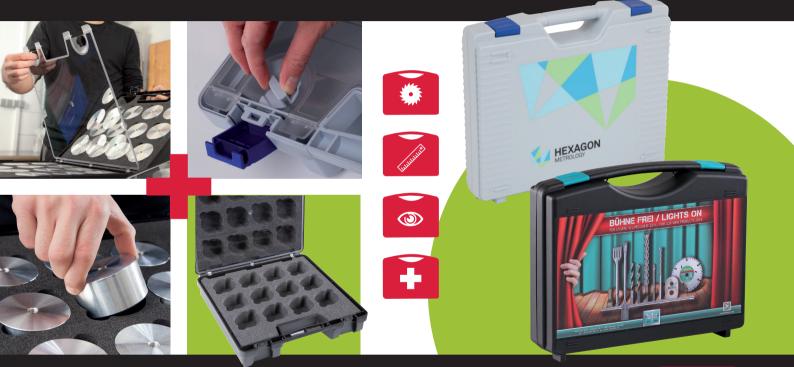
FUNKTION + DESIGN: IN-HOUSE EXPERTISE AND DESIGN OPTIONS FOR INDIVIDUAL CASE SOLUTIONS.

W.AG FUNKTION + DESIGN



Case solutions for your success.





Konrad Goldbach, CEO W.AG Funktion + Design GmbH



Individual designed case solutions for a sales-promoting presentation of your products and services!

»You never get a second chance to make a first impression« is a famous saying by the advertising speaker Harlan Hogan. A professional and convincing appearance of excellent products and services as well as strong brands embodies the most important element within the customer journey - the customer's road beginning with the interest in the product ending with the purchase. Therefore, specific benefit promises, attitudes and purchasing arguments should be communicated through the outside and the inside of the case.

Plastic cases of W.AG Funktion + Design GmbH already attract attention from a distance because of their unique language of forms and underline the individual image of your brand. Matched in colour and decoration to your corporate design, a distinctive and permanent packaging solution "made in Germany" comes to life.

Because of individual inlays that are tailored to your needs a convincing and professional presentation of your case content is guaranteed. Besides an optimum protection of your content during mobile use our inlays promise the highest level of usability.

Let yourself be convinced by W.AG Funktion + Design GmbH to be your reliable B2B partner with unique case models and an incomparable spectrum of in-house expertise.

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W.AG FUNKTION + DESIGN

W.AC[®]

About us



W.AG Funktion + Design GmbH was founded in 1992 and currently employs 125 people at the headquarters in Geisa. As an experienced case manufacturer, W.AG develops, manufactures and distributes innovative plastic cases and boxes "made in Germany" and offers more than 100 injection-moulded case sizes within 10 case models.

Products of W.AG stand for a striking language of form with elegant style elements and a distinctive appearance. W.AG offers an unique all-round package of in-house expertise that lead to an individual and prompt realisation of customers' wishes. The project-orientated sampling and the client specific consulting let W.AG become the perfect B2B partner.





Industry solutions





The W.AG product family at a glance:





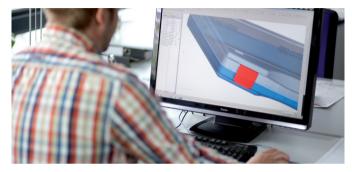
Beginning with the customer ... via the innovation lead ... to the added value for the customer!

Product development	Development/ Toolmaking	Injection moulding
 » Development of innovative products and case series with a modern design 	» Construction and maintenance of own injection moulds	 Flexible injection moulding manufacturing with a focus on a high variety of colours
Finishing	Marketing/Sales	Service
 » Inlays: Complete manufac- turing of foam inlays through water jet cutting, milling and punching » Decoration: Screen printing, pad printing, in-mould labelling 	» Area wide sales structure in Germany and Europe by Key Account Manager and internal sales team	 » Individual customer service » Customer specific sampling » Logistics services » Settlement pre-print stage screen printing, pad printing and IML

7

Development and toolmaking





For over 20 years W.AG Funktion + Design GmbH is a specialist for innovative plastic cases. Sales and development departments work toghether for creating new products that embody the current market demands and set new trends. In cooperation with an experienced designer W.AG designs real trendsetter for B2B industries.



W.AG benefits from the long-time experience of our toolmaking employees who ensure a quick maintenance and persistent injection mould optimisation. The results are a smooth manufacturing process withouth disturbances in manufacturing and with a lowering effect in production costs.

