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Client Country	Project
G-Steel Public Company Ltd., THAILAND	Technical Due Diligence Audit & Conceptual Project Plan Equipment assessment and elaboration of an implementation concept for a cold rolling mill project to be established in Thailand
Saha Thai Steel Pipe Co. Ltd. THAILAND	Engineering Design for a Hot Strip Mill Project Engineering Design for a plant to produce hot rolled coils based on the EAF route to be established in Thailand as backward integration for a pipe producer with an envisaged production of up to 700,000 tpy
Tycoons Worldwide Group (Thailand) Public Co., Ltd THAILAND	Detailed Market Survey for Backward Integration Together with Grant Thornton Thailand the elaboration of a detailed market survey for the backward integration of Tycoons Worldwide Group (Thailand) Public Co., Ltd. (TYCN) Thailand's largest manufacturer and distributor of wire rod, annealing wire and screws; this survey included a detailed end-user analysis and resulted in forecasts of the demand in Thailand for billets, bars and sections up to the year 2020
Duferco SA SWITZERLAND	Ladle Furnace & 2-Strand Slab Caster for Alchevsk Iron and Steel Works, Ukraine Elaboration of a detailed feasibility study to evaluate the technical and commercial soundness of the project which comprises the following technological process units: a twin ladle furnace (300 t / 50 MVA) and a continuous 2-strand slab caster for the production of 2.5 Mt/y of slabs

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Client Country	Project
Vietnam Steel Corporation VIETNAM	Hot Strip Mill Project For Vietnam Steel Corporation a Feasibility Study for the establishment of a hot strip mill project for the production of 1.5 million tonnes of hot rolled coils based on imported slabs; the study comprised a detailed market survey including an end-user analysis, the technical definition of the main plant equipment and all ancillary and auxiliary plant items; a detailed financial analysis assessed the commercial soundness of the project; a sensitivity analysis investigated the impact of changes of main project parameters on the commercial viability
Vietnam Steel Corporation VIETNAM	Phu My Cold Rolling Project Technical Consultant for the Phu My Cold Rolling Project of Vietnam Steel Corporation (consisting of 2 reverse cold rolling stands, push-pull pickling line, batch annealing, recoiling and packing station and all ancillaries and infrastructure); basic engineering, elaboration of tender documents, assistance at contract negotiations and monitoring consultancy services during erection and commissioning as well as technical assistance for the first production period
Lucchini S.p.A. ITALY	Feasibility Study on a Hot Strip Mill Project A highly reputable company in the European steel business intends to implement a mini mill project for the production of 1.2 Mt/y HRC (thickness 1.0 to 6.0 mm) as an additional production line within the perimeters of an existing conventional integrated steel works; the liquid crude steel will be provided by the LD meltshop but finished in a ladle furnace; state-of-the-art thin slab continuous casting and in-line hot rolling shall be applied to achieve minimized operating cost; approximately 40 % of the HRC production shall subsequently be cold rolled in a 4-high reversing mill stand, after passing through a front end pickling line

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Client Country	Project
Siam Strip Mill Plc THAILAND	Valuation Report On behalf of the lead creditors of Siam Strip Mill Plc, Thailand, elaboration of a valuation report of the existing 1.5 million tpy hot rolled coil plant, based on a discounted cash-flow basis and comparison with replacement cost value, recent market value sales and liquidation value
Duferco La Louvière on behalf of Export Credit Insurance Companies BELGIUM	Feasibility Study on Cold Rolling & Galvanising Project Elaboration of a detailed feasibility study to evaluate the technical and commercial soundness of the project including the following process lines: pickling line with a 4 stand cold rolling mill coupled at the exit section, a hot dip galvanising line, a coil coating line, and the transformation of the existing cold rolling mill into a skin pass mill
Österreichische Kontrollbank AG AUSTRIA	Sector Study - Near and Middle East (Various Countries) On behalf of the Österreichische Kontrollbank AG (Austrian Export Credit Authority) elaboration of a sector study to investigate and analyse the iron & steel sector of the region, with special emphasis on Egypt, with regard to the consumption of medium and heavy sections and – based on the quantitative findings of the study – elaboration of a possible technical concept for the realisation of a plant to produce the required medium and heavy sections

