



De Smet
Engineers & Contractors



Reliability through Experience

Company Profile

De Smet Engineers & Contractors (DSEC) is a privately held limited liability company incorporated in Belgium in 1989. It has an established reputation as a General Contractor, specializing in the agro-industrial field. It is a world class provider of engineering, procurement and construction services under a single point responsibility.

DSEC has a compelling business offering, built on many years of experience, that combines excellence in execution, safety, cost containment, and reliability with a particular focus on energy saving initiatives and sustainability.

- ▶ Headquarters located in Brussels, Belgium with offices in Ribeirão Preto, Brazil
- ▶ Permanent staff of more than 120 – mainly engineers
- ▶ Average annual turnover of approximately EUR 200m
- ▶ Single contracts from EUR 20 to 200m and more



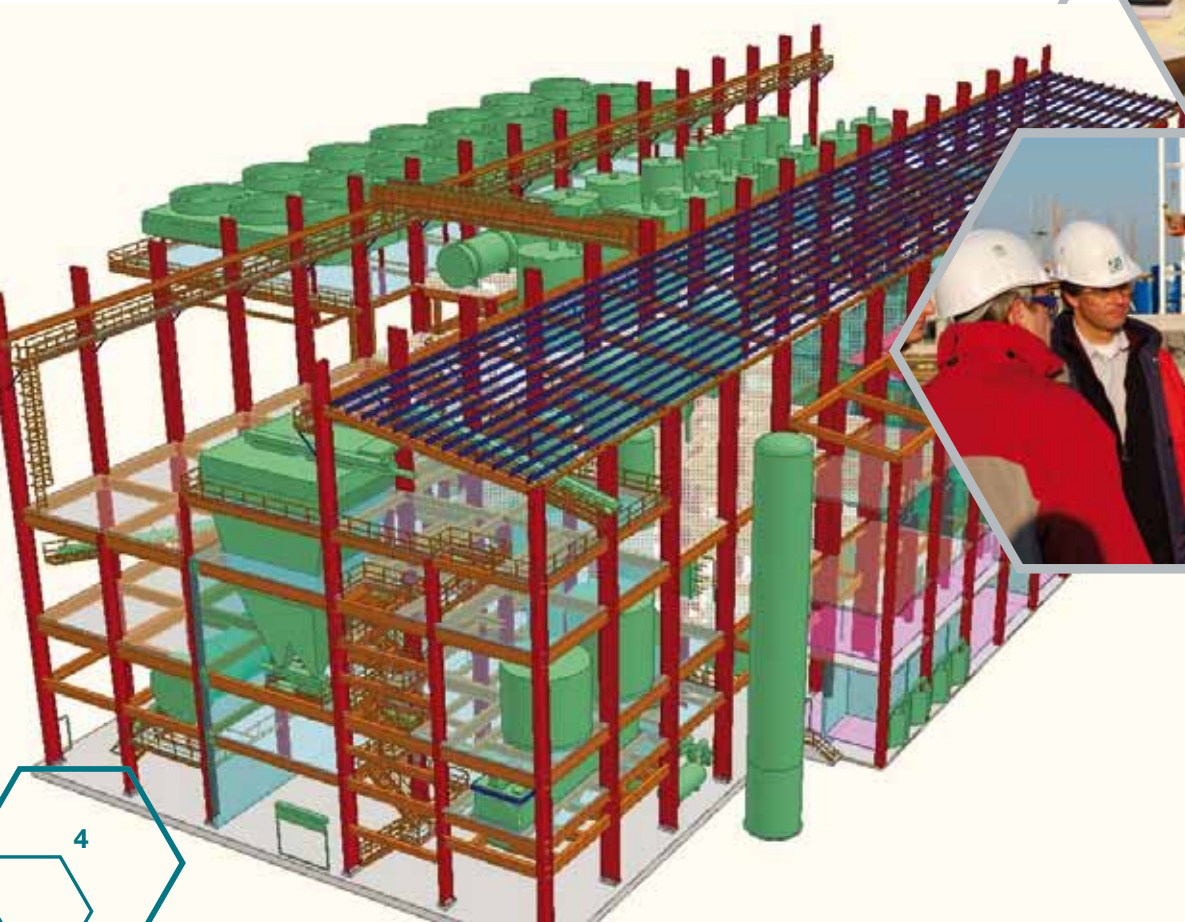


Full Turnkey Solutions from Concept to Handover

We build plants, eliminating construction risk with:

- ▶ Guaranteed technical performances
- ▶ On time completion
- ▶ Within agreed budget

