## **Technical Information Sheet**

Technology for fermenting organic waste to produce methane (dry method) for power generation  This technology is used to ferment organic waste to produce methane gas (dry methane fermentation) and use the methane gas for gas engine power generation or as automobile fuel after it is purified.  Discription of technology  [Objective and application of the technology]  This technology is used to ferment organic waste to produce methane to recover energy. [Characteristics of the technology]  Organic waste is finely crushed into pieces of 30 mm or so and mixed with dilution water in a mixer to produce surry of 15 to 40% which is then put in a fermentation tank at a temperature of approx. 55°C. After the hydrolysis, acid fermentation of approx. 60%. When 3 tons of organic waste is treated in one day, over 300 m³N of bio gas can be recovered.  Objective, application, characteristics, delivery record, and price of technology  [Delivery record]  Company K (Kyoto) 50 tons per day Bio gas 7,800 m³N per day Power generation 620 kW [Price and other inquiries]  Engineering Planning Department (Tokyo), Planning and Development Center, TAKUMA Co., Ltd.  Person in charge: Susumu Uno  TEL: 03-5822-7894 (Direct) FAX: 03-5822-7895
2. Type of technology  fermentation, and use the methane gas for gas engine power generation or as automobile fuel after it is purified.  3. Description of technology  [Objective and application of the technology]  This technology is used to ferment organic waste to produce methane to recover energy. [Characteristics of the technology]  Organic waste is finely crushed into pieces of 30 mm or so and mixed with dilution water in a mixer to produce slurry of 15 to 40% which is then put in a fermentation tank at a temperature of approx. 55°C. After the hydrolysis, acid fermentation and methane fermentation processes, methane gas is recovered at a concentration of approx. 60%. When 3 tons of organic waste is treated in one day, over 300 m³N of bio gas can be recovered.  Objective, application, characteristics, delivery record, and price of technology  [Delivery record]  Company K (Kyoto) 50 tons per day  Power generation 620 kW  [Price and other inquiries]  Engineering Planning Department (Tokyo), Planning and Development Center, TAKUMA Co., Ltd.  Person in charge: Susumu Uno
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4. Classification of technology
(1) Applicable fields
(2) Target waste Paper/cardboard, Food waste/raw garbage
(3) Services provided Plant construction, Sales of machinery and equipment, Waste treatment service, Technical cooperation/licensing, Environmental impact assessment, Survey/data processing, Other
5. Countries to which this technology can be provided  No limitations have been placed on country or region.
6. Keywords Organic waste, methane fermentation, dry method, power generation
Engineering Planning Department (Tokyo), Planning and Development Center,  7. Contact  TAKUMA Co., Ltd.
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