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Client Country	Project
EU Tacis Contract on behalf of Izhorskiye Zavody, Kolpino, (also Ministry of Economy) RUSSIAN FEDERATION	Steel Sector Energy Efficien cy Programme (Improvements in Steel Production Techniques) Russian steel enterprises have started on a programme of efficiency improvements but lack some of the essential tools to carry it out; the project aims to support the implementation of a programme of restructuring which corresponds with the Russian national energy strategy and specific sectoral re-equipment programme objectives, as well as the Tacis objective of providing technical assist ance to industrial sectors to achieve energy savings; the prime project-specific objectives are to establish a demonstration plant and to execute a promotion campaign for its introduction as a means of actuating efficiency improvements in an energy-intensive industry
Österreichische Kontrollbank AG AUSTRIA	Sector Study - South East Asia (Various Countries) On behalf of the Österreichische Kontrollbank AG (Austrian Export Credit Authority) elaboration of a sector study on the present situation of the iron and steel industry in South-East Asia and the effects of the economic crisis on this industry sector; the study includes a description of the historic development of the sector, an analysis of the present situation, a description of the measures taken by governments and companies and an outlook on the possible development in the next years
PT. KS-Posco INDONESIA	Technical Assessment Report Independent assessment of technical concept, contractual documents and base case assumption for financial analysis, on behalf of the lenders of the 1 million tonnes per year HRC mini mill project in Cilegon, Indonesia

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Client Country	Project
Siam Strip Mill Public Company Limited THAILAND	Update of Feasibility Study submitted in 1995 The assignment comprised an updating of the market survey of the feasibility study elaborated by AUSTROPLAN in 1995, and the incorporation of the definite technical parameters resulting from the technical documents of the contract signed with the supplier's consortium; the assignment included also an update of the financial project analysis
Anshin Steel Industries Sdh. Bhd. MALAYSIA	Technical Feasibility Study Analysis and technical assessment of the technological route selected, the adequacy and reliability of project specifications, technology and design; the mini mill includes a finger-shaft electric arc furnace, a ladle furnace, a billet caster and a wire rod and bar mill for a production capacity of 1 million tonnes per year
Foundation for Industrial Restructuring of Enterprises, Warsaw POLAND	Market Study and Technical Feasibility Study In cooperation with the Institute for Ferrous Metallurgy of Gliwice, Poland, within the EU PHARE technical assistance programme, elaboration of a marketing study for corrosion-resisting steel sheets and a technical feasibility study for launching this product line at T. Sendzimir Steel Mill in Krakow, Poland
Sumitomo Corporation JAPAN	Production of Large Diameter Welded Steel Pipes in Thailand Market study oriented to local Thai and regional South East Asian markets for large diameter welded steel pipes (diameter 6 to 80 inches) as a basis of decision making on an off-shore investment in Thailand

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Client Country	Project
UNIDO, Vienna, AUSTRIA for the Government of INDONESIA	Strategy Analysis Flat Steel Industry The objective of this study was to assist the Government of Indonesia (Ministry of Industry) in the process of analysing short-term and long-term strategic options for the flat producing iron and steel industry, and to recommend an outline of immediate and short-term strategies and measures to increase the competitiveness of the industry
Siam Strip Mill Public Company Limited THAILAND	Semi-integrated Steel Plant Technical assessment study of the general plant concept, technical specification of equipment and machinery and performance test parameters of a semi-integrated compact mill for 1.5 million tonnes per year hot rolled coil (ordinary and quality carbon steel grades), consisting of an electric arc furnace melt shop, thin slab casting and in-line direct rolling to be implemented by a consortium of renowned metallurgical plant makers and equipment suppliers
P. T. Krakatau Steel INDONESIA	Stainless Steel Plant Bankable feasibility study for a stainless steel production project, utilizing existing melt shop equipment and rolling mill capacity for 250 kt of austenitic and ferritic stainless HRC in combination with the staged implementation of cold rolling facilities (100/160 kt/a) including finishing facilities for sheet and skelp
Corporación Siderúrgica S.A. SPAIN	Rehabilitation of a Blast Furnace Prefeasibility study for the rehabilitation of a blast furnace including renewal of all ancillary and auxiliary facilities
Nagarjuna Fertilizers & Chemicals Ltd. INDIA	Equipment Assessment of an Integrated Steel Plant Technical audit and assessment of equipment and machinery of a complete integrated iron and steel plant, capacity 2.5 million tonnes per year; investigation on transferability of the plant from the present location in Spain to India

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Client Country	Project
Siam Strip Mill Public Company Limited THAILAND	Semi-integrated Steel Plant Bankable feasibility study for a semi-integrated mill project, 1.4 million tonnes per year hot rolled strip via the electric arc furnace, thin slab casting and direct rolling route at a defined location
UNIDO, Vienna, AUSTRIA for the Government of INDONESIA	Analysis of Steel Plant Production and Marketing Within the framework of a strategic study of the iron and steel industry in Indonesia being prepared by UNIDO, assessment of the market situation for flat steel products and development of a concept for implementation of new capacities as expansion projects of existing and newly to be erected plants
P.T. Bakrie & Brothers INDONESIA	Steel Strategy 2000 Prefeasibility study for the project +Steel Strategy 2000* (backward integration for existing pipe mills) which incorporates the examination of possible project alternatives, the choice of specific sites and the potential impact of the production process on international and national environmental standards
Ministry of Heavy Industry S.R. VIETNAM	Integrated Iron & Steel Plant Prefeasibility study and final feasibility study for an integrated compact mill project (ICM) based on COREX ironmaking process for the production of either 1.5 million tonne per year HRC or 1.2 million tonne per year HRC and 0.3 million tonne per year plate on a preselected location including assessment of infrastructural requirements and analysis of recommendable utilization of COREX export gas; the project is aimed to optimally utilize domestic raw materials (including evaluation of locational alternatives)

