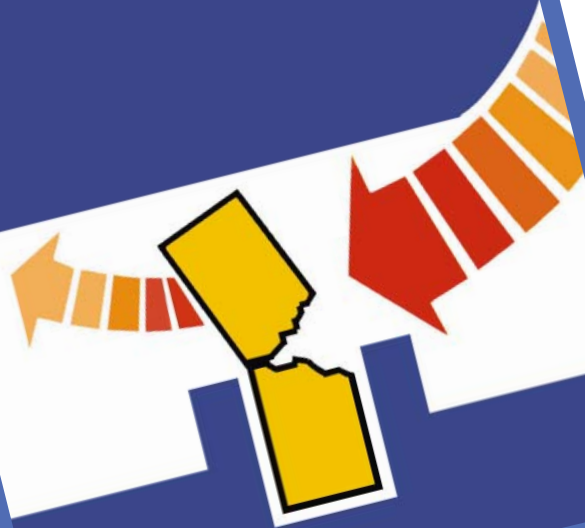




# FNCT FULL NOTCH CREEP TESTER



DESIGN AND PRODUCTION OF  
INSTRUMENTS AND APPARATUS  
FOR QUALITY CONTROL  
ON MATERIALS



These instruments are made in  
compliance with CE health and  
safety requirements



**Introduction**

FNCT is a test method to determine the stress crack resistance of polyethylene materials in any environment. The test is carried out on notched test specimens cut from compression-moulded sheet or finished products where applicable. The test specimen is subjected to a static tensile load when immersed in an environment such as a "surface active" solution held at a specified temperature and the time to failure measured.

The test has been specifically developed for polyethylene materials but can be used to evaluate PE extrusions, such as pipe segments, PE fusion welds/fittings and PE blow moulded containers to study the effect of aggressive environments i.e. dangerous goods/chemicals. The test may also be adapted for other thermoplastic materials e.g. Polypropylene (PP).

**Standards**

Designed and built to meet the following standards:  
ISO 16770  
and others equivalent.

**Technical Characteristics**

- Number of stations: 6 independent
- Force application: brushless servomotors, one for each station
- Force measure: load cells, one for each station
- Force range: up to 2000 N each station, selectable independently
- Force resolution: 0.1 N
- Force accuracy:  $\pm 1\%$
- Stroke: max. 200 mm
- Displacement resolution: 0.027 mm
- Displacement accuracy:  $\pm 0.1$  mm
- Time range: up to 10000 h
- Time resolution: 1 s
- Time accuracy:  $\pm 1$  min
- Thermostatic bath: stainless steel, unique for all the stations
- Temperature range: 50°C to 95°C (without cooling) room temperature to 95°C (with cooling)
- Temperature resolution: 0.1°C
- Temperature error:  $\pm 1$  °C
- Thermostatic bath inside dimensions (LxWxH): 1330 x 240 x 410 mm
- Bath level sensor: stainless steel float
- Bath level compensation: with valve (external reservoir not included)
- Heating system: circulation pump with heating element
- Cooling system: cold water circulation or optional cooling system (chiller)

**Ancillary Equipments**

- External chiller
- Optional load cells, full scale 500 N or 1000 N
- Instrument control and data acquisition via PC with dedicated software

<b>Technical Data</b>	
Overall dimensions (L x W x H) [mm]	1620 x 730 x 1750
Mass [kg]	500
Electrical Supply	380 V - 50 Hz - Three phase, five wires (230 V - 60 Hz - Three phase, on request)
Power [kVA]	15
Paint	fuchsia RAL 4006 - gray RAL 7035

"Due to the continuous development policy of CEAST's Research and Development Department, changes may be introduced without notice"

Xuanyang M&E Equipment (Shanghai) Co.,Ltd  
Address:Room1010,Lujiabang Road 1011,Huangpu District,Shanghai,Zip:200011  
Tel:+86-21-63761198  
Mobile+86-13918494243  
Fax:+86-21-63760778  
E-mail: hsy@xytec.net  
Website:www.xytec.net