NORWE®

EN | 2019/2020

norwe.com | norwe.eu | norwe.de

A family company with a future based on traditions …

As a family company, we still feel beholden to tradition, but also to the technological challenges of the future, which is something we cannot compromise on. We have an international position, a global way of thinking and a way of working which is environmentally-aware, sustainable and customer-focussed.

Industry 4.0 together with the digital revolution are the central issues facing all sectors of industry without exception in the 21st century. But it is especially relevant to our branch, which is the production of highly qualified passive components and elements for electrical engineering and electronics.

At a very early stage, we braced ourselves for the challenges of increasing digitalisation across all areas of the company and are now well-equipped to meet them, partly through our comprehensive standard range of around 25,000 coilformers and components, partly through our knowledge and experience of the new technologies and what individual designs and parts developments they require.

We support all phases of the technical product developments of our customers with integrated solutions all the way through to series production. Of course, the framework conditions to create a relationship based on trust are also spot on with us, with the necessary quality certifications in accordance with ISO 9001:2015 and UL 746D and an environmental management system in line with ISO 14001:2015.

A reliable team of qualified, long-serving employees who form the heart of the company guarantee consistently high NORWE quality and compliance with all environmental requirements. This is our recipe for success in guaranteeing the utmost customer satisfaction. At the same time, we are represented at the world's leading specialist shows for the industry as NORWE GmbH or its subsidiary NORWE Inc.

René Weiner | NORWE GmbH, Deutschland

Peter Weiner | NORWE Inc., USA

… for more than 60 years.

1956
Sole proprietorship founded in Lüdenscheid by Ing. Norbert Weiner
Production of small electrical appliances

1961
Production of the first standard coilformers of thermoplastics with tools in modular system, still a NORWE highlight

1964
Company headquarters relocated to Bergneustadt

1971
Production of the first safety class coilformers

1976
Beginning of plastics moulding technician training

1978
Transformation of the sole proprietorship into a family GmbH (private limited company)
Managing directors Gritta and Norbert Weiner

1988
Production of NORWE components in Tunisia begins
New building activities at the headquarters

1993
Norbert Weiner goes into retirement
ISO 9002 certification

1994
Build-up and certification to DIN EN ISO 9001
Preparation of machine data logging

1996
Founding of subsidiary NORWE Inc., USA
Managing director Peter Weiner
Internet presence at norwe.de and norwe.com

1997
UL 746D certification

2001
Article drawings in 3D CAD system

2006
Anniversary year:
10 years NORWE USA and
50 years NORWE Germany

2007
Set-up of an environmental management system according to DIN EN ISO 14001
Gritta Weiner goes into retirement
Managing directors Marlene Weiner and René Weiner

2011
AEO certification for export awarded
50 years coilformers

2014
Development and production of the first LDS coilformers

2016
3D printing for prototypes and series production
New, responsive internet presence (also for mobile devices)

2017
Re-certification
DIN EN ISO 9001:2015 / DIN EN ISO 14001:2015
Marlene Weiner leaves the company
Expansion of production lines capacities

2019
Environmental measures/energy efficiency updated (aim is UN certificate)
New internet presence at norwe.cn

NORWE Quality – ISO 9001

Reliable quality in serial production since 1994

Over 25,000 standard components for a wide variety of applications – NORWE has made an outstanding name for itself in the industry.

National and international companies in various fields trust in the NORWE standard; i.e. certified quality compliant with DIN EN ISO 9001:2015 – high and reliable product quality for maximum production and functional safety for the customer.

But quality at NORWE also means rising to technical and logistical challenges and responding to individual customer needs in a wide variety of fields.

NORWE Traceability – UL 746D

UL 746D certification since 1997

UL 746D is an international standard from Underwriter Laboratories UL. This standard defines the requirements for identification and traceability for production of items made of plastic materials with a view to providing fast, reliable evidence about the identification of the plastic material used.

Compliance with the UL 746D guidelines is monitored by means of regular unannounced inspections by UL employees – normally 4 times a year.

In accordance with UL, all plastic items used must be made by a manufacturer certified in accordance with UL 746D in order to reflect the process chain for materials and processing. NORWE has had uninterrupted UL 746D accreditation since 1997.

