

# We are obsessed with QUALITY.



















At virtti Associates every of our process is documented and analyzed continuously and strategically for the opportunities of betterment.

**Compliance Certifications** 

AS9100C | ISO 13485:2012 | ISO 9001:2008









# About us

Vritti Group was born in the year 1994 with a dream of setting up a world class manufacturing facility-producing state of art transformer and inductors to customers across the globe. The beginning was small and challenging. Vritti Associates, in its early days deal with toroidal and laminated transformers with a limited manpower of 15 individuals who were adept at multitasking. In the last 18 years, we have grown by leaps and bounds, all thanks to our esteemed customers, and today we serve over 20 countries across the globe.

The team of 15 has grown to an enviable force of 250, the product gamut now encompasses all the Categories in transformer, inductor, filter and alike segments, but the vision has remained unchanged.

We are today, one of the market leaders in the segment we operate and have an unarguable commitment to quality and innovation.

Today, we boast one of Asia's most comprehensive standard ranges on toroidal / laminated transformers, wire harness, box building, SMPS and power-supplies. The gamut spans small wound toroidal / laminated transformers to large three-phase auto power transformers and energy saving transformers.

For more than 15 years, our research, expertise and forethought have resulted in market-leading innovations that have shaped and defined the transformer industry. Our history of product excellence and committed customer service has assisted us in evolving into a global company serving business around the geography.

Our product are being used in the sectors of Control Panels, Medical Equipment, Lab Equipment, Aerospace & Aviation, Defence, Process Control Equipment, SPM, Electronic Equipment, Vending Machines, Test & Measuring equipment, Packaging, Automation, Energy Saving Equipment, Entertainment, Audio Equipment, Security Systems, Automobile, CNC Manufacturing, Marine, Speaker, Energy Meters, LED Drivers, DC-DC Converters and UPS manufacturing.

All our product s complies with various quality and industry specification norms including RoHS Compliance, Reach Compliance, CE and UL Mark.

We also maintain Buffer stock for the clients in order to support them when they have any uncertain demand. We can also help our clients in their early phase of project design and development of new products. We like to work with the clients closely to understand their needs, so that we can help them to be competitive in the global market.

Our current clients are Bio-Rad, Flextronics, Allegers medical system ltd, Form+Surfaces, Café Coffee day, OEP Walter Group, Obelux OY, Palmer Audio, L&T, Advance Energy, BOSCH, ABB and many others.

We believe to tie-up with our clients to be their preferred supplier.





## Why Vritti Associates

We always follow a positive approach...

#### Just in Time Delivery

We provide Just in Time Delivery of our products to the customers globally to improve business return on investment and to keep long term relationship with our valuable customers.

#### > 100% Product Testing

Before delivering the product to customers our technicians do all the possible testing on products so that the consumers get benefit for a long term from our company testing.

#### Customization on Product for our Clients

Our team is capable for making Customize Product as per the client's requirement. We provide utmost satisfaction to our clients with our unique proposition for customized products and services for every need.

#### Buffer Stock

We always keep Buffer Stock for our clients in order to support them whenever they are in any uncertain demand for our products.

#### Project Design

We also help our clients in project design stage. Using this service, our clients can remain rest assured for any smoother functioning of their project.

#### Understanding the Needs

We at Vritti Associates, work closely with clients to understand their needs.

## Reasonable Pricing & Reliable Quality

We provide highly competitive pricing with no compromise on quality of products and services to our clients.

## Quick Response on Queries & Email

We have dedicated production lines; hence our clients can expect quick response to emails and queries.

For more details about our products you can visit on our company's website www.vrittiassociates.com

We Believe in Building everlasting customer relationships...

# Toroidal

Vritti Associates Toroidal transformers are more efficient than other transformers of similar power level. Vritti Associate's Toroidal Transformers are of smaller size, lower weight, make less mechanical hum, possess a lower exterior magnetic field and generate very low off-load losses. Thanks to the lack of residual gap in the magnetic path, Vritti Associates Toroidal Transformer is certainly the ideal choice for your utility.

Our Toroidal Transformers are extremely durable, come with superior wiring, varnishing, connection terminators, Tyco / 3D Terminals and are of low profile, generate less acoustic noise, have a low EMI with a low profile. Our Toroidal Transformers are indeed highly efficient and provide excellent regulation with minimal temperature rise.

