



S.C. IPIP S.A.

**Engineering Services For
Cost Effective Investments**

**The EXPERTISE POWER
to CHALLENGE the FUTURE**



Brief Company Presentation

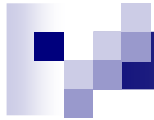


IPIP S.A. the Engineering and Design Institute for Oil Refineries and Petrochemical Plants it is for almost 50 years, the biggest romanian design institute for refineries and petrochemistry, acquiring a high prestige due to the recognized quality of its specialists and achievements.

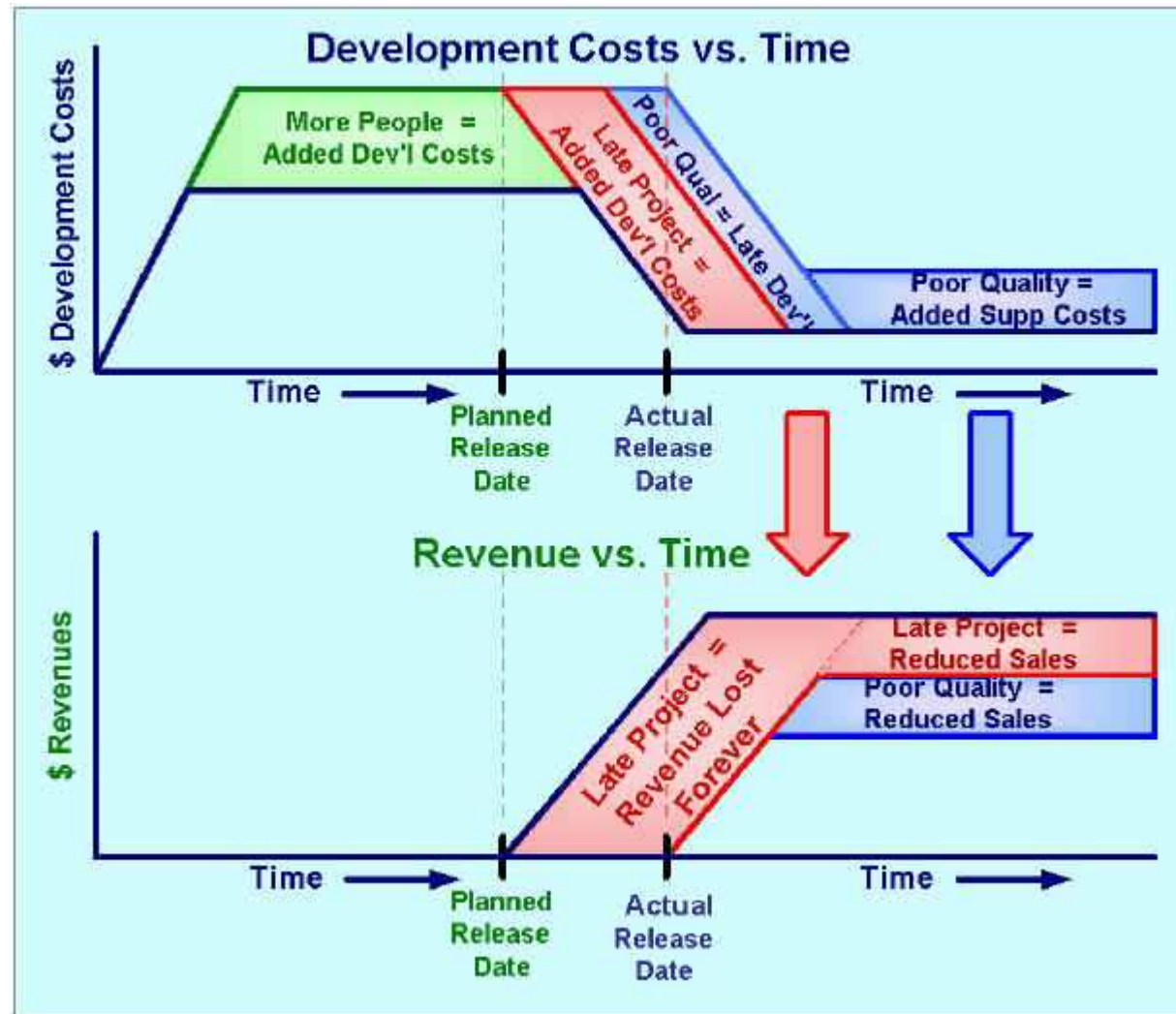
The Institute has performed the complete engineering and design for the achievement and implementation of the new Romanian refineries and for the revamping and extension of the existent ones.