NORWE Environment – ISO 14001

Environmental protection in coilformer production since 2007

In the knowledge that all activities with and around the products have a direct or indirect influence on the environment, environmental protection is treated sensitively and lived actively and is continually improved. The introduction of an Environmental Management System and the certification compliant with DIN EN ISO 14001:2015 underline the high importance of environmental protection for NORWE.

… at trade fairs worldwide.

CPS Expo

CN Shanghai

PCIM Europe

DE Nürnberg

APEC

US Anaheim

Electronica

DE München

IEEC PEAC

CN Shenzhen

PCIM Asia

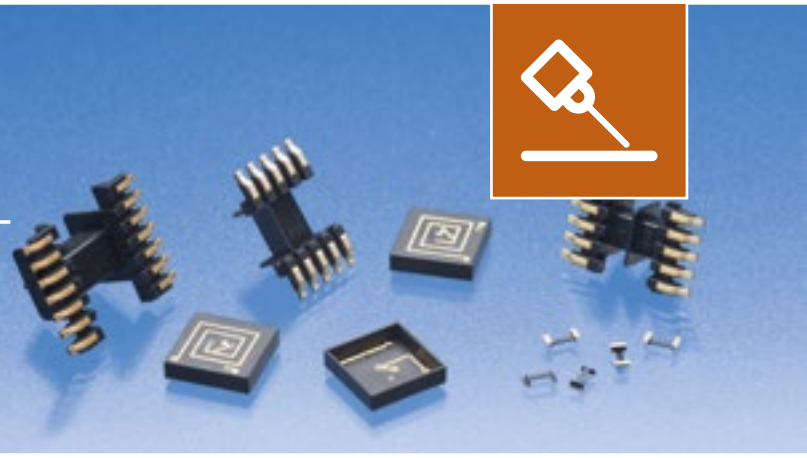
CN Shanghai

We design and implement your innovations.

LDS – Laser-Direct-Structuring

Downsized components – optimal coplanarity – without expenses for a pinning technique

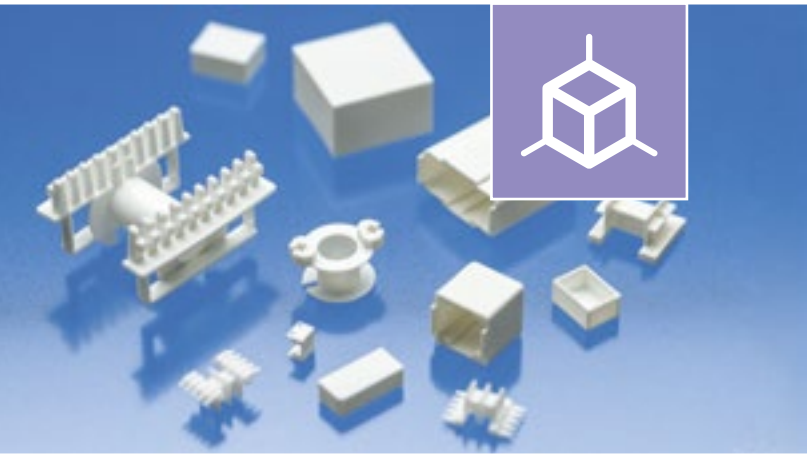
NORWE uses this method amongst others for SMD-components of the SMD3-series and already for solutions to customers' specifications.



3D-Printing

For optimum product development and for small series

Selective laser sintering (SLS) is the production process currently used by NORWE, as this technology is ideal for prototypes and small series (rapid manufacturing).



