

DAL Machinery

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DAL MACHINERY

Member of Dal Engineering Group

innovative approach to build your idea



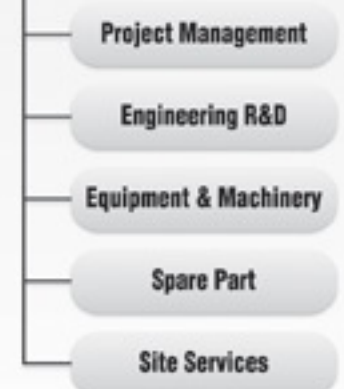
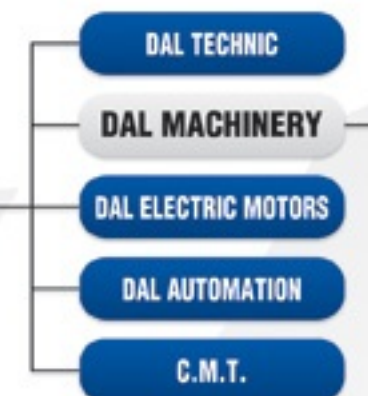


INTRODUCTION

Dal Machinery is an innovative leader in cement, zinc recovery and energy industries. We provide machines, equipments and customized systems. Dal Machinery has unique experience in considered by the customer in order to implementing the most effective and profitable investment.

DAL Machinery, has been providing machineries for industrial plants for more than 20 years. We mainly focus on cement, lime, coal and energy technologies. We provide brand-new and 2nd hand machineries worldwide.

DAL Machinery also supplies integrated services together with Dal Engineering Group (DEG) companies for Turn-key plant projects.





PROJECT MANAGEMENT

We are providing complete service from the basic engineering to commissioning of the industrial projects. We mainly focus cement and energy industry.

We are using project management techniques gives better initial planning and assessment of risks. It provides a greater chance of forecasting problem areas while there is still time to take corrective action and it allows flexibility for alternative modes of operation. Dal Machinery concentrates on the three prime issues of time, cost and quality, ensuring a coherent structure for managing all three.

- Providing expert advice from day one.
- Setting clear objectives and a defined scope.
- Supplying crucial resources where and when required.
- Using a structured process for managing risk.
- The tight control of budgets
- Management of communications and supply chain relationships
- Deliver the project completed, on time, on budget as originally intended.
- Performance measurement through key performance indicators.

The principles behind the successful delivery of on-time projects embrace the following fundamental aspects:



Working in collaboration with our clients and group companies at an early stage, Dal Machinery Project management team has helped reduce costs, provided a flexible and responsive resource and given access to new technologies, skills and the necessary expertise from simple to highly complex projects.





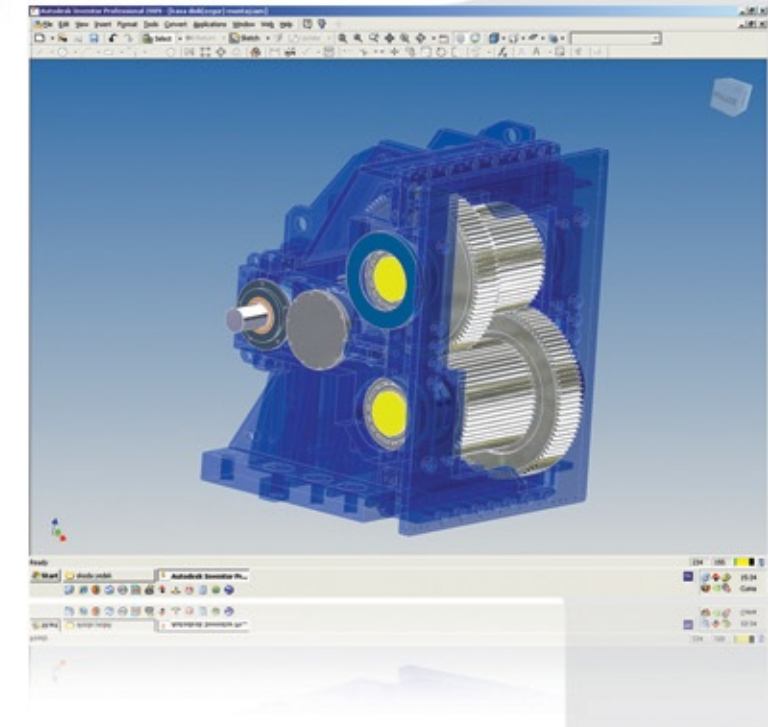
Engineering R&D Department

ENGINEERING R&D

Engineering R&D is a new product and equipment development corporation committed to providing quality products, engineering and manufacturing services.