## **Key Application Areas:**

Home Appliances | Medical Equipments | IT Equipments | Telecommunication Systems | Automotive Applications | Power Supplies | Testing Equipments | Audio Speakers | Solar Inverters and Chargers | Energy Saving Equipments



#### **Specifications:**

Primary input voltage: 120 / 240 VAC, 50 / 60 Hz Secondary Voltage: 6, 9, 12, 15, 18, 22, 25, 30

VAC or as per customer requirement Ambient Temperature: 40 Deg C Overall Insulation: Class F

RoHS compliant

Dielectric withstanding Voltage - 3500 RMS

(Minimum) @ 50 / 60 Hz

Insulation Resistance: 100 M Ω @500V DC

UL approved materials

#### **Manufacturing Capability:**

MIL-PRF-27F J-STD-001

UI506, UI1411, UI1446

En61558

Testing Standard and equipment ensure to

100% Quality Test

Assemblies are visually inspected to ensure

workmanship

# El Transformer

Regarded as one of the most influential electrical innovations of all time, E & I transformers have successfully almost reduced the safety concerns associated with alternating current to zero. Vritti Associate's E & I Transformers have the ability to do what is precisely required by them - lower the voltage exactly to a value that is required by the appliance and keep them running right and safe.

Vritti Associates E & I Transformers are extremely durable, come with superior wiring, varnishing, and connection terminators. Our E & I Transformers are indeed highly efficient and provide excellent regulation with minimal temperature rise.

## **Key Application Areas:**

Home Appliance | Medical Equipments | IT Equipments | Telecommunication Systems | Automotive Applications | Power Supplies | Testing Equipments | Audio Speakers | Solar Inverters and Charges



#### **Specifications:**

Primary input voltage: 120 / 240 VAC, 50 / 60 Hz Secondary Voltage: 6, 9, 12, 15, 18, 22, 25, 30

VAC or as per customer requirement Ambient Temperature: 40 Deg C Overall Insulation: Class F

RoHS compliant

Dielectric withstanding Voltage - 3500 RMS

(Minimum) @ 60 Hz

Insulation Resistance: 100 M Ω @500V DC

UL approved materials

#### **Manufacturing Capability**

MIL-PRF-27F J-STD-001

UI506, UI1411, UI1446

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# Wire Harness

Vritti Associate's Wire Harness / cable harnesses provide several advantages over loose wires and cables. Masses of wires in a home / commercial appliance or in an automobile or even in an aircraft would stretch over a considerable distance if extended and can be quite difficult to repair, maintain or even to replace. Vritti Associates Cable harness provide a compact, intelligent yet simple way to bind numerous associated wires and Cables into a cable harness. Our wire harness not only provide a more oranganized way of managing the tangles of wires, but also make them better secured against the adverse effect of vibrations, abrasions, and moisture. The intended design of constricting wires into a non-flexing bundle, optimize space and decreases the risk of a short. Vritti Associates Wire Harness also decreases installation time exponentially and provide scope for standardization of whole process, leading to lesser or eliminated errors.

## **Key Application Areas:**

Patient Monitoring System | Medical Diagnostic Equipment Cables | Modular Medical Cables | Connector Assemblies | Medical Cable Assemblies | Sensor Cables | Test Cables | EMI Shield Cables | Automotive Cable Harness | Aerospace application Cables



## **Specifications**

94V-1 RoHS

RoHS compliant

Dielectric withstanding Voltage - 500 RMS

(Minimum) @ 50 / 60 Hz

Insulation Resistance: 100 M Ω @500V DC

UL approved materials

#### **Manufacturing Capability**

ISO 13485

IPC / WHMA-A-620B

J-STD-001

UL 486

Testing Standard and equipment ensure to

100% Quality Test

Automatic measuring, wire cutting, stripping and terminating, as well as state-of-the art testing equipment

# **Audio Transformer**

We believe that there must be no disturbance in your auditory pleasure. No matter what.

Vritti Associates Audio Line Matching Transformers have been carefully designed to exactly do that. The core purpose of our transformer is to match the Impedance of the loudspeaker or a number of loudspeakers to the optimum load of the tube or transistor. In other words, Vritti Associates transformer transforms the Impedance of the speaker, so that the impedance which it presents to the primary winding is equal to the load of the Output stage active element.

#### **Key Application Areas:**

Audio Amplifiers | Speaker LMT | Microphone System | Stereo Systems | Security / Protection Equipments



## **Specifications**

Dual Outputs: 4 & 8 Ω

Maximum Ambient Temperature: 40 Deg C. Frequency Response: 40Hz to 20,000Hz (-2dB). Connections: 150 +/- 10mm multi stranded

PVC wire. Stripped and Tinned.