Biobased Polymers

The challenges lie in temperature resistance and flame protection

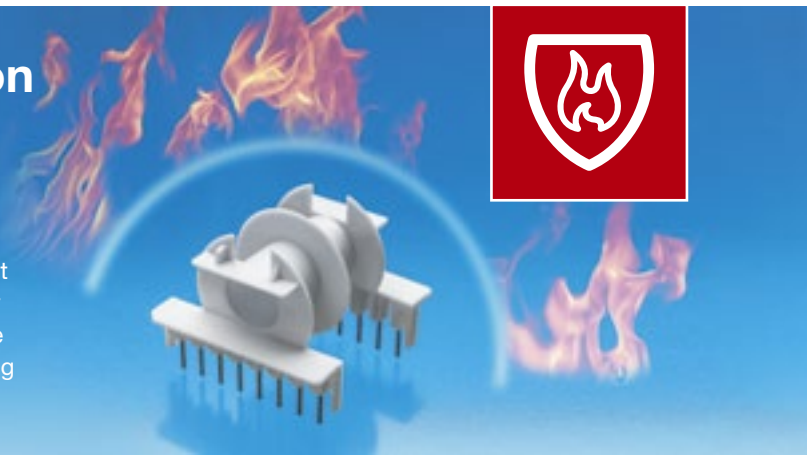
NORWE is following the development of biobased polymers very carefully.

Biobased polymers are already an interesting prospect for areas of application with a lower temperature load, or from an ecological point of view.

Halogen-free flame protection

NORWE can already offer alternative plastics with inherent or halogen-free flame protection in many fields.

The maximum possible protection of people and environment has always been of great importance. This is documented by a certified environ-mental management system, of which one of the aims is an increased use of halogen-free flame-proofing systems.



Your developments enjoy absolute protection with us.

Take advantage of the experience and know-how of our team of specialists. In close collaboration and consultation with you we design and manufacture your innovations functionally and economically. Based on our certified Environmental Management System our products are always of certified quality and optimized to meet your requirements, from small quantities to large-scale production. And irrespective of whether your developments are intended to protect and safeguard a competitive advantage, or are part of a patent application, they enjoy absolute protection with us.

These industries appreciate both – our solutions and our special know-how, starting together in the development phase.

e-mobility

Lighting technology

e-motor technology

Automotive suppliers

Telecommunications

Sensor technology

Medical technology

Aerospace

Industrial electronics

Alternative energy supply

Automation technology

Transformers manufacturing

Technologies and product developments ...

Plastic materials used

The overview on our website you can find additional information on the different plastic-qualities. The material quality orientates to the conventional use of the components. For technical reasons alternative materials cannot be used for all articles. Consult our qualified specialists regarding your individual material requests – we will be pleased to check whether your material requirements can be realized.

Further information on the different materials can also be obtained direct from the manufacturers (or just click on the UL-file-no. to call up the UL card).

NORWE Environment

REACH

The EU Regulation concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) entered into force on 1 June 2007. Its goal is to protect human health and the environment. Manufacturers, importers and downstream users may place on the market only those substances which ensure this.

The Regulation is based on the pre-cautionary principle – the registration of substances is to a large extent com-pulsory. Since the first publication of the list of candidates of Substances of Very High Concern (SVHC) NORWE has on every update regularly checked all standard materials used and since 2008 can confirm that they do not contain any Substances of Very High Concern.

NORWE Environment

RoHS 3

As of 1 July 2006, the first European RoHS Directive 2002/95/EC prohibited the use of six substances classified as hazardous in electrical and electronic equipment. Directive RoHS 2011/65/EU – also known as RoHS II or RoHS 2 – came into force on 1 July 2011.

With the new Directive 2015/863/EU, the European Commission included four additional substances into the Directive 2011/65/EU as of 4 June 2015.

Certification since 1997

UL 746D

UL 746D is an international standard from Underwriter Laboratories UL. This standard defines the requirements for identification and traceability for produc-tion of items made of plastic materials with a view to providing fast, reliable evidence about the identification of the plastic material used. Compliance with the UL 746D guidelines is monitored by means of regular unannounced inspec-tions by UL employees – normally 4 times a year. In accordance with UL, all plastic items used must be made by a manufacturer certified in accordance with UL 746D in order to reflect the pro-cess chain for materials and processing.

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Please visit our website for all previous REACH information.

In accordance with the list of candidates, NORWE does not use any Substances of Very High Concern.

The European Chemicals Agency (ECHA) publishes at regular intervals a list of candidates for registration as Substances of Very High Concern (SVHC). These substances are accused of having the following extremely negative properties, in particular:

- *carcinogenic, mutagenic and/or harmful to reproduction*
- *persistent, bioaccumulative, and toxic*

For firms which manufacture or use such substances, there are the following grave consequences if one of these substances is placed on the list of candidates:

- Suppliers of chemicals and products must inform their commercial customers if these contain a substance on the list of candidates.
- The substance concerned may only be manufactured or used after authorization, once it has been entered in REACH Annex XIV and the deadline ("sunset date") has expired.