- Development of new products in cooperation with external designer
- Continuous optimisation of own case series in consultation with production and sales departments
- Testing of the products through simulations for meeting the highest functionality and quality

- ✓ Construction of own injection moulds
- Internal maintenance and optimisation of injection moulds
- Close consultation with development and production departments for the realisation of a smooth manufacturing process

Injection moulding and finishing





EXPERIENCE IN FIGURES:

- Over 20 years experience in injection moulding and designing individual packaging solutions
- 24-hour-manufacturing in 3-shift operation
- Manufacturing of over 15 million plastic cases and plastic boxes in the last 6 years



- W.AG already pays attention to a high quality when purchasing materials
- Environmental friendly polypropylene (PP) for a sustainable packaging solutions
- Optimal process logistics due to the coordination of the manufacturing of plastic cases and inlays
- High variety of colours regarding colour selection and design options

Inlay development and foam processing





The in-house expertise inlay development, water jet cutting, milling and punching guarantee an all-round package for individual foam inlays. Our experienced team creates your inlay tailored to the measures and the weight of your products with an ideal and space-saving placement of your content. Concerning deep-drawn inserts our team is available at any time and realises professional solutions promptly.

- ✓ Customer specific consulting
- ✓ Quick sampling
- ✓ Realisation of a professional presentation
- ✓ Reliable product protection

Services



Individual customer consulting through key account manager and internal sales team





Settlement of pre-print stage screen printing, pad printing, in-mould labelling

Sampling according to customer specific requirements and wishes





Logistics services such as transportation process

Selection criteria and design options

CASE MATERIAL

Coloured case shells are manufactured with copolymer polypropylene (PP). Transparent case shells are made of homopolymer polypropylene. At temperatures below the freecing point coloured case have a higher impact resistance.

WHY WE USE POLYPROPYLENE?

- good composition
- light weight
- non corrosive
- energy efficient
- low danger of injuries or damages
- low noise and convenient surface

CASE COLOURS

- 20 standard and selection colours
- special colours availabe (CD)
- case shells and closures are separate parts – thus, many colour compositions are <u>possible</u>
- realisation in your corporate design



STEPPED SURFACE

 stacking feet enable an ease stacking of the cases and protect the surface of the case shell

 lower step surface for protection of sticker, IML-foil and printings

HIGHLY BRILLIANT SURFACE

 noble look and sticker friendly surface

• improved visibility for transparent cases

STRUCTURED SURFACE

• tough, durable and robust

 maintains good visual appearance for everyday use



SCREEN PRINTING

helps to create a strong brand image through large printing
multicoloured printings
available for all W.AG cases



IN-MOULD LABELLING (IML)

- PP-foil in photographic quality
 ideal medium for your information
 available for a large range
- of case models



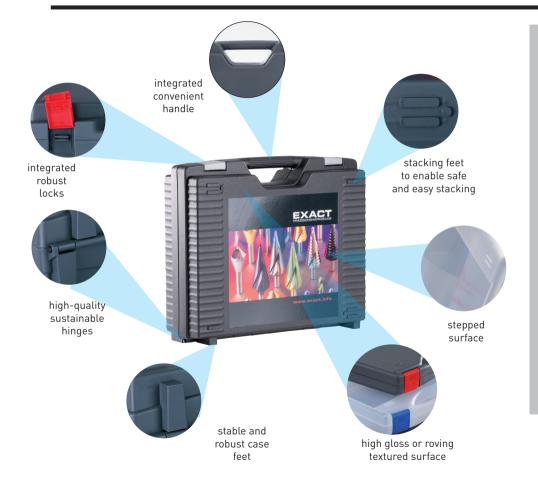
ENVIRONMENT

- all materials are suitable for use in the food industry
- polypropylen is environmentally
- material efficent manufacturi



Convincing features ...





- Choose your ideal plastic case from 10 case models and over 100 injection moulded case sizes.
- Design your individual plastic case or plastic box.
- Different colours and surfaces can be combined because the plastic cases consist of seperate case shells and locks.
- Plastic cases of W.AG are very sustainable and acompany the case content for a lifetime or provide a secondary use.

The short route to your individual case solution





>> Your products/content



Your corporate design (logo, font, imagery, color concept)



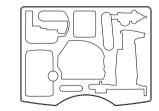
Selection of the ideal case according to

- dimensions and weight of your products/content
- functional and technical demands
- coherence to your corporate design
- requirements regarding product protection



Selection of the matching foam type and foam quality based on

- dimensions, shape and weight of your product
- functional and technical demands
- requirements regarding product presentation and protection
- alternative: conceptualisation of your individual deep drawn insert







Coloration and individual exterior design in your corporate design through

- individual case colour
- individual lock colour
- ► stickers or decoration process in-mould labelling, screen printing or pad printing





- >> joint concept development
- > drafting
- > sample construction



Your individual case solution 3 for

- >> your best possible sales success
- » a permanent brand communication



Colour diversity forms the character of the case





Design your own plastic case in colouration and exterior design. You have all possibilities concerning case colour and lock colour.