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Client Country	Project
Ministry of Industry THAILAND	Integrated Iron & Steel Plant Prefeasibility study and final feasibility study for an integrated compact mill project (ICM) based on COREX ironmaking process for the production of 1.5 million tonnes per year hot rolled strip for two preselected locations including assessment of infrastructural requirements and analysis of recommendable utilization of COREX export gas (including evaluation of locational alternatives)
National Steel Corporation of the PHILIPPINES	Integrated Iron & Steel Plant Prefeasibility study for the staged implementation (0.8 and 1.6 million tonnes per year slabs) as backward integration to two existing hot strip mills by way of direct iron smelting, LD steelmaking and continuous casting including all auxiliary and ancillary facilities. Alternatively fully integrated iron and steel plant for the production of 2.4 million tonnes per year slabs and hot rolled coils to be erected on a green field site including all auxiliary, ancillary and infrastructural facilities
UNIDO, Vienna, AUSTRIA for Government of Indonesia INDONESIA	Integrated Iron & Steel Plant Within the framework of a detailed feasibility study for an integrated iron and steel plant project (i. e. +Second Generation Steel Mill*) being prepared by UNIDO, elaboration of engineering and technology design, including process description, plant conceptual design, layout design, process flow charts and investment cost estimates for selected process route (COREX process) out of five alternative iron & steel making and two different casting and rolling alternatives; production target is 1.5 million tonnes per year hot strip, within an alternative cost assessment of a 2.5 million tonnes per year capacity plant
Ministry of Heavy Industries S.R. VIETNAM	Integrated Iron & Steel Plant Masterplan concept for a staged implementation of fully and semi-integrated steel mills in the S.R. Vietnam in a 15 years projection (capacity 1.5 to 3 million tonnes per year) with special considerations of utmost use of indigenous raw materials and energy (gas and/or coal based)

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Client Country	Project
Maschinenfabrik Andritz AG AUSTRIA	Cold Rolling Mill Financial analysis for a cold rolling mill project in Malaysia
Société Nationale de Sidérurgie (SNS) ALGERIA	High-grade and Special Steel Plant Updating of a feasibility study for a 120,000 tonnes per year high-grade and special steel plant originally performed for AIDO and AIIC on a pan-Arab basis
Dongbu Steel Company REPUBLIC OF KOREA	High-grade and Special Steel Plant Feasibility study for a 120,000 tonnes per year high-grade and special steel plant to produce bar steel, wire rod and forged products
China Intern. Iron & Steel Investment Corp. (CSI) and Wuhan Iron & Steel Comp. (WISCO) P. R. CHINA	Iron & Steel Plant Expansion Basic design and tender documents for a new 2.5 million tonnes per year LD (BOF) steelmaking plant for flat products to be implemented at WISCO's works in Wuhan
China Intern. Iron & Steel Investment Corp. (CSI) and Wuhan Iron & Steel Comp. (WISCO) P. R. CHINA	Iron & Steel Plant Expansion Feasibility study for the expansion project of Wuhan iron & steelworks from 5 to 7 million tonnes per year in cooperation with WISDRI (the Wuhan Iron & Steel Design & Research Institute)
Arab Industrial Development Organization (AIDO) PAN-ARAB ORG.	Spare Parts Manufacture Market study concerning demand/supply situation in short and long-terms in major Arab countries; detailed feasibility study for the suggested industries in cooperation with Arab Iron and Steel Union (AISU), Algeria
Ministry of Industry THAILAND	Flat Steel Using Industry Masterplan for the development of a flat steel using industry (in cooperation with the local consultant Sirida Consultants Co. Ltd.), comprising 9 prefeasibility studies for suggested new industries

