

The background image is a dark, blue-tinted photograph of an industrial facility. On the left, a large, horizontal screw conveyor is visible. In the center, there is a large, circular structure with many radial spokes, resembling a large wheel or a fan. To the right, there are several tall, cylindrical industrial tanks or silos. The overall scene is industrial and complex.

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FEEDSTOCK PRETREATMENT FOR SAF PRODUCTION

Honeywell SAF Conference, Kuala Lumpur, 27-may-2025

THE RIGHT CHOICE FOR YOU

Global solutions provider for the food, feed and biofuel industries

Leading global provider of custom-engineered plants and equipment for the **food, feed and biofuels** industries. Our reliable and innovative technologies transform oilseeds, grains and tropical oils into protein feed/food, edible oils/fats, oleochemicals and biofuel.

We deliver best-in-class expertise through 3 long-standing brands:

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GRAINS & OILSEEDS

Oilseed preparation, Solvent extraction

OILS & DERIVATIVES

Oils & Fats refining, Fat modification,
HVO pretreatment, Biodiesel,
Oleochemicals

ROSEDowns

GRAINS & OILSEEDS

Oilseeds and
rendering presses

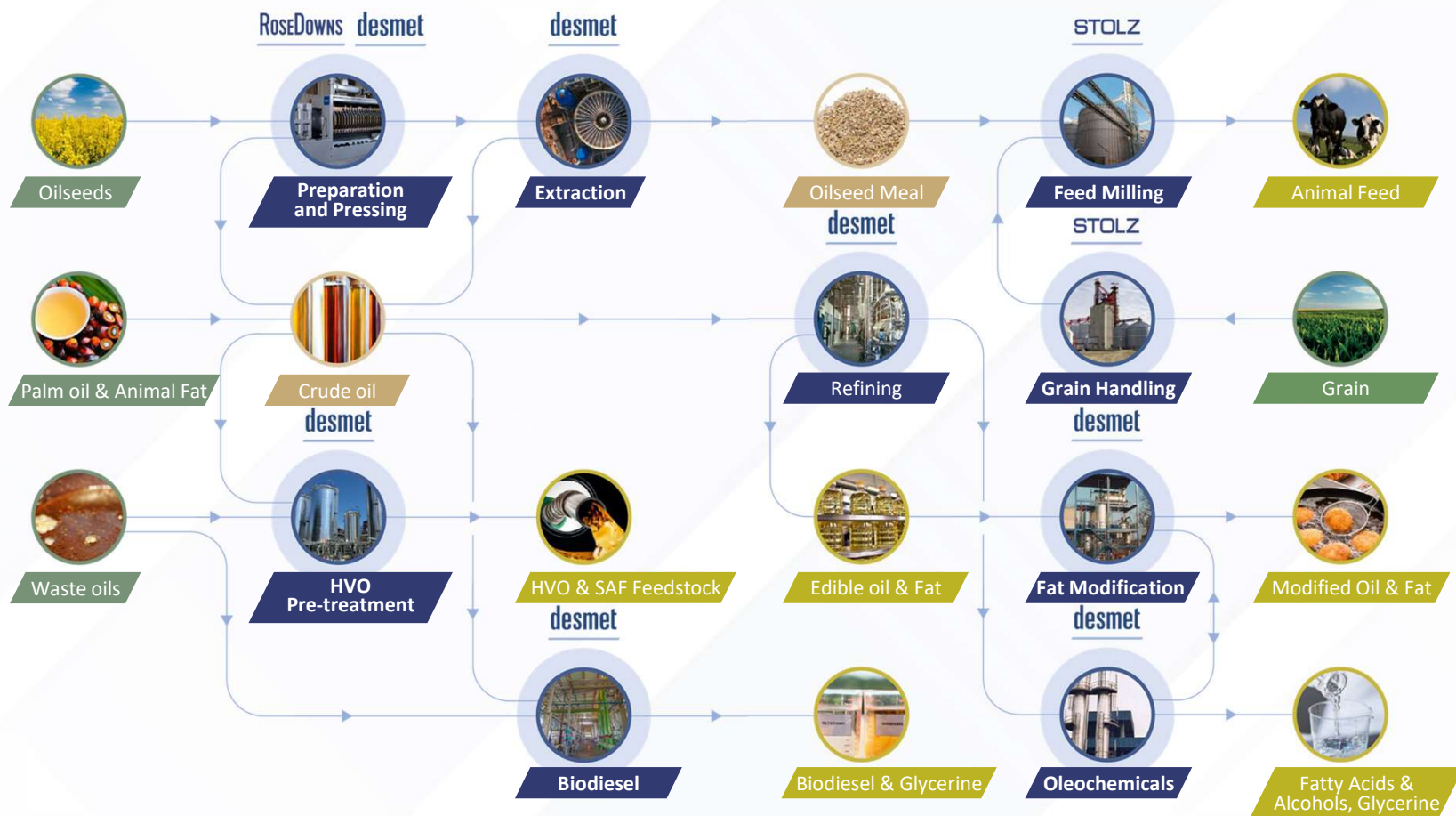
STOLZ

GRAINS & OILSEEDS

Grain handling,
Food & feed milling

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A COMPLETE TECHNOLOGY OFFERING