You can find more information on the current list of candidates under echa.europa.eu.

Soon after publication of an updated list of candidates, we check, together with the suppliers and manufactures of our standard materials, whether these materials contain "SVHC".

Currently our standard products do not contain any Substances of Very High Concern included in the candidate list above the permissible concentration.

NORWE will continue to carry out such checks. If in future a standard material used by us contains a substance included in the SVHC list of candidates, we shall find alternatives and replace the substance concerned.

Our specialists will be glad to provide additional information.

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Directive RoHS 2011/65/EU – also known as RoHS II or RoHS 2 – came into force on 1 July 2011.

With the new Directive 2015/863/EU, the European Commission included four additional substances into the Directive 2011/65/EU as of 4 June 2015.

- Di(2-ethylhexyl) phthalate (DEHP)
- Butyl-benzyl phthalate (BBP)
- Dibutyl phthalate (DBP)
- Diisobutyl phthalate (DIBP)

After a transition period until 22 July 2019, the use of these products is restricted to a maximum concentration.

As part of the changeover to "lead-free for all soldering connections", NORWE has concerned itself with this issue since 1999. With the publication of the first European RoHS Directive 2002/95/EC, all standard contact elements used at NORWE, such as solder-pins and solder-tags, had already been changed over to pure tinning and, together with our suppliers and manufacturers, all standard products were checked for the substances listed in the Directive.

All NORWE standard products have been RoHS-compliant since 2003.

NORWE standard products do not contain any substances above the permissible concentration in accordance with directive 2011/65/EU and 2015/863/EU, also known as RoHS 3.

Together with our suppliers and manufacturers, we have checked compliance with the RoHS directives and can confirm to you that the standard products we produce and distribute meet the requirements of directive 2011/65/EU and directive 2015/863/EU.

We will be glad to provide further information and answer any questions you may have.

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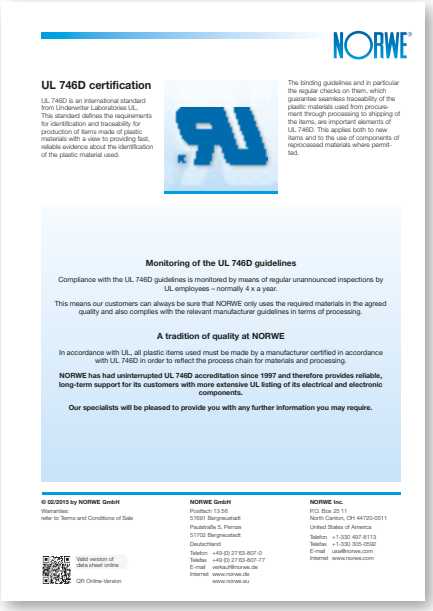

NORWE

UL 746D certification

UL 746D is an international standard from Underwriter Laboratories UL. This standard defines the requirements for identification and traceability for production of items made of plastic materials with a view to providing fast, reliable evidence about the identification of the plastic material used.

The binding guidelines and in particular the regular checks on them, which guarantee seamless traceability of the plastic materials used from procure-ment through processing to shipping of the items, are important elements of UL 746D. This applies both to new items and to the use of components of reprocessed materials where permit-ted.

Monitoring of the UL 746D guidelines

Compliance with the UL 746D guidelines is monitored by means of regular unannounced inspections by UL employees – normally 4 x a year.

This means our customers can always be sure that NORWE only uses the required materials in the agreed quality and also complies with the relevant manufacturer guidelines in terms of processing.

A tradition of quality at NORWE

In accordance with UL, all plastic items used must be made by a manufacturer certified in accordance with UL 746D in order to reflect the process chain for materials and processing.

NORWE has had uninterrupted UL 746D accreditation since 1997 and therefore provides reliable, long-term support for its customers with more extensive UL listing of its electrical and electronic components.

Our specialists will be pleased to provide you with any further information you may require.

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… always up to date and innovative.