We are a multi-disciplinary team with a diverse skill set in design, engineering, automation and fabrication. Assisting in all phases of product development in varying capacities, from concept creation, prototyping, to designing in-process equipment, fabrication and test in cement businesses, energy and material handling.

- Disposition Drawings and Process Flow Sheets.
- Design and Engineering Services.
- Civil Engineering and Design
- Building Steel Structures
- Mechanical Engineering and Design
- Technological Projects
- Instrumentation
- Process Water Design
- Compressed Air Unit Design



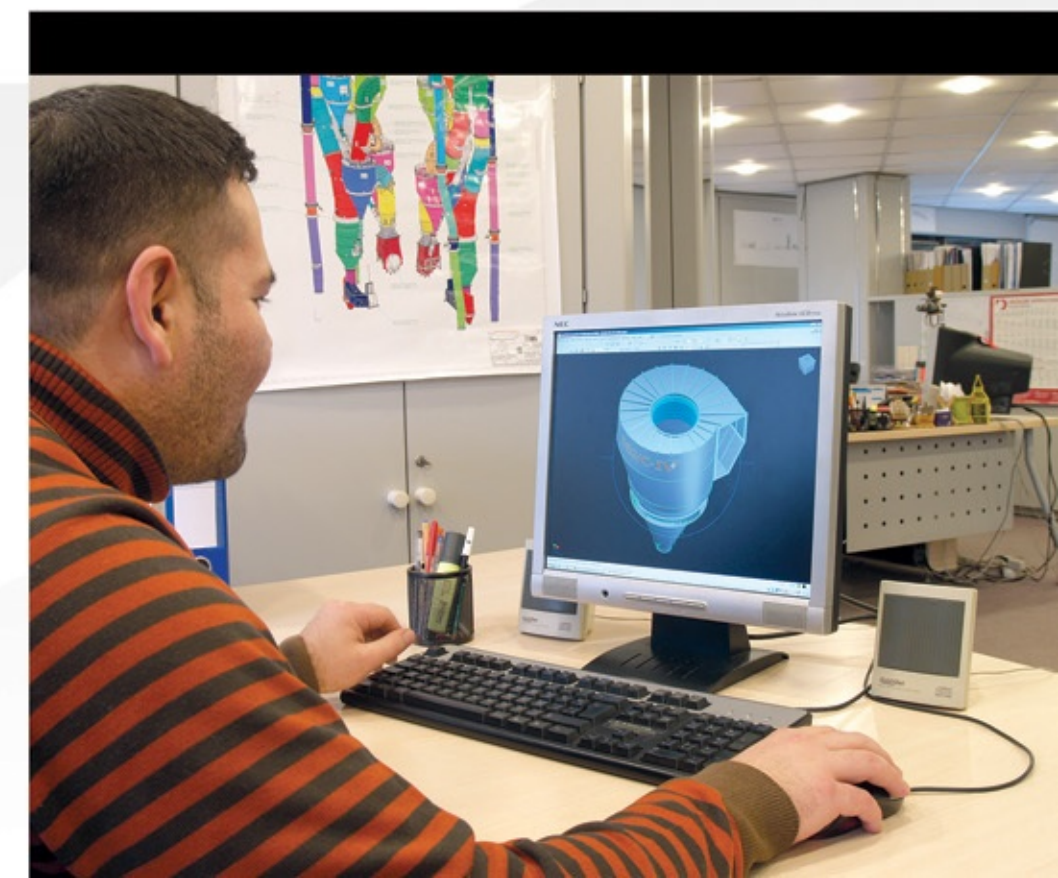
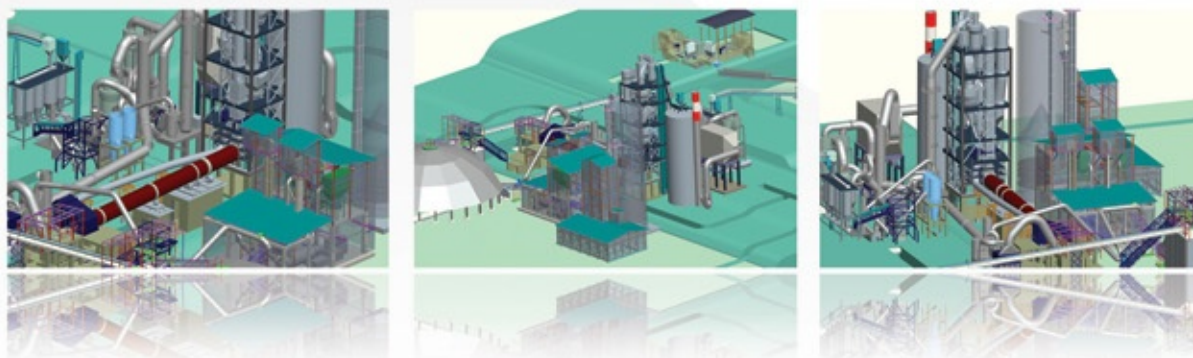
DESIGN of COMPLETE CEMENT PLANTS