Thus, IPIP has fully designed the 11 oil refineries of Romania, totaling a processing capacity of about 40,000,000 Mt/y, and a great number of objectives abroad, spread worldwide and comprising, mainly, oil refineries, lube oil / gas processing complexes, oil terminal and other associated facilities.

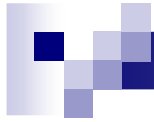




The Customer Problem



- Late projects cause impact of added development costs and revenue lost forever.
- Poor quality causes impact of longer development intervals (i.e. added development costs), added sustaining engineering and support costs.
- Projects with too many people cause added development costs.



Ineffective vs. Effective Engineering

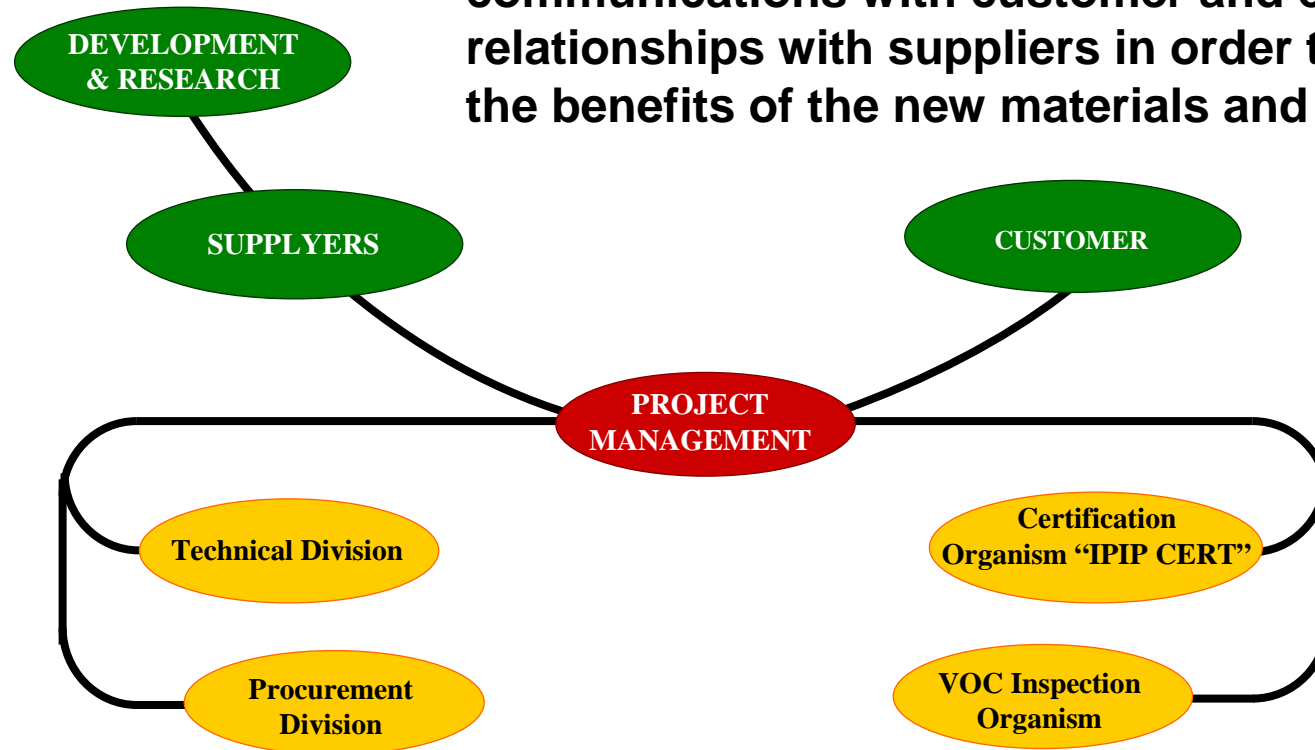


Category:	Ineffective Engineering Impact:	Results In:
Delivery	<i>Late Delivery</i>	<ul style="list-style-type: none">» Added development costs» Revenue lost forever» Reduced sales and margins
Quality	<i>Poor Quality</i>	<ul style="list-style-type: none">» Longer development intervals (i.e. added development costs)» Added support and sustaining engineering costs» Reduced sales and margins
People	<i>More people</i>	<ul style="list-style-type: none">» Added development costs» Poor team communications

Category:	Effective Engineering Impact:	Comes from:
Delivery	<i>On-time Delivery</i>	<ul style="list-style-type: none">» Clear up-front definition for scope of supply» Good development of internal procedures» Good quality control» Usage of latest computer design tools» Good project management
Quality	<i>High Quality</i>	<ul style="list-style-type: none">» Quality design» Good quality control procedures
People	<i>Fewer People</i>	<ul style="list-style-type: none">» Clear up-front definition for scope of supply» Strong team communications» Good development of internal procedures» Good quality control» Good project management



IPIP S.A. Project Management develop strong and fast communications with customer and encourage relationships with suppliers in order to be informed about the benefits of the new materials and equipments.