To the client's full satisfaction



Meeting our Client's Needs

Flexible contractual set-up

Engineering & Technical Assistance

For & On Behalf Management
(EPCM, EPCM+®)

Semi Turnkey Construction

Full Turnkey (EPC) Construction



Building your Plants



De Smet Engineers & Contractors is a trustworthy partner in the construction of complete industrial plants thanks to their design capabilities in process, architecture, civil engineering and steel structures as well as skills in establishing comprehensive site construction tenders and execution procedures. All site works are organised and supervised by DSEC's site team who liaise with the project management staff to constantly monitor quality, budget and time scale compliance of all sub-contracted works. Plant start-up and commissioning is provided by a dedicated team of start-up engineers assisted by vendors' specialists under the authority of the site manager.

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Why De Smet Engineers & Contractors?

- ▶ Strong track record accumulated over many years, working in more than 30 countries and completing over 50 large scale projects successfully
- ▶ Repeated experience with key industry players
- ▶ A global vision of the agro-industrial sector
- ▶ Would only contract if full command and understanding of the process technology involved
- ▶ Highly skilled and committed team, including experts from the industry
- ▶ Understanding of cultural, linguistic and local context differences
- ▶ No claim philosophy – No bonds ever called
- ▶ Focus on efficiency and energy saving initiatives



Sectors of Activity

De Smet Engineers & Contractors serves different industries worldwide – all of which belong to the Natural Resources Processing Chain, including:

► **Edible Oils & Fats** extraction and processing

► **Biodiesel** production



Through its heritage from Mr Jean-Albert De Smet, inventor of the De Smet continuous counter-current solvent extractor, De Smet Engineers & Contractors has continued to work closely with the edible oil sector, offering the integration of all processing units and related auxiliaries from seed storage to refined oil packaging. DSEC's understanding of vegetable oil techniques provides a unique background for the implementation of a comprehensive project, being with its definition, its construction or its operation.

As a natural extension of the edible oil activity, the production of renewable fuels such as biodiesel is also part of De Smet Engineers & Contractors activities. Stand-alone biodiesel production units using vegetable oil can be proposed as well as vertically integrated complexes producing both protein meal and biodiesel from oilseeds.



- ▶ **Sugar** production and refining
- ▶ **Bioethanol** production

The projected increase in world sugar demand of 90 million tons from 2010 to 2030 makes our experience in the sector extremely valuable for the market. De Smet Engineers & Contractors' longstanding experience of the diffusion of sugar from beet and cane has resulted in the sale of more than a hundred diffusers. This experience has transferred successfully to the sugar and oligofructose sectors where our expertise now ranges from feedstock handling and processing up to final product refining and conditioning. Our independence from equipment suppliers allows us to select the best possible technological and mechanical solutions with a view of optimizing performances, energy recovery and construction costs for the benefit of the project.

In addition to state-of-the-art projects, our engineering skills combined with agro process know-how has been selected by major players for developing large scale industrial units from laboratory research and pilot plants in the speciality sugars and inulin production sectors.

In the same way it extended its activities from oil to biodiesel some years ago, De Smet Engineers & Contractors also identified Bioethanol projects as a logical development of its general contracting activities where its sugar engineering experience was of utmost importance. The company has so far undertaken the construction of complete fuel ethanol projects using both cereals and sugarcane as feedstock.





► Biomass to Energy facilities



Biomass is one of the most promising renewable energy sources on earth. Its usage is, however, often limited by logistical issues that considerably reduce its efficiency as an important part of the energy produced has to be consumed for its own transport to the transformation facilities.

De Smet Engineers & Contractors is therefore concentrating its efforts on offering a comprehensive solution for those biomasses that are by-products from the processing of higher value feedstock and that are thus available in large quantities in an industrial complex. High steam pressure cogeneration units that combine Heat and Power production (CHP) required by the main feedstock processing line with, in addition, a potential of exporting excess electricity to the public grid is amongst the most reliable options contemplated by DSEC. The company has accumulated considerable experience in high efficiency combustion and power generation systems for sunflower hulls, palm residues, wheat bran, straw and sugarcane bagasse.

More than stand alone power plants, cogeneration units exporting electricity associated to a processing factory require important integration skills for both facilities so that neither one is exposed to problems of the other one possibly caused by uneven feedstock supply or an unforeseen reaction of the public grid. We also believe that by-product biomasses will become the preferred raw material for the promising transformation of cellulose into ethanol and bio-chemicals through second generation fermentation processes that will play an important role in De Smet Engineers & Contractors activities in the coming years.



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