DESIGN of MAIN EQUIPMENT

Rotary Kiln, Ball Mill, Clinker Cooler, Dynamic Classifier, Preheater, Big Size Reducers and Gears. etc.

RESEARCH AND DEVELOPMENT

PROJECT GENERAL DRAWINGS



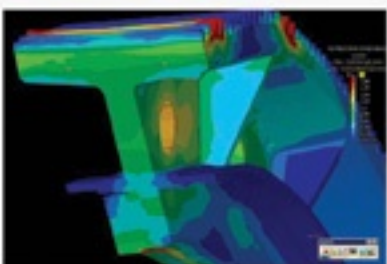


MANUFACTURING & QUALITY CONTROL

Dal Machinery an innovative leader in cement plant equipments fabrication such as crusher, rotary kiln, clinker cooler, ball mill, dynamic separator and manufacturing such as preheater, vertical mill parts, big size reducer parts, girth gear, roller press.

Dal Machinery has the strong capability to engineer and manufacture custom parts the exactly match or exceed OEM specifications.

Kiln parts, preheater parts, ductworks, silos etc, Dal Machinery has advanced manufacturing facilities throughout Turkey. By engineering and manufacturing of big size equipments and units locally, it can respond more rapidly to the needs of customers and has eliminated the significant time and cost of overseas freight shipment. Dal Machinery can also more readily monitor and control the quality of local manufacturing operation.