IPIP SA founded as an independent structure IPIP-CERT, with activities in certification of the third party (independent of customer and supplier) for the products in the field of pressure equipment and plant mounting according to applicable regulations and reference national and international standards.

The entire activity of **IPIP SA** is assisted by the most suitable IT tools, among which we have to mention some of the dedicated **Software Packages** :

PROCESS ENGINEERING

- Process Simulation ChemCAD, PRO II
- Heat exchanger software STX by Heat Transfer Consultants, Inc.
- Fired Heaters simulation FRNC-5PC by PFR Engineering Systems, Inc.
- Pipe network calculation PipeNet , FlareNet

MECHANICAL ENGINEERING

- Pressure Vessel Design PVElite by COADE, Tank

PIPING ENGINEERING

- PDS (25 graphic stations)
- Cesar II v 5.0

CIVIL ENGINEERING

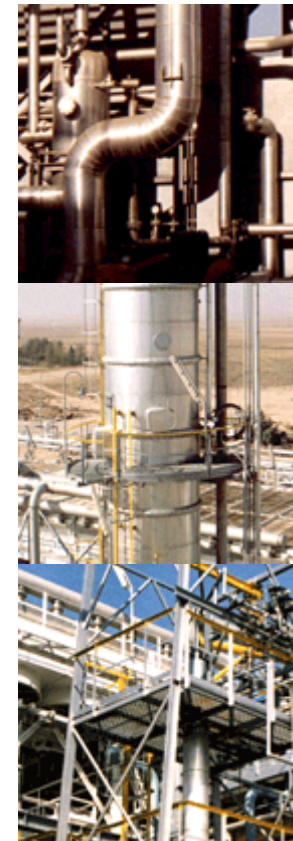
- Civil: STAD PRO, SpaceGass, MadthCad
- Structural Steel: SpaceGass, MadthCad
- Arhitectural: ArhiCad

INSTRUMENTATION & ELECTRICAL ENGINEERING

- INTOOLS, Masonailan, Fisher, Spink, DocWin, Ecodial, Spider, Eplan Elcad

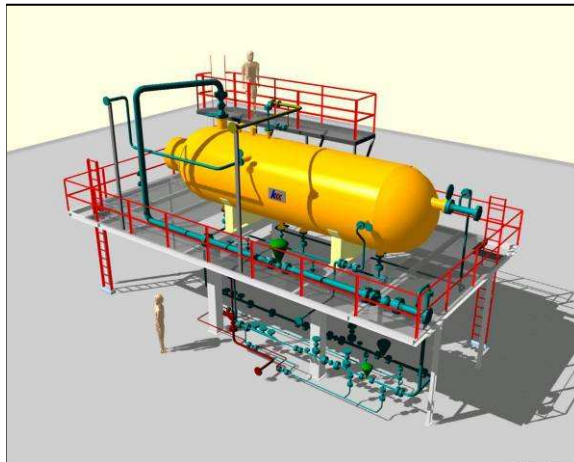
CADD Software List:

