

THE MANDERSTAM GROUP

METALLURGICAL DIVISION

Since 1974 the Manderstam Group has operated a separate Metallurgical Division. Our engineers have experience in many fields and we are therefore able to undertake a variety of services:-

Feasibility studies

Preliminary engineering studies

Market studies

Engineering design and layout

Tender documents and specifications

Assistance with the selection of engineering contractors and suppliers of equipment

Procurement

Expediting and equipment inspection

Construction supervision

Training of operatives

Start-up and initial operation

SUMMARY OF ACTIVITIES COVERED BY OUR PERSONNEL

Design, Development and Production Engineering

Ore terminals, up to 100,00 tons capacity

Ore and Pellet Handling Systems

Coke Ovens

Blast Furnaces

B.O.S. Plants

Direct Reduction

Electric Arc Furnaces

Continuous Casting

Cogging Mills

Heavy, Medium and Light Section Mills

Universal Mills

Plate and Strip Mills – Hot and Cold

Rod and Bar Mills

Tube Mills

Reheat Furnaces

Finishing Processes

Pollution Control

Mechanical and Electrical Services

Management and Supervision

Design and Development

Erection and Commissioning

Production

Maintenance Procedures

Costing Systems

Stores Systems

Administration and Sales

Purchasing

General Works

Training

Safety Procedures

Studies and Reports

Marketing and Sales

Development and Diversification

Viability Studies

Rehabilitation and Modernisation of Steelworks Plant

Process and Plant Optimisation

Direct Reduction 1. A study of all known processes and their foreseeable future

Direct Reduction 2. Direct reduction versus blast furnace procedures

Mini Mills – Reinforcing Rounds

Mini Steelworks – Scrap and Electric Arc Furnaces

OUR RECORD OF EXPERIENCE IN THE METALLURGICAL INDUSTRIES

Listed below are some of the assignments carried out or currently being implemented by the Manderstam Group in the iron, steel and metallurgical industries.

ARAB REPUBLIC OF EGYPT

Client : Government of the Arab Republic of Egypt

A series of technical and economic feasibility studies for projects based on the utilisation of electrical power from the Aswan High Dam. The products considered included:

Production and processing of iron and steel

Production of aluminium

Production of ferro-silicon

Production of ferro-manganese

Production of silicon carbide

BELGIUM/UNITED KINGDOM

Client : Societe Cockerill – Ougree – Providence et Esperance – Longdoz

Study on the marketing of finished steel products

GREECE

Client : Ministry of Coordination, Government of Greece

Review of Existing Steel Industry in Greece

The project included a detailed survey of the existing production facilities and consideration of their economics. Having studied the present and projected market requirements, a programme was prepared for the rationalisation of the production of steel and steel products on a national scale.

Establishment of a New Integrated Steel Plant

The project included an assessment of the present and projected future market demand for steel products in Greece, followed by technical, economic and engineering studies of new production facilities, including direct reduction and hot and cold rolled flat products.

Ministeel Plant Evaluation

A financial evaluation of a 250,000 t.p.y. ministeel plant was made, in order that necessary finance could be arranged for operation and production purposes.

Operational supervision for steelmaking and rolling mills.

INDONESIA

Client : Government of Indonesia

Bar Mill and Section Mill Project

We were engaged by p.t. Krakatau Steel Corporation of Indonesia on the development of an integrated steel industry in the country. This entailed the preparation of feasibility and market studies, and the re-organisation of steel production. These activities were subsequently followed by the entire engineering and supervision of construction, for a 150,000 t.p.y. bar mill and a 100,000 t.p.y. section mill, together with all the necessary off-sites and services.

Our involvement also included the development of a wire rod mill installation and a local township water supply.

MOROCCO

Client : Ministry of Industries – Moroccan Government

Extraction of Cooper and Iron from Pyrrhotine Cinders

We have carried out a process investigation followed by a technical and economic evaluation of the project.

GHANA (Port Tema)

Technical appraisal of steelworks to evaluate the production and quality of rod and bar by the electric arc furnace and ingot rolling route.

Rehabilitation of electric arc furnace shop and rod rolling mills, together with supervision of operation.

Technological appraisal for 25,000 t.p.y. mini steelworks.

U.K. (N. Ireland)

Technical and financial evaluation and market study for proposed mini-steelworks for the production of steel billets using electric arc furnaces and billets casting machines.

COLOMBIA

Appraisal Study of Steel Foundries

Survey of two plants with a view to appraising their existing facilities and methods of operation, as well as suggesting positive improvements to maintain or increase present output levels, prior to the completion of a new complex.

SINGAPORE

Studies and design of 300,000 t.p.a. plate rolling mill, including market and financial appraisals and forecasts, and design of infrastructure.

YUGOSLAVIA (Feni, Skopje)

Process investigation together with a techno-economic study for a ferro-nickel project at Skopje, Yugoslavia.

People Republic of China

Client – EEC

Centrifugal Modular Cast Iron Pipe Manufacture at Shoudu Iron and Steel Company

On site diagnostic services to de-bottle neck production and draw up plans for increasing production including preparation of project program and budget costs.

Non-Ferrous and Composite Metal Strip Production at No. 1 Instrument and Metre Plant Shichuan

Preparation of production strategy, detailed workshop and foundry layouts and budget costs for new base/noble metal continuous casting and cladding mills.

NIGERIA

Rehabilitation survey of steel foundry in Lagos on behalf of the World Bank including valuation and listing of existing equipment and preparation of revised production strategy and new equipment proposals.

GHANA

Rehabilitation survey of aluminium smelting and scrap recovery operation on behalf of the World Bank including valuation and listing of existing equipment and preparation of revised production strategy and new equipment proposals.

CHINA

Technical audit of centrifugal modular cast iron pipe manufacture at Shouda Iron and Steel company on behalf of the EEC.

CHINA

Technical audit of expensive metal processing at Sichuan No. 1 Instrument and Meter Plant on behalf of the EEC.

CHINA

Technical audit of production of Nd-Fe-P alloy at Bautou State Magnetic Material factory on behalf of the EEC.

The following countries have been involved during the course of our organisation's activities and project developments in the metallurgical field:

U.K.	Indonesia	Germany	Greece
Italy	Peru	Egypt	India
Saudi Arabia	Pakistan	Lebanon	Thailand
Morocco	Yugoslavia	Singapore	