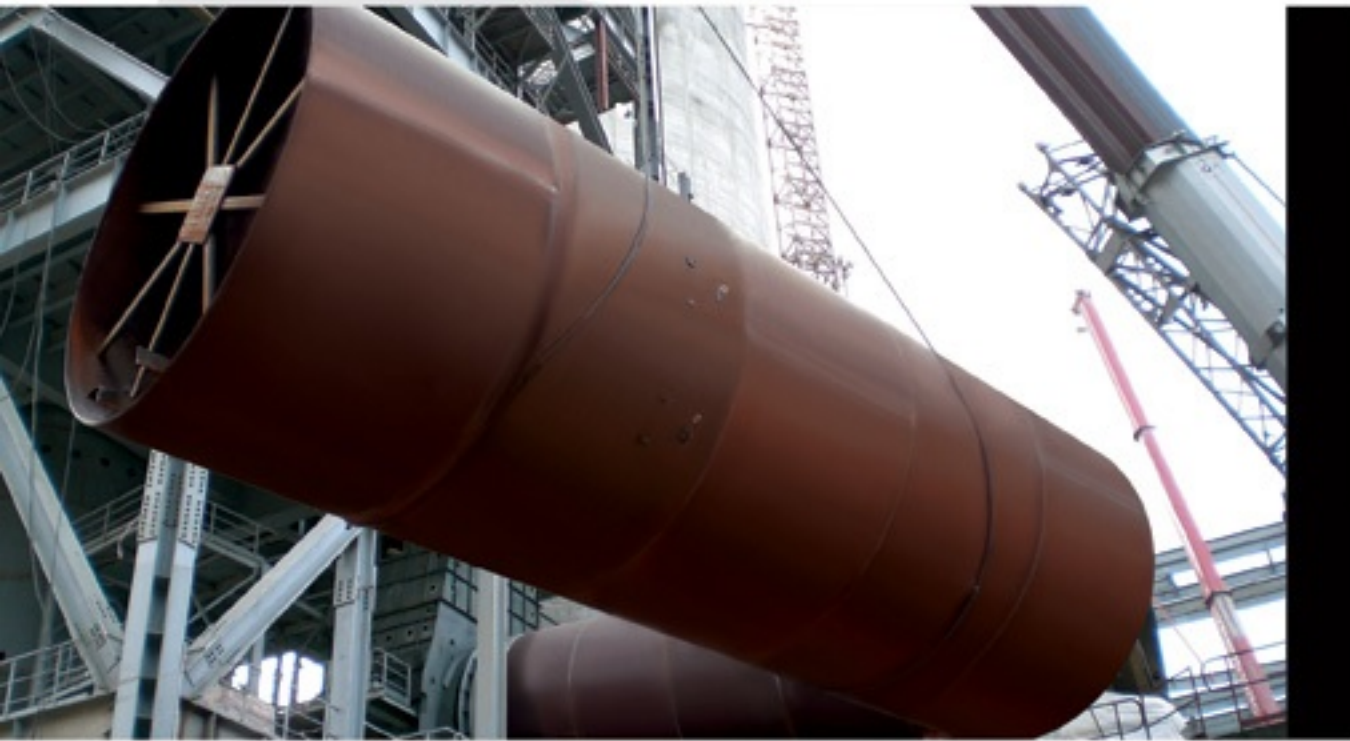


PACKING & SHIPMENT

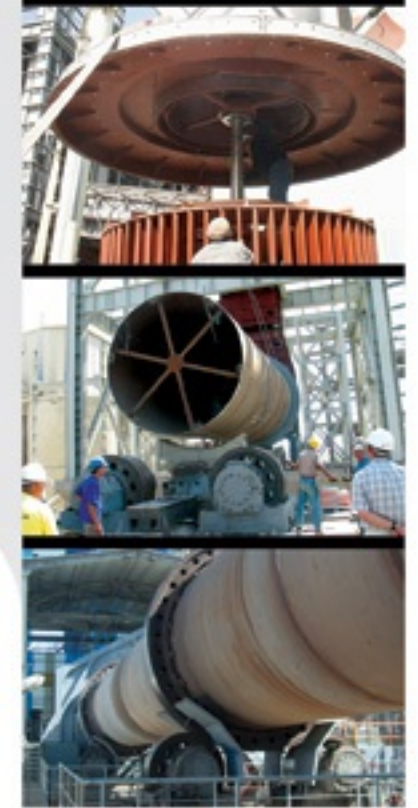
Dal Machinery provides complete shipping solutions including insurance, packing, loading - unloading lashing, and delivery. Dal Machinery has the unique ability to provide engineered packaging solutions based on machines and equipments requirements. The best packaging and crating options to ensure machines and equipments arrive safe, damage - free and on time.



Our engineers design and draw the best packaging solutions for products. The quantity and density of cushioning materials such as polyethylene or polyurethane foams are determined based on the item characteristics as applied to density, shock value, drop, vibration, and recovery.



- Plant Construction Work
- Organize Site For Safety and Efficiency
- Oversee Contractors and Subcontractors
- Supervise Delivery and Unloading Inspection of Materials and Equipment
- Organize Assembly According to Schedule



Accurate fabrication, skilled engineering, high quality products...

ASSEMBLY & COMMISSIONING

We are a trustworthy name in the field of erection & commissioning and have rendered peerless services in the same. We have successfully carried out commissioning and erection of plant and equipments for various industries. The immense experience of our team of experts has been the sole reason behind our providence of client-oriented results. The enormous trust, which clients put upon us for erection and commissioning, has gained us the reputation of one of the potential providers of plant erection services.



We will accept responsibility for total plant erection, if desired, or we can supply site erection supervision for your contractor. Our own engineers will be present during the commissioning phase to assure a successful startup and assist in optimizing operations and attaining maximum product quality.





