

















# EQUIPMENT

- Metrology Lab with CMM (Coordinates measurement machine).
- > Electricity, Electromechanical Controls, Hydraulics, Pneumatics and PLC.
- > Automation Lab.
- 3 CAD/CAM Labs with NX and CATIA Licensing, Solidworks, Mastercam & Autocad.
- Aircraft Sheet Metal Shop with hydraulic bending brake, rolling machine.
- Conventional Machining: Milling, Lathe & Grinding Machining CNC: 3 axis F5 Makino, Five axis Hass CNC, 3 axis CNC router, 3 axis Okuma CNC Lathe.
- > Wire EDM and Sinker EDM.
- Plastic Molding Shop with three molding machines.
- TIG-MIG-SMAW Welding workshop.
- Laser welding.
- > Flame cutting (oxygen).
- > Fifteen classrooms with Smart Boards.
- 300 Trainees per shift, installed capacity (which can be increased inside the building).
- > 120 people capacity in the Catering room.
- ) One infirmary.

# CERTIFICATIONS BY

- > Kenteq (Netherlands).
- Cessna.
- > Textron International, Bell Helicopter.
- Arnprior Aerospace (Sault College, Ontario Canadá).
- Fokker Aeroestructures.
- Universidad Tecnológica Nacional de Argentina:
  Net-Learning
- Escuela Normal Superior del Estado de Chihuahua:
  Education Science.
- British Standards Institution (BSI):
  Auditor Líder ISO 9001:2008 con énfasis en ISO/TS 16949:2009

# CENALTEC'S MAIN FEATURES

- **Educational model:** 80% hands on practice and 20% theoretical classes.
- Courses lenght: 8 hours up to 600 hours- depending on Companies requirements.
- Customer involvement in the selection and design of the course's material.

# CENALTEC'S COURSES INCLUDE

- > Building's usage.
- > Equipment and tools.
- Interactive SMART Boards.
- Catering room.
- > Security.
- Infirmery
- > Accident insurance

(Whithin the buliding's premises).

- > Certified trainer.
- > Printed manual.
- Hands on- examinations troughout the course.
- > Certificate: validated by the Federal Ministry of
- > Public Education.

# ACADEMIC PROGRAMS:

# **AEROSPACE**

Electrical wiring

Sheet metal assemblies

Alloys and Materials Used in Aerospace

#### **> METROLOGY & MEASURING**

Precision measuring

Aerospace industry precision measuring

## **MACHINING**

Conventional machining

**CNC** machining

#### **MAINTENANCE**

Mechanics

Ball screws & bearings

Hand tools

# > ELECTRICAL

Residential and commercial

Electromechanical controls

Electric motors

## **MECHATRONICS**

Hydraulics

Pneumatic

Process failure mode and effect analysis

PLC

#### > COMPUTER ASSISTED DESIGN

Autocad

Catia v5

Mold design and fabrication NX

Mastercam

NX

Solidworks (CSWA-CSWP)

# **PLASTICS**

Plastic injection molding

Plastic extrusion

Elastomer injection molding

WELDING

## > WELDING

TIG welding

SMAW welding

MIG welding

Stainless stel welding

Hot gas cutting

Laser welding

#### > REFRIGERATION

Basic refrigeration

# **GREEN TECHNOLOGIES**

Photovoltaic cells system (installation &design)

## **> QUALITY**

5´s

Health and safety at work

Lean manufacturing

AS9100

ISO14000

ISO9011

ISO9000

Ts-16949

Quality tool (SPC, AMEF, MSA, APQP, PPAP)

Power lock out

Implementation of 5"S" (on site)

#### **ENGLISH**

8 levels. National Geographic methodology