### **TECHNIBUS**





## ABOUT TECHNIBUS

**Technibus**, **Inc.** is a global leader in the supply of metal enclosed bus systems operating for more than 50 years. Our products include Isolated Phase, Non-Segregated, Segregated phase systems and Advanced Systems. Operating in a 150,000 square foot manufacturing facility in Canton, Ohio, the Technibus name was trademarked 22 years ago leveraging our focus on innovative bus products. We serve the power generation, distribution, petrochemical, transit, municipal, medical, military, data centers, industrial markets, and many others. Our commitment to ISO 9001 certification as a key quality process ensures that we build products which meet the most stringent customer and industry standards worldwide.

#### **ENGINEERING EXCELLENCE**

- 29+ years of experience
- Best in Class cycle times in the industry
- Hands-on quotation & bidding process
- In-depth knowledge of industry standards
- Site visits to obtain specs required for installation including:
  - Walking job site early in bid cycle
  - Working with EPC groups for design enhancements & alternative design routing options

#### **EMERGENCY SERVICE OFFERINGS**

- Reverse engineering from damaged parts:
  - Bus
  - GPO-3
  - · Sheet metal
- Quick cycle fabrication with around the clock work & project management

#### **FOCUS ON INNOVATION**

The driver behind Technibus "Best in Class" world-wide recognition stems from innovations in Non-Segregated, Segregated, and Isolated Phase Bus Systems that include:

- Installation friendly designs to reduce time & expenses
- Proprietary design
- Seismic certified products that meet requirements of:
  - ASCE-10
  - CBC-2010
  - IBC-2009
  - IEEE-693-2005 high level
  - UBC-1997
- UL & C/UL listing for Non-Seg products

### **CAPABILITIES**

**Technibus'** Advanced Systems, our fully-equipped precision fabrication division, is prepared to handle all phases of precision fabrication to meet your exact specifications. Our design team will take your product from concept to a complete production plan using Auto CAD, Inventor and Solid Works. In most cases, we can even use your existing CAD data for production. We process a wide range of materials including, but not limited to: carbon steel, stainless steel, aluminum, copper, galvanized steel, and galvannealed steel.

#### **ENGINEERING**

Our engineers work closely with you in the design process to ensure that it will meet your technical specifications. If existing CAD drawings are provided, it will cut down on the design time. If they are not provided, we can use advanced prototyping, reverse engineering and our 3D CAD design programs in the development process.

#### **PUNCHING**

One of our many in house capabilities is our Computer Numerically Controlled (CNC) punching machine. Our CNC press features a 30-ton turret punch equipped with a maximum speed of 350 hits per minute with a max sheet size of 1525 x 3660 and 6.35mm thick to provide a wide range of high-performance laser punching solutions.





#### LASER CUTTING

Our laser cutting machine has cutting, shearing, sawing, plasma cutting and etching capabilities. Our laser cutter has a max positioning speed of 3,150 IPM equipped with 25,000 watt laser resonator and programmable automatic sheet repositioning to provide precise clean cuts on various materials.

#### WATER JET/PLASMA CUTTING

In addition to our laser cutting machine,
Technibus also has water jet and plasma cutting
machines. Our high speed 3 axis cutter is able
to use water or plasma torch to cut through
material up to 4" thick. Our water jet/plasma
cutting machine provides the upmost quality,
precision and leading-edge technology for even
the most complex projects.

#### **FORMING**

Our in house forming options are broken down into Brake Forming, Open Back Inclinable (OBI) stamping/forming and rolling. Our RG Series Brake Press ensures unprecedented accuracy through mechanically controlled parallelism and positioning thus simplifying the hydraulic system to reduce valve reaction time and error.



#### WELDING

Technibus offers MIG, TIG and resistance welding services to compliment our in house fabrication. We have an experienced team of AWS certified welders working with a wide range of metals. We are able to seam weld for parts up to 144" in length.

#### **POWDER COATING**

Technibus utilizes the latest technology in an automated zirconium pretreatment. Each enclosure part passes through a multistage high pressure wash system that cleans and then coats with zirconium for excellent powder paint adhesion that is also ecofriendly. We are able to powder coat up to 800 lbs with a size up to 28" W x 60" H x 240" L. The epoxy coating helps reduce the possibility of corrosion and electrical tracking. This finish has been salt spray tested up to 840 hours.

#### **PAINTING**

We have an in house paint booth that can accommodate for equipment up to 20 feet and 800 lbs. Corrosion spray testing has been performed by an independent laboratory. A 2.5 up to 7 mil thickness of our standard paint withstood 840 hours of salt spray testing. By comparison, conventional wet paint of equal thickness only withstood 294 hours of Salt spray testing.

#### **ASSEMBLING**

To complete the process, we do our assembly, crating and preparing it for shipment in house to ensure we are meeting all of our scheduled deadlines.





# CUSTOM SHEET METAL FABRICATION

**TECHNIBUS** uses a wide range of fabrication machines to do prototyping, repair, retrofits, and production of individual pieces of equipment. Our design team is able to reverse engineer damaged or worn out parts and assemblies or fabricate utilizing hand drawn sketches to ensure an exact match to the original piece of equipment. We have all of the in house capabilities to build and run the most complex progressive designs when project scope calls for it. Since everything is done in house, we can ensure on time delivery and that everything is customized to the technical specifications provided.



#### **MATERIALS**

- Aluminum
- Carbon steel
- Copper
- Galvanneal steel
- · Galvanized steel
- GPO3
- Lexan
- Nylon
- Stainless steel

#### **APPLICATIONS**

- · Electrical enclosures
- Heavy structural supports
- · Insulated panels
- OEM components
- Sheet metal punching and forming
- Small brackets
- Structural components
- Switchgear bases

## COMMITMENT TO QUALITY

**TECHNIBUS** prides itself on providing customers with the upmost highest form of quality. We are one of the only global cULus, UL, and C/ **UL** Listing certified suppliers with low and medium voltage bus. We are Seismic and OSHPD Certified meeting requirements of: UBS-1997, IBC-2009, CBC-2010, ASCE7-10 and IEEE 693-2005 high level. Lastly, we provide all of our own custom packaging and marking to help reduce install time through: color coding, match marking, split shipments and containerization for oversea shipments.



# **BUS BAR FABRICATION**& INSULATION SERVICES

For more than twenty years, Technibus has been insulating bus bar with epoxy coating using state of the art technology for both manufacturers of switchgear and contractors involved with switchgear repairs and retrofit projects. High dielectric strength, excellent chemical resistance, durable mechanical characteristics, 130°C thermal rating and high thermal emissivity are distinct advantages our insulation offers over traditional insulating products. With all of these features, our product has become the industry preference.

#### **ENGINEERING**

- 3D CAD design
  - · Advanced prototyping
  - Autocad (also 2D)
  - Inventor
  - · Solid works
- · Reverse engineering

#### **MATERIALS**

- Aluminum
- Copper

#### **EQUIPMENT CAPABILITIES**

- CNC brake forming & punching
- Fluidized bed epoxy process
- Powder coating epoxy process

#### **TESTING**

- · Basic insulation level
- Dielectric
- Hipot

#### **FINISHING**

- Silver plating
- Tin plating