Raw Material and
Additive Crushers

Raw Material
Storage System

Preheater

Rotary Kiln

Clinker Cooler

Cement Mill
(Ball Mill)

Dynamic Classifier

V-Separator

Roller Press

Big Size
Reducers & Gears

Material
Conveying Systems

OUR PRODUCTS



WHEREVER IN THE WORLD

PIONEER CEMENT - PAKISTAN



- Pioneer Cement / PAKISTAN
- OYAK Elazığ Cement / TURKEY
- Holcim Lanka / SRILANKA
- OYAK Mardin Cement / TURKEY
- LAFARGE Perlmooser / AUSTRIA
- ADO Tokat Artova Plant / TURKEY
- HIEDERBERG Rustavi Cement / GORGIA
- Zealpak Cement / PAKISTAN
- HOLCIM Minetti / ARGENTINA
- VICAT Konya Cement / TURKEY
- Finncementi / FINLAND
- CEMENTIR Çimentaş Cement / TURKEY
- HEIDELBERG Geseke / GERMANY
- LAFARGE Aslan Cement / TURKEY
- Ciment Quebec / CANADA
- ÇİMKO Adıyaman Cement / TURKEY
- Zinc Recycling Plant / TURKEY





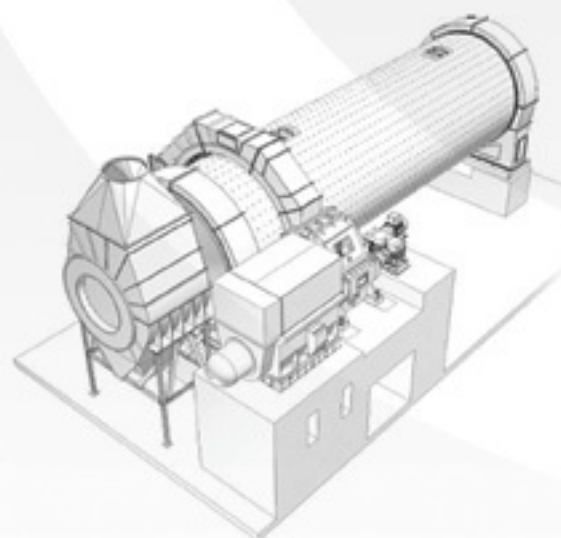
Dal Machinery
UDCM type
Cement Mills are
Designed for
Grinding of
Clinker to any
type of Cement

Particularly well suited for increasing the productivity of mills already in operation. The innovative rotor cage system enables the grinding of premium product qualities. The investment cost incurred by a change of separators is quickly recovered. Through its compact dimensions and low operating and maintenance cost the DEG separator significantly increases grinding plant efficiency.

DYNAMIC CLASSIFIER

UNIVERSAL DRIVE BALL MILLS

All mill types may operate in either open or closed circuit. UDCM type mills are designed to achieve maximum grinding efficiency, low energy consumption, compact plant layout and compact mill drive design, approved lining types.