Developments

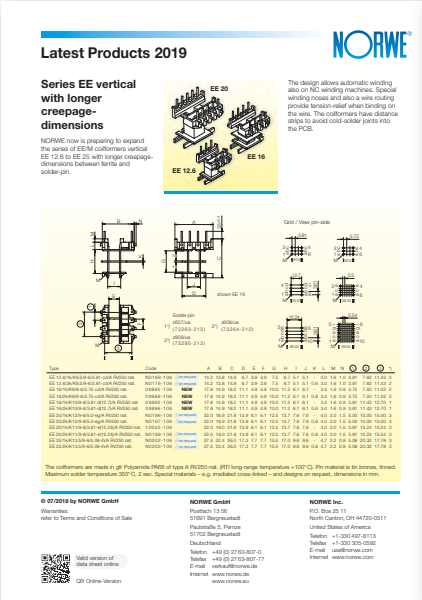
NORWE coilformers and components in the development and planning always keep up-to-date with the corresponding data sheets on our website.

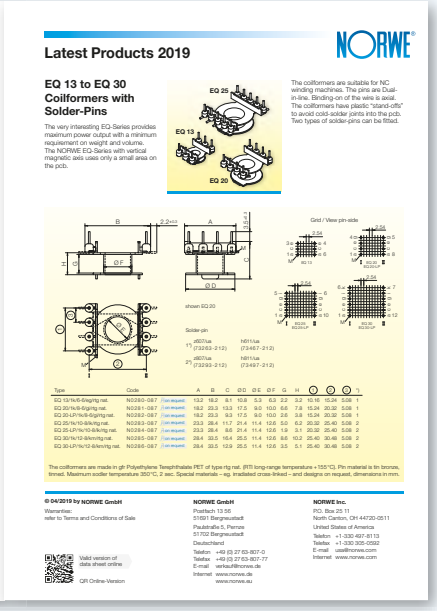
Company policy

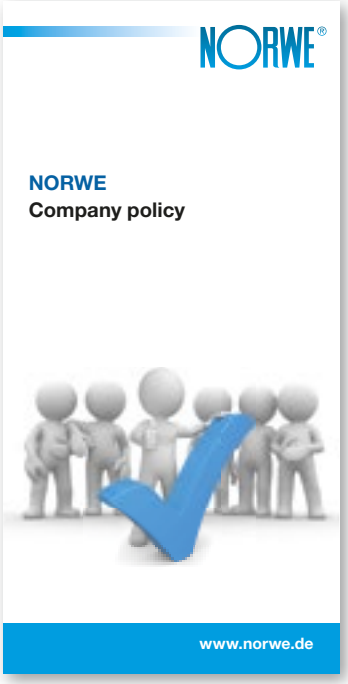
To be successful now and in the future be next to a clear one Professional and a clear strategic Orientation especially sustainability ahead, that is, the connection of ecology, economy and social Components.

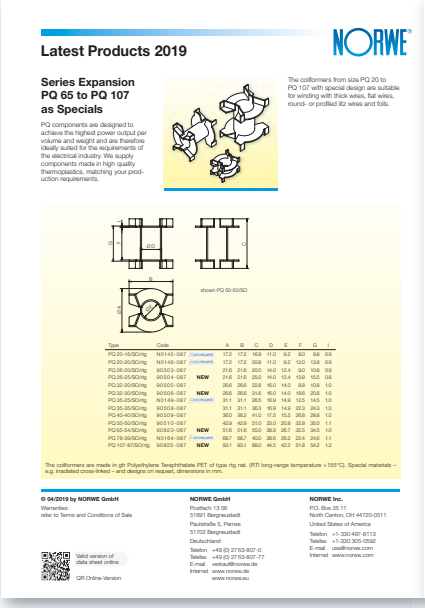
With the formulated corporate policy we want as company management clearly refer position and with it for a sustainable corporate development stand.

