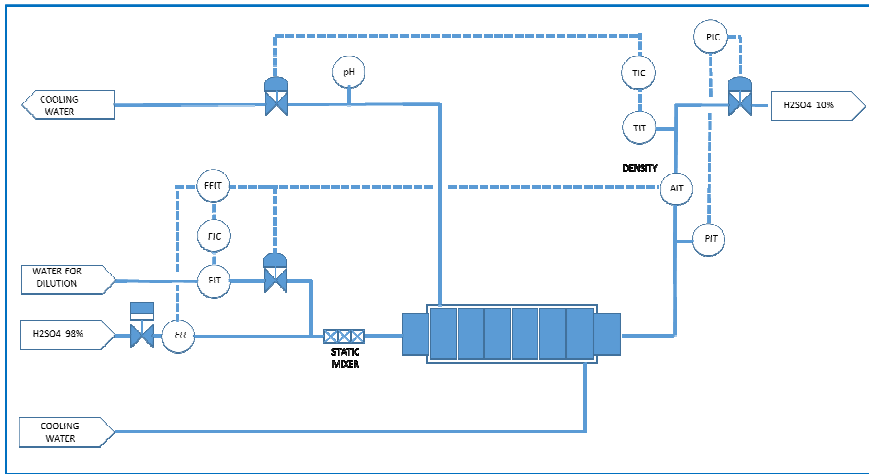


# DILUTION OF STRONG ACID

H<sub>2</sub>SO<sub>4</sub> OR HCL DILUTION PROCESS TECHNOLOGY

A UNIQUE TECHNOLOGY TO OPTIMIZE PRODUCTION

Reference: F03\_1\_E



Typical Process PFD



Dilution Skid – 96T/h 84% H<sub>2</sub>SO<sub>4</sub>

**BENEFIT #1 :**  
**OPERATION**

**BENEFIT #2 :**  
**CONCENTRATION**

**BENEFIT #3 :**  
**VERSATILITY**

**BENEFIT #4 :**  
**ENERGY SAVING**

Can be used for :  
- continuous operation  
- batch operation.

Can be used to deliver diluted acid at any concentration.

Can be used for all corrosive fluids :  
- HCl (hydrochloric acid)  
- H<sub>2</sub>SO<sub>4</sub> (sulfuric acid)  
- HF (hydrofluoric acid)

Can be used to recover heat coming from the exothermic reaction between strong acid and water.

## HEAT EXCHANGER MADE IN GRAPHILOR®

THE WEAPON OF CHOICE FOR CORROSION RESISTANCE  
(NOTE : OTHER MATERIALS ALSO AVAILABLE SUCH AS SILICON CARBIDE, ETC.)

# DILUTION OF STRONG ACID

H<sub>2</sub>SO<sub>4</sub> OR HCL DILUTION PROCESS TECHNOLOGY

## MERSEN PROPOSES THREE PACKAGES WITH OPTIONS

### BASIC PACKAGE

INCLUDES PIPING, INSTRUMENTATION AND MIXER  
IN A SKID PACKAGE

This is a “no heat exchanger ” package with dilution only.

→ Generally perfect for diluting 93% acid below ~15% wt.

### STANDARD PACKAGE

INCLUDES PIPING, INSTRUMENTATION, MIXER  
AND A HEAT EXCHANGER IN A SKID PACKAGE.

→ Perfect for diluting 98% acid to above ~70% or  
for diluting 93% acid above ~15%

### PREMIUM PACKAGE

INCLUDES PIPING, INSTRUMENTATION,  
MIXER AND TWO HEAT EXCHANGERS IN A  
SKID PACKAGE.

→ Perfect for diluting 98% acid below ~70%

### FLEXI+ AND/OR PUMP+ OPTIONS

THE FLEXI+ CONTROL OPTION AND  
PUMP+ OPTION CAN ADD A COMPLETE  
CONTROL SYSTEM AND/OR FEED PUMPS  
TO ANY OF THE ABOVE PACKAGES.