Besides colouration and printing of the case your corporate identity can be communicated through stickers.

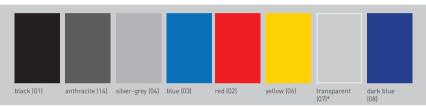






STANDARD COLOURS

are available from stock or can be supplied within our standard delivery time without additional cost.



- * for selected case range
- Alignment of the colouration to your corporate design
- Fine adjustment of the case and lock colour to your exterior design (printing/colour)
- Special colours available on request
- Realisation of colour coding system (combination of a basic case colour with different lock colours possible)

SELECTION COLOURS

are colour batches that are available in our stock. The manufacturing takes place based on minimum quantities and a small surcharge for the machine setting.











Offset printed PP-foil Customer-based loading of the label magazine Handling picking up the single foil

Insertion of the foil into the open injection mould Decorated case shells at the end of the production cycle Complete assembly of the case on the machine

The offset printed PP-foil in photographic quality is inserted in the injection mould by the machine handling. Foil and case shell merge during the injection moulding process.

- Environmentally friendly because of the recycable material
- ► High protection against UV and abrasion
- Moisture- and temperature-resistant
- Surprisingly affordable at highest quality
- IML is available for the case series
 TEKNO, JAZZ, BEAT, MAMBO and SWING



Screen printing



Plastic cases as promotionally effective information carriers





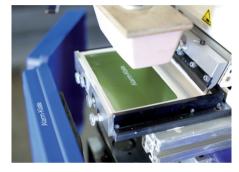


- High quality and permanent decoration process
- Available for all W.AG cases
- Doable in high gloss or roving textured surfaces
- Single-colour and multi-colour printings are possible
- Barcodes, QR codes or product information can be printed on the case surface

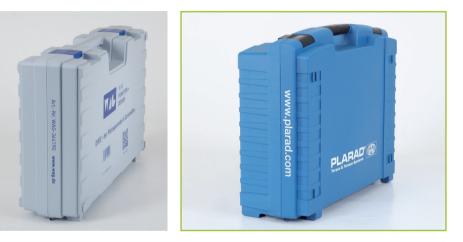
Pad printing



Attractive designing of the locks and the case's side







- ► Individual pad printing can be applied to all W.AG cases
- Individual locks and individual design of the case's sides
- Your logo, slogan or product designation can be printed with high colour force
- ► Alignment of the case to your corporate design down to the last detail



Inlay types, foam types and foam quality entirely to your requirements:

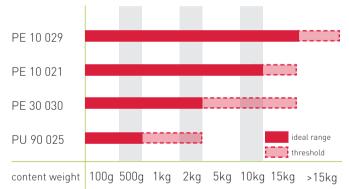
The foam inlays produced by W.AG are designed in its shape, foam quality and processing technology according to your preferences and products to be packed. Therefore your functional and presentation requirements are considered when selec-



Profile foams
 (PU 90 025, PU 90 016)

secure the surface of the content and ensure a perfect hold.

ting the inlay type and the foam colour. For realising a good usability and a reliable product protection the ideal foam quality according to weight and characteristics of the content will be selected.



• Bespoke foams / water jet cut foams / milled inlay (PU 90 025, PE 30 030, PE 10 021, PE 10 029)

individually made inlays which can be tailored to the individual size and use of the product.







• deep-drawn inserts

customised to your products, easy to clean and printable on your request.

•••• = high •• = middle

= low







	PU-soft foam	PE-hard foam	deep-drawn inserts
compressive strength	•	••••	•
resistance to high temperatures	••••	•••	•
resistance to low temperatures	•••	•••	•••
solvent resistance	•	•	•••
light resistance	•	•••	•
acid resistance	•	•	•
flammability	•••*	•••*	•
water repellency	•	••••	••••
sound absorption	••••	•	•••
harmlessness to health	••••	•••••	•••••
shock resistance	•••	••••	•

* In consideration of the applied testing methods, foams equipped with special additives can achieve flame retardent properties.

Water jet cutting





- Optimum material use through nesting function (maximum utilisation of foam material at high qualities)
- Quick adjustment and modification directly at the machine possible
- Highest quality during water jet processing guaranteed due to experienced personnel









- Recesses with different depths without the use of filling parts possible
- Milling of laminated hard foam with different coloured layers
- ► High stability for heavy inlay contents
- For a professional presentation logos and product information can be realised directly on the inlay



Consulting





A close customer relationship represents the core of our work.