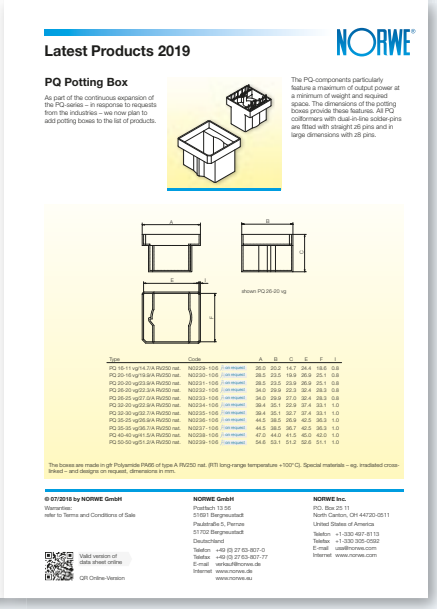
The folder can be requested in printed form at NORWE or downloaded as a PDF form at the NORWE website.

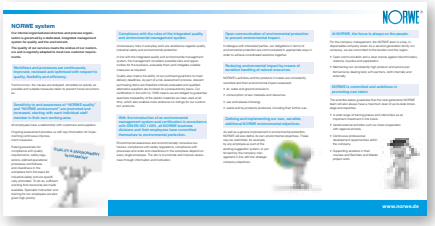






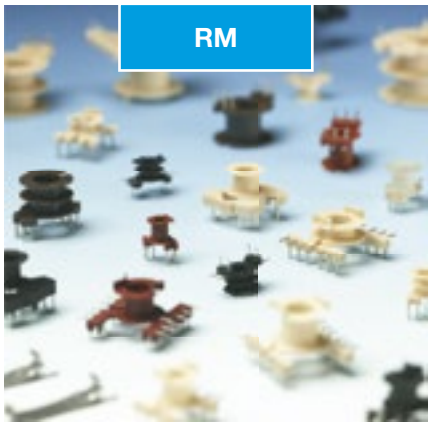






Standard product range

EE/M | ETD/EER | RM | PQ | EC | PC | SMD | EFD | EP | U | UNI | M-EI-UI | EI/UI | PLANAR | LDS/SMD3



NEW
NORWE Coilformers and Components – Our latest products

EE/M
EE 8 - EE 32
M 20 - M 74
E 20 - E 80

ETD/EER
ETD 19 - ETD 59
EER 28 - EER 54L

RM
RM 4 - RM 14

PQ
PQ 16 - PQ 107

EC
EC 35 - EC 120

PC
PC 4,6x3,1 - PC 70x42

SMD
EE 5 - EE 20
EFD 10 - EFD 30
ER 9,5 - ER 14,5
EP 5 - EP 13
EPX 7 - EPX 10
RM 4 - RM 6
PC 4,6x4,1 - PC 9x7
TR-SMD carriers
GP-SMD bases
SMD potting boxes

EFD
EFD 15 - EFD 30

EP
EP 7 - EP 20

U
U 10 - U 25

UNI
EE 25-8 - EE 25-11
EI 30-5 - EI 66-23

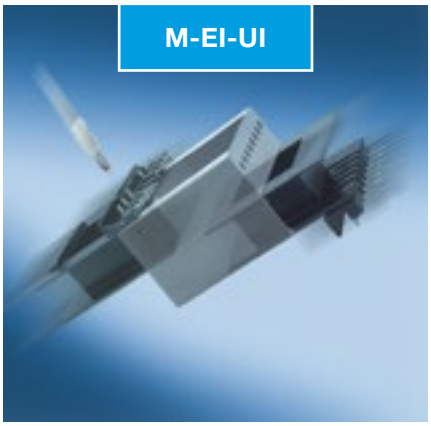
M-EI-UI
M 20 - M 102b
2UJ 48b

EI/UI
EI 19 - EI 78
2UI 30a - 2UI 60b

PLANAR
E 22 - E 64

LDS/SMD3
EE 5 - EE 16

NORWE®



BOXES
HB/VB Potting Box
RH/RV Ringkern Potting Box
H-RG/V-RG Potting Box for pcb mounting
RK-LP Pin-Plate
RK-H Toroidal Core Carriers
Standard Potting Box

STAMP PARTS
Solder-Pins
Solder-Tags

DEVELOPMENTS
NORWE coilformers and components in the development and planning

SPECIAL DESIGNS
We design and manufacture your innovations

LIST OF MATERIALS
Overview of the used plastic materials
UL-cards

PRODUCT SEARCH
Expanded search function
PDF-files as downloads
Additional product information
Order examples
Automatic offer function
Sample order

We are at your service – worldwide.

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Responsive website for mobile devices

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