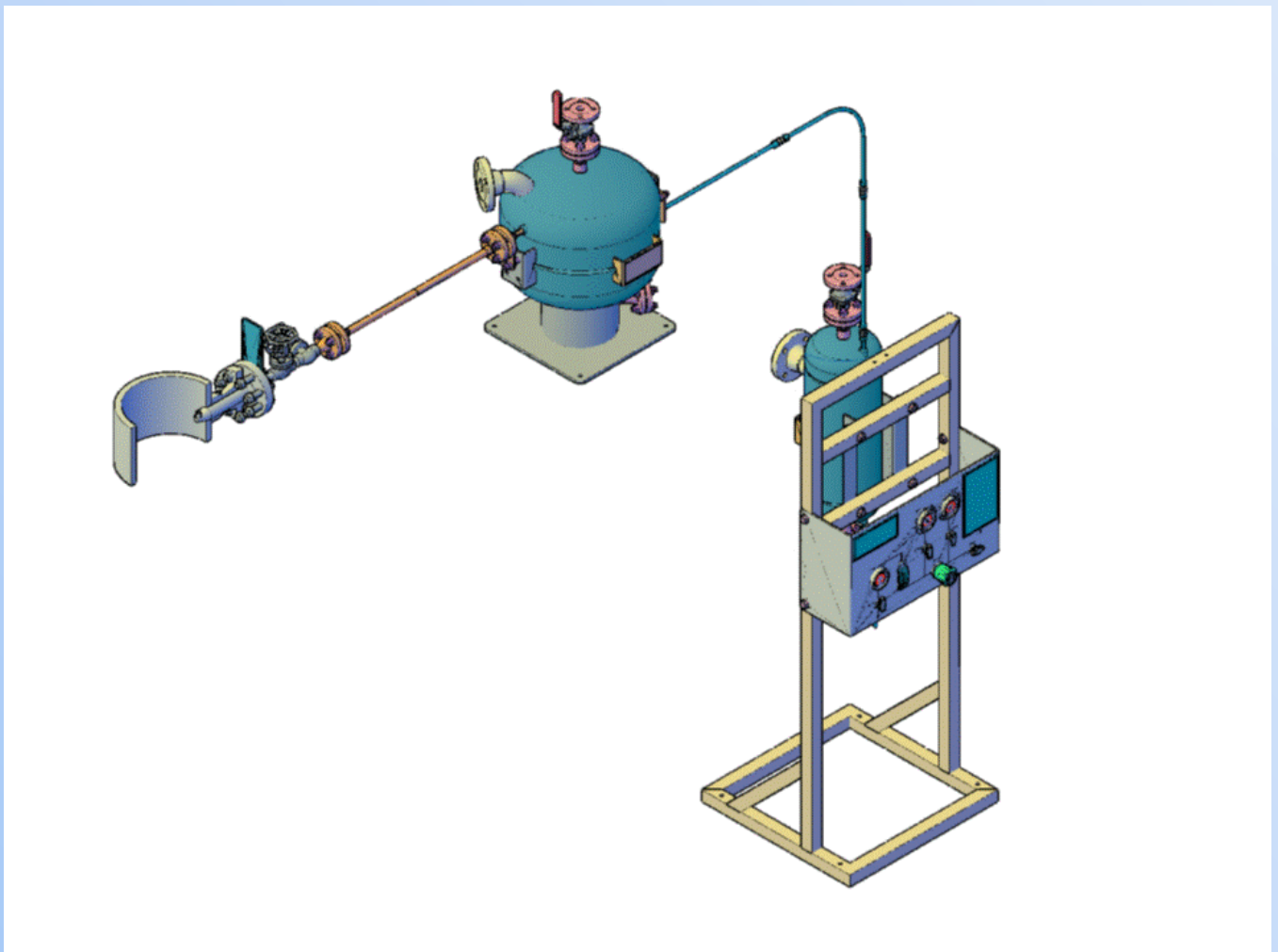




# SAMPLING SYSTEMS FITTING THE CUSTOMER NEEDS

**VINCI TECHNOLOGIES MANUFACTURES SINCE 1993**  
**SAMPLING SYSTEMS FITTING THE CUSTOMER NEEDS**



Sampling units are used in refineries, chemical and petrochemical industry to control the process and confirm the unit operation.

## GENERAL

An oil refinery is an industrial process plant, where crude oil is processed and refined into useful petroleum products.

The reasons that refineries sample are various:

- ❖ Confirm unit operation (Quality control and custody transfer between units and customers)
- ❖ Environmental control and compliance
- ❖ Process control (catalyst, heat exchanger, unit performance)
- ❖ Waste water treatment loading

### CHALLENGES WITH SAMPLING UNITS

The sample must be representative of the process. In order to design a sampling unit, special attention is taken to following points:

- ❖ Sample Viscosity
- ❖ Carry over
- ❖ Sample port / valve plugging
- ❖ Temperature during and after sample
- ❖ Obtaining a representative sample from a line with high process temperature and pressure / vacuum
- ❖ Often requires special materials of construction (hastelloy, titanium, AL6XN, etc)
- ❖ Numerous sampling points require “closed” sampling to eliminate operator exposure to hazardous conditions

### MAIN ADVANTAGES OF THE VINCI'S SAMPLING UNITS

- ❖ Energy autonomous: Explosion-proof compliance
- ❖ Simple, safe and reliable
- ❖ Elimination of human error
- ❖ Environmental safety
- ❖ Easy operation and low maintenance
- ❖ Sample is representative of the process
- ❖ Clean and eliminates spills
- ❖ Wide variety of materials of construction available to comply with process
- ❖ Ability to offer closed sampling solutions when required