintain production throughputs and qualities and increase product recoveries.</p> <p>Mine value chain audit</p>
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	<p>Audits or assurance engagements provide our client or stakeholder with an overview regarding the metallurgical integration within the mining value chain to ensure optimal production through put and to unlock more potential product value for our client.</p> <p><u>Equipment performance testing and modelling</u> Equipment performance testing and modelling enable CoreMet with the understanding of equipment efficiencies and the opportunities for equipment optimisation to increase plant throughput like: Crushers Grinding mills Cyclones (water & DMS) Screens De-watering (thickeners & filters)</p> <p><u>Plant Operations</u> CoreMet offer our clients fit for purpose modular plants in commodities like chrome, iron ore, coal, heavy minerals and heavy metal minerals (tin, tungsten and tantalum). CoreMet also offer our client the option to de-risk the project to offer a full capital operational turnkey BOOM or BOOT contract option.</p>
<p>HEALTH & SAFETY:</p>	<p>CoreMet Mineral Processing is focused on providing quality consulting services, mineral processing equipment, modular plants, operational support and operational management to the mining industry. At CoreMet we care for the health and safety of our people and clients, the environment, associated communities and natural resources by focussing on sustainable development in all our activities. CoreMet Mineral Processing is committed to:</p> <ul style="list-style-type: none"> Safety and health of all employees, contractors, clients and clients' employees; Complying with relevant legal and other requirements; Continual engagement with clients to ensure compliance with clients' SHEQ requirements; Continually striving to reduce process and plant impacts on the environment; Ensuring that all work is performed at a high quality to the benefit of all stakeholders;

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CLIENT PORTFOLIO:	Glencore CoalToll Exxaro Ferro Globe Tronox LDE TransHex Bond Equipment EnviroServe SJT MetMin Solo Resources LanXess DTE Projects Afrimat
PARTNERS:	Gravity Mining Virto Group Obsideo Consulting PilotCushTec Bond Equipment

COREMET MINERAL PROCESSING CONTACT TEAM DETAILS:

WILLIE HEFER - Managing Director



- Wide range of experience in business management, plant operations and metallurgical process development.
- Professional project management background
- Honours degree in Metallurgy, Diploma in Chemical Engineering, Management Development Program (MDP) certificate & Professional Project Management (PPM) Certificate

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ALBERT VENTER - Technical Director



- Wide range of experience in metallurgical process development and plant operation for different minerals and ores
- Technology experience and understanding of most mineral processing technologies
- Master's degrees in Metallurgy and Mineral Resource Management