Desmet technologies

Inputs

Intermediary products

Products

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DESMET – UOP SUCCESSFUL RUNNING REFERENCES



2013
900000
MTY
(18000
BPD)
Louisiana, USA

2014
560000
MTY
(11200
BPD)
Venice, Italy

2019
750000
MTY
(15000
BPD)
Gela, Italy

2021
1500000
MTY
(30000
BPD)
Louisiana, USA

2023
1000000
MTY
(20000
BPD)
Louisiana, USA

2025
500000
MTY
(10000
BPD)
Thailand

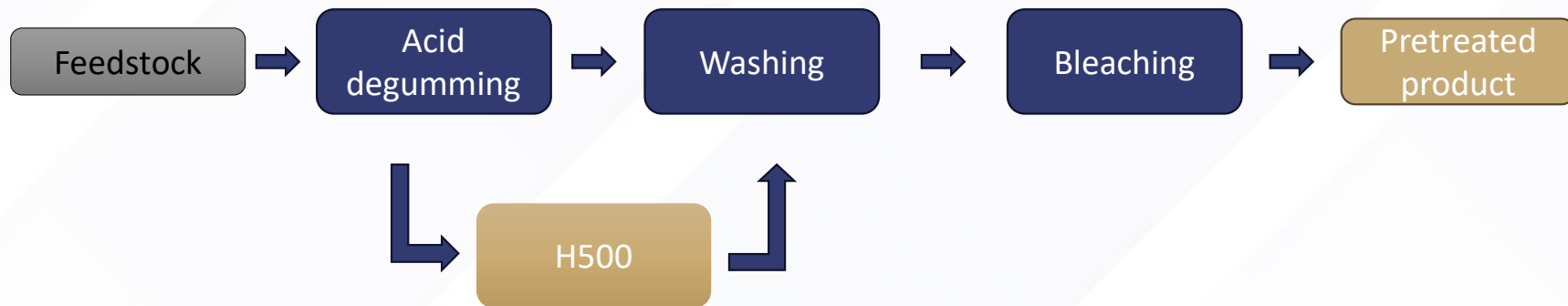
2025
330000
MTY
(6600 BPD)
Grandpuis,
France
Coming soon!

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PRETREATMENT SETUPS

1. Standard PTU
2. Standard PTU + High Temperature treatment



WHY HIGH TEMPERATURE TREATMENT MATTERS

1. Even though they are not available in large volumes, low-quality raw materials constitute a significant segment of the market reinforced by governmental policy support.
2. Low-quality raw materials, even when mixed in small percentages, can result in a product that does not meet the desired specifications with the usual pretreatment. **(CASE FOR AF, ACID OILS AND GUTTER OIL)**
3. Even if the standard pretreatment achieves the specifications desired by the licensor, the application of heat treatment results in a significant reduction of absorbents handling, abrasion related problems, use of steam and effluents generation. **(CASE FOR POME & UCO)**

ECONOMICAL BENEFITS

Capacity	466667	TPY	
	Basic PTU	Basic PTU + Heat Treatment	
BE Dosage	2	0,5	%
BE Use	9333	2333	Tn/Y BE
Price BE	\$ 200,00	\$ 200,00	USD/Tn
	\$1.866.666,67	\$ 466.666,67	USD/Y
Saving BE		\$ 1.400.000,00	USD/Y
Nat Gas		\$ 3,00	Nm3/Tn
		1400000	Nm3/Y
Price Nat Gas		\$ 0,25	USD/Nm3
Spent in Gas		\$ 350.000,00	USD/Y
Material loss	2800	700	Tn/Y Feedstock
Price Material	\$ 800,00	\$ 800,00	USD/Tn
Spent in loss	\$ 2.240.000,00	\$ 560.000,00	USD/Y
Saldo		\$ 2.730.000,00	USD/Y
Saving per Tn		\$ 5,85	USD/TN

- For an installation of 460KTY, comparing degumming prior bleaching vs degumming & Heat treatment prior bleaching
- Less Filter Aid dosing (longer filter cycle time due to less ratio BE/oil). Less precoat/Tn.
- Less logistics costs for handling fresh BE & solid waste.
- Less steam consumption & less effluent generations due to less filter cake blowing

WHEN CHOOSE HTT SECTION

1. In the case of new installations dealing with difficult feedstocks. **To secure quality.**
2. For new installations, utilizing normal-quality feedstocks can reduce the use of absorbents, manage solid residues more effectively, lower steam usage (for filter purging), and decrease the production of effluents. **To secure quality.**
3. For current installations, an additional component can be incorporated to gain the before mentioned advantages. **Improve quality and Operability**



THANK YOU

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SCIENCE BEHIND
TECHNOLOGY