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Client Country	Project
Arab Industrial Development Organization (AIDO) and Arab Industrial Investment Co. (AIIC) PAN-ARAB ORG.	High-grade and Special Steel Plant Feasibility study for a 110,000 tonnes per year alloy and special steel plant project (bar steel and forgings) to be implemented in one or more Arab countries
National Ind. Co. & Modern Arab Contracting Co. (NIC) SAUDI ARABIA	Scrap Processing Plant Feasibility study for a ferrous scrap processing plant, estimation of risk of investment by employing stochastical simulation technique
Voest-Alpine AUSTRIA	Steel Plant Feasibility study for an OBM-plant; adaption of OBM/Q-BOP process for the purpose to use COREX-pig iron as input material for the steel plant in Nador, MOROCCO
Executive Office of the President NIGERIA	High-grade and Alloy Steel Plant Regional infrastructural studies for a high-grade and alloy steel plant project, comprising: electric power supply system, regional transport, water supply system, disposal system, township and relevant social economic infrastructure, analysis and forecast of regional and sub-regional impact of the plant
Federal Ministry of Mines Power & Steel NIGERIA	High-grade and Special Steel Plant Basic design and tender documents for a semi-integrated high-grade and alloy steel plant for which a feasibility study was prepared 1980/1981
Voest-Alpine AUSTRIA	Continuous Billet Casters Detail engineering for continuous casting moulds and mechanical components

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Client Country	Project
Federal Ministry of Mines Power & Steel NIGERIA	High-grade and Alloy Steel Plant Feasibility study for a high-grade and alloy steel plant project with an initial capacity of 80,000 tonnes per year rolled products (bar steel and wire rod) to be implemented in the Oyo State
P. T. Krakatau Steel INDONESIA	Cold Rolling Mill Feasibility study for a 850,000 tonnes per year cold rolling mill project to be implemented at Cilegon integrated steelworks site, West Java
Ministry of Industry PHILIPPINES	Iron Ore Assessment Elaboration of raw material supply strategies for the future integrated iron & steelworks project (capacity: 1.5 million tonnes per year)
Ministry of Commerce and Industry KENYA	Steel Industry Masterplan Masterplan for the development of an integrated steel industry in Kenya, comparative analysis of alternative process routes, related to alternative plant capacities and production programmes; suggestions of the appropriate alternative and feasibility study for this alternative
UNIDO, Vienna, AUSTRIA for the Government of THAILAND	Steel Industry Masterplan Masterplan concept for an integrated steel plant project in the Kingdom of Thailand; comparative analysis of conventional steelmaking (BF-LD) versus direct reduction arc furnace (DR EAF) process route; capacity: 1.6 to 4.2 million tonnes per year
Acerias del Caribe COLOMBIA	Integrated Steel Plant Feasibility study for an integrated steel plant of 400,000 tonnes per year based on direct reduction process
Compania Ecuatoriana de Siderurgia ECUADOR	Steel Industry Masterplan Feasibility study for an integrated steel plant of 400,000 tonnes per year based on direct reduction process

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Client Country	Project
Ministry of Industry THAILAND	Direct Reduction Plant Selection of direct reduction process (based on natural gas) for the production of direct reduced iron
Prime Minister's Dept. MALAYSIA	Steel Plant Masterplan concept for an integrated iron and steelworks project of 1.15 million tonnes per year capacity
NISIC IRAN	Equipment Inspection Preshipment inspection of pelletizing plants, direct reduction plants, facilities for steel melting shop and continuous casting machines, cranes, distribution and control system, electrical and auxiliary plants, manufactured in various countries
UNIDO, Vienna, AUSTRIA	Special Steel Plant Feasibility study for a semi-integrated high-grade and special steel plant of 70,000 tonnes per year for Maghreb countries (Algeria, Morocco, Tunisia)
Siderúrgica del Orinoco (SIDOR) VENEZUELA	Integrated Steel Plant Expansion Conception of expansion programme of Matanzas steelworks +Plan 4* including direct reduction process selection steelmaking rolling and finishing; capacity: 4 million tonnes per year
Makina ve Kimya Endüstri Kurumu (MKEK) TURKEY	High-grade and Quality Steel Plant Feasibility study for a semi-integrated high-grade and quality steel plant of 200,000 tonnes per year capacity
Siderúrgica del Orinoco (SIDOR) VENEZUELA	Integrated Steel Plant Expansion Feasibility study for the expansion of the existing Matanzas steelworks up to a capacity of 2 million tonnes per year
Ministry of Trade and Industry MOROCCO	Mini-Steel Plant Feasibility study for an integrated steel plant of 250,000 tonnes per year based on direct reduction process

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Client Country	Project
Société Nationale de Sidérurgie (SNS) ALGERIA	High-grade and Quality Steel Plant Feasibility study for a semi-integrated special steel plant of 100,000 tonnes per year capacity
Voest-Alpine AUSTRIA	Plate Rolling Mill Design and conceptual engineering for the expansion of a heavy plate rolling mill at Linz

AUSTROPLAN

AUSTRIAN ENGINEERING GMBH

Hietzinger Kai 133

1130 Vienna / Austria

Phone: +43 1 891890

Telefax: +43 1 89189 299

vienna@austroplan.at

http: \\www.austroplan.at