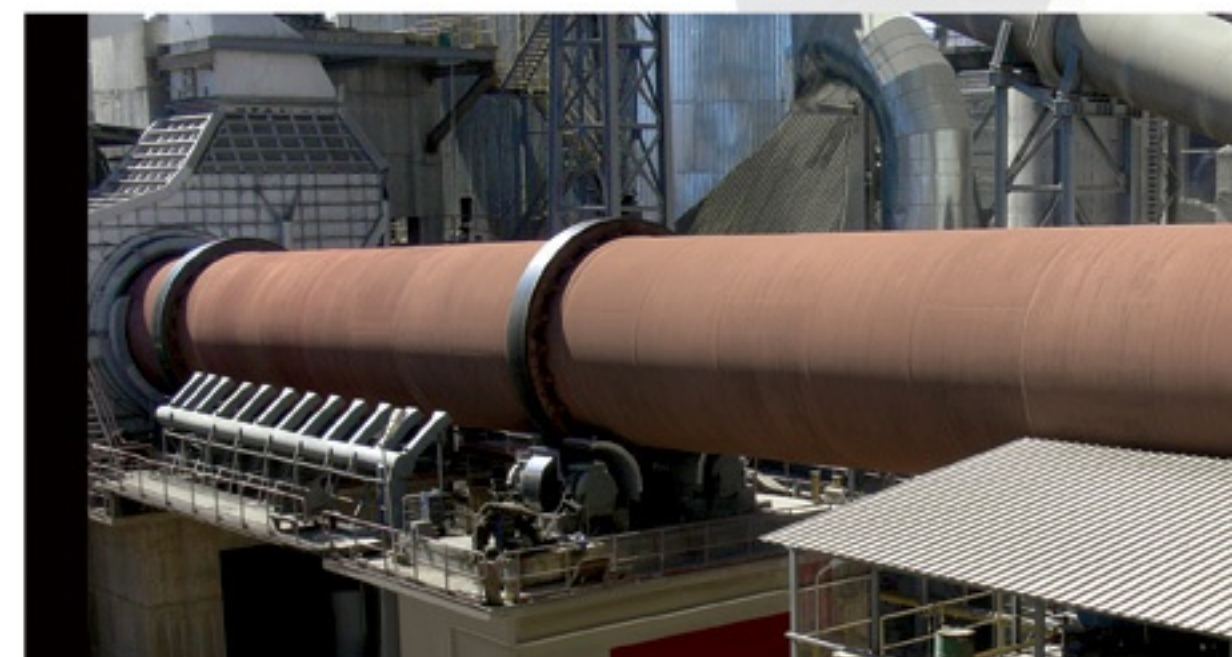
PREHEATER

Preheater and precalciner kilns are shorter than a long cement kiln and contain tall preheater towers that use the heat produced by the kiln to calcine the raw materials as they move through the various stages of the tower. These kilns reflect the latest in cement kiln design technology. They are more fuel efficient than long kilns using up to 50% less energy. Waste-derived fuels can be introduced at either the burner end or through a special port at the rear with other raw materials to further increase fuel efficiency. Four or five stages, single or double strings preheater can be designed for green field plants as well as existing plants for upgrading projects.



ROTARY KILN

For responding the demands of the today cement industry, Dal Machinery provides rotary kilns up to 6000 tpd with regard to quality, maximum capacity and minimum costs. Our reliable design will lead you to low resource consumption, high operating safety and low specific operating costs and capital expense.



CLINKER COOLER

Compact and flexible design can be applied for new plant and also existing plant for upgrading projects. Hydraulic drive, mechanic drive, pneumatic dust transport system, classic dust transport system with chain conveyor, hammer and roller crusher are presented to our customer as an optional systems.





DRIVES & GEARS

Drives and gears are the essential and one of the most important parts of industrial plants. Using reliable and long life equipment will make your investment profitable.

We are able to design and produce state-of-art gears and drive systems, matching today's requirements.



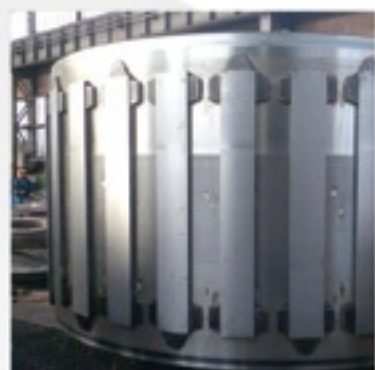
VERTICAL MILL PARTS

Local manufacturing works of the nominated supplier of mill to complete turn key package are managing with required fulfill quality and time. We concentrate main frame, main drive system frame, mill body and feeding equipment housing manufacturing as usual in the world. We also provide manufacturing special parts of mill according to drawings are supplied by nominated supplier with required quality.





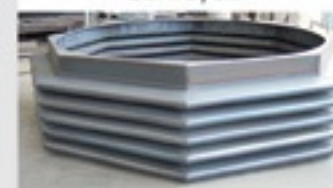
REPLACEMENT & SPARE PARTS FABRICATION



Manufacturing and providing spare parts of the main equipments and units such as kiln, ball mill, vertical mill, clinker cooler, preheater, conveying system, dedusting system, big scale reducer and planet gear system and auxiliary units. We also provide manufacturing for the replacement projects according to original design parametres and drawings or improvement design as customize solutions. Some of the typical parts as follows:



Conveyors



Compansators



Screw Conveyors



Rotay Feeders



Hydraulic Stations



Clinker Crushers



Slide Gate

EQUIPMENTS



Surface Feeder / Steel Conveyor



Roller



Liner



Grinding Table



Thrust Rollers