- AutoCad and Microstation



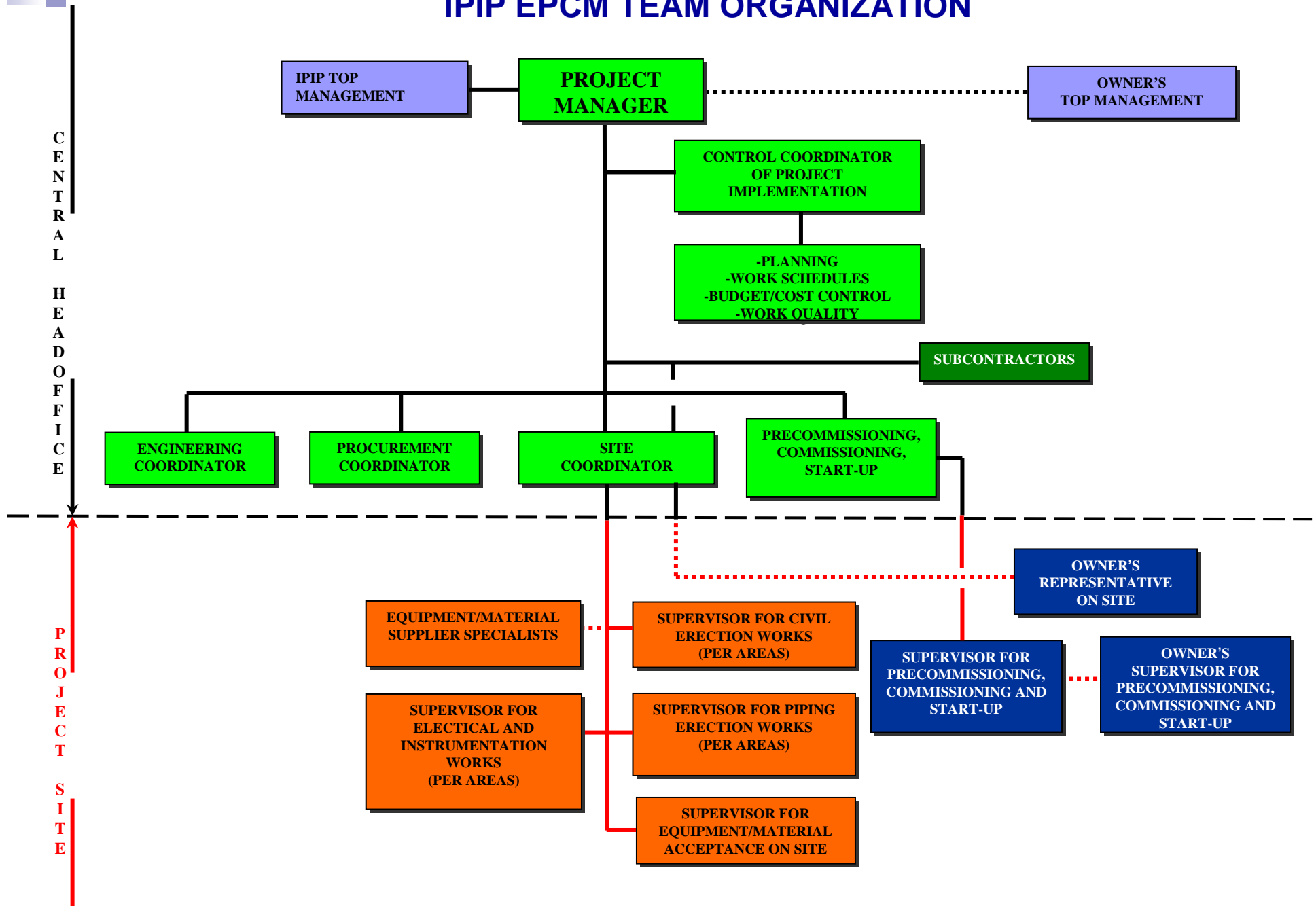
Benefits of 3D Design - PDS

- Increase productivity by taking advantage of all resources
- Ensure accuracy by using the same data across the project workflow
- Saves time and effort; enables quick evaluation of structural and piping configurations
- Improves accuracy
- Cuts costs



- Keeps information accurate, current, easy to access
- Makes reporting easier, faster
- Provides secure, fast, easy, up-to-date viewing of data

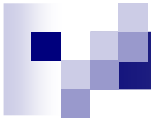
IPIP EPCM TEAM ORGANIZATION



EPCM TEAM MAIN RESPONSABILITIES

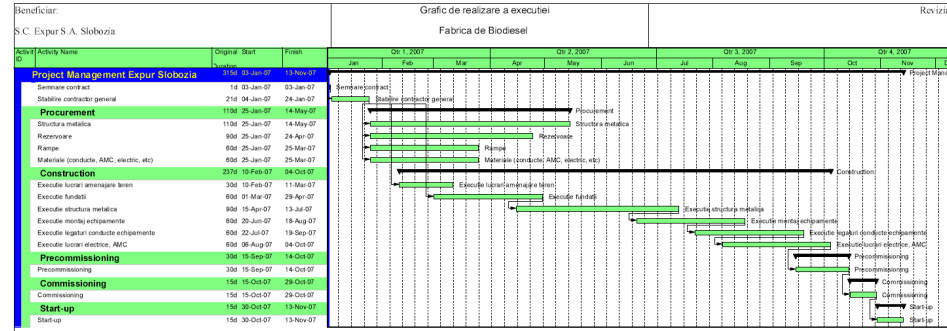
- provide for all planning and communications
- maintain a close relationship with Customer
- ensure strict compliance with contractual and legal requirements
- monitor quality assurance and control systems
- provide reports to assure accurate information flow
- submit detailed progress reports to Customer
- project cost management
- respond to any execution issues
- consultancy and recommendations to Customer
- reporting accumulative cash flow and anticipated cost to complete
- scheduling and programming of the Project
- monitoring of progress to meet the milestones
- preparation, submission and the follow up of the papers and documents required by the competent authorities for the execution of the Project
- monitoring the legal deadlines imposed by the local authorities
- organize regular project meetings, bid meetings, contract signing meetings
- manage subcontractors during erection and construction works
- manage and supervise construction works and services performed on site
- implementation of the Project safety procedures



