

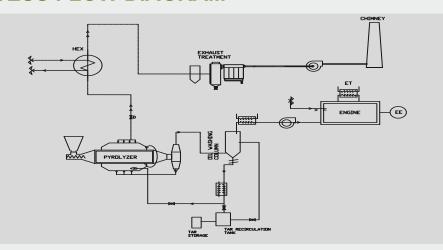
# **Biorefineries**

## SYNGAS & ENERGY FROM RESIDUAL BIOMASS

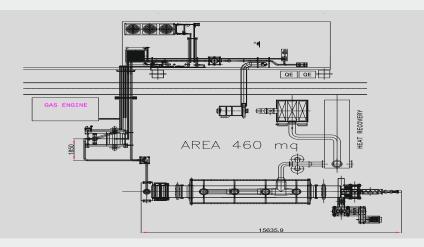
#### PROCESS FLOW DIAGRAM







### 200 KW PRODUCTIVITY PLANT: LAY OUT







#### **TECHINAL DATA FOR 200 KWe PLANT**

- 1. FEEDING MATERIALS: VIRGIN BIOMASSES
- 2. FEEDING CAPACITY: up to 200 kg/hr at 10% humidity
- 3. PYROLYSIS TEMPERATURE: 500 -600 °C
- 4. ELECTRIC PRODUCTION FROM BIOGAS: 200 Kwe (max)
- 5. AVAILABLE THERMAL ENERGY FOR OTHER USES : 200  $\,$  Kw ( hot fumes at 400°C)
- 6. LIQUID HYDROCARBON PRODUCTION: 10 kg/h
- 7. PLANT AREA REQUIRED: about 500 sq mt
- 8. WORKING HOURS IN A YEAR: 7500 h/y