RoHS compliant

Dielectric withstanding Voltage - 3500 RMS

(Minimum) @ 50 / 60 Hz

Insulation Resistance: 100 M Ω @500V DC

UL approved materials

#### **Manufacturing Capability**

MIL-PRF-27F J-STD-001 UL1411

Testing Standard and equipment ensure to

100% Quality Test

Assemblies are visually inspected to ensure

workmanship

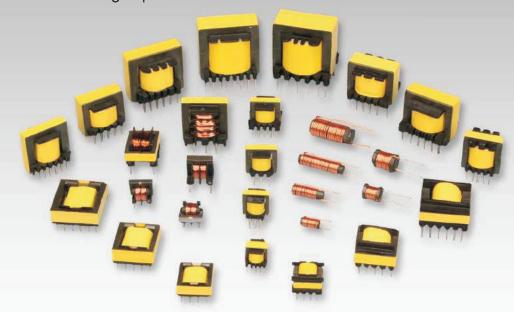
# SMPS Transformer

Switched Mode Power Supply Transformers (switching-mode power supply, SMPS, or switcher) are essential components in power conversion products. We essentially understand that the quality of the transformer, in terms of it's performance to specification and its longevity, is vital to the quility of the end product. Vritti Associates SMPS Transformers are critically designed to achieve this objective.

Vritti Associates SMPS Transformers have a very high power-to-size ratio, and each segment transformer topology has a unique Vin to Vout Transfer Function leading to absolute efficiency.

#### **Key Application Areas:**

Home Appliance | Medical Equipments | IT Equipments | Telecommunication Systems | Automotive Applications | Power Supplies | Testing Equipments | Audio Speakers | Solar Inverters and Charges | Windmills



#### **Specifications**

Low Cost magnetic components for custom specifications

Power range: 1 Watt to 120 Watts
Frequency Range: 20kHz to 0.5mHz
High power density and low radiated noise
Meets UL94V-0 flammability standard
RoHS compliant (-R option)

Ambient Temperature: 40 Deg C
Overall Insulation: Class F

Dielectric withstanding Voltage - 3500 RMS

(Minimum) @ 50 / 60 Hz

Insulation Resistance: 100 M  $\Omega$  @500V DC

UL approved materials

#### **Manufacturing Capability**

MIL-PRF-27F J-STD-001 UI506, UI1411, UI1446 En61558

Testing Standard and equipment ensure to 100% Quality Test

Assemblies are visually inspected to ensure workmanship

# **Box Integration**

We ensure that our product works great and looks great too.

A majority of our clients require a final assemble for their innovative products, which need to be a true reflection of the encased product itself. Vritti Associates proudly and efficiently caters to this requirement.

Vritti Associates offers various options to Clients who require Box Assemble. We Provide design and finishing services for Surface Mount, Through Hole Assembly to Cable Manufacturing, Panel Wiring and Complete Cabinet Assembly.

## **Key Application Areas:**

Elevator Lighting System | Isolation transformers | Medical Diagnostic Equipment | Audio - Video - Visual Systems | Security Systems | Energy Saving Systems



#### **Specifications**

Maximum Ambient Temperature: 40 Deg C RoHS compliant Dielectric withstanding Voltage - 3500 RMS (Minimum) @ 50 / 60 Hz Insulation Resistance: 100 M Ω @500V DC UL approved materials

#### **Manufacturing Capability**

UL 60601 J-STD-001

Testing Standard and equipment ensure to 100% Quality Test

CAD & Design, 3D Modeling, MGF, Prototyping, CNC & Tooling, Molding, Laser Cutting, and Fabrication with in house expertise and external alliance.

# Medical Grade Isolation Transformer

When you have lives to save, the best you can rely on is the best. We understand the need for you to be precise, and error free. We understand the complexity and criticality of your decisions. We understand your Industry. We understand you.

Vritti Associates specializes in offering critical Electro-Mechanical components for the Medical Devices Industry. One such offering is our international Standard Box Series Medical Grade Isolation Transformers. Our Transformers offer least noise and minimal Electro-Magnetic Radiation, assuring the best performance form your equipment, ever.

## **Key Application Areas:**

Scanning Machine | Bio Medical Test Equipments | Patient Monitoring Equipments | XRay Machines | Power Supply of Electronic Equipments





**Electrical Specifications** 

Input Rating Output Rating

Regulation

Temperature Rise Leakage Current

Input Filter Leakage Current

Input Switch

IEC Inlet Fuse for Each Line Medical Filter on Input Side

Line Filter Standard

MIT-300 MIT-600 MIT-1000 MIT-1500 MIT-2000

220/230 V@50/60 Hz (Optional: 115/120 V@ 60 Hz) 220/230 V@50/60 Hz (Optional: 115/120 V@ 60 Hz)

< 6%

< 40° C

< 100 µA

Medical  $< 5 \mu A (250 V / 60 Hz)$ 

Yes

Yes

Yes

Line Filter Standard Medical Version, IEC 60939, UL 1283, CSA C22.2 no.8

The enclosures are made of sturdy Aluminum with white finish (Protection: Ip20). All Fasteners are made of Stainless Steel \* Note: On all the models, the secondary neutral conductor is NOT grounded.



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