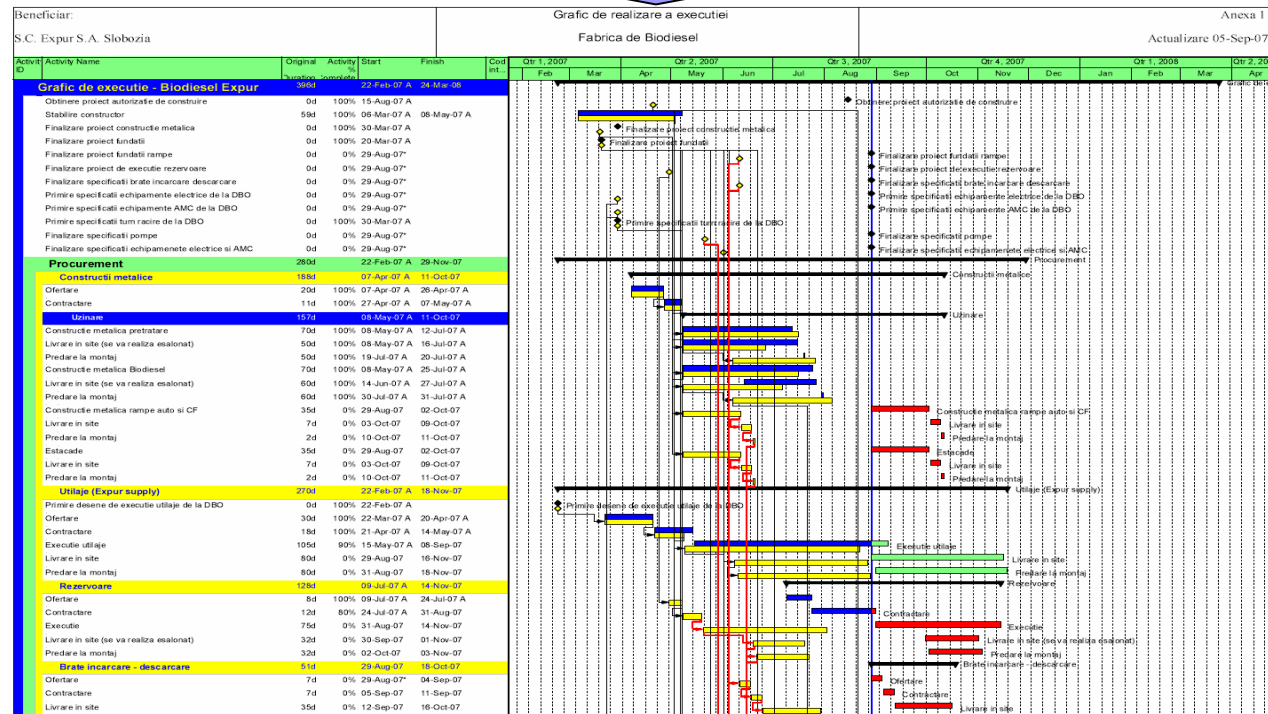


EPCM PROJECT TIME SCHEDULE

PRELIMINARY TIME SCHEDULE



DETAILED TIME SCHEDULE



IPIP S.A. is committed to offering best-practice engineering design and expertise based professional services for oil refineries, chemical and petrochemical plants, tank farms, utilities, offsite and auxiliary facilities. IPIP offers today a full range of services from the conceptual phases through on-stream operation, post start-up assistance and training, EPCM services.



Cost Effective Investment needs:

1. **Good Project Management based on Progress Report**
2. **Usage of the latest IT Tools for engineering design**
3. **Strong Communications with customer and suppliers**





Thank You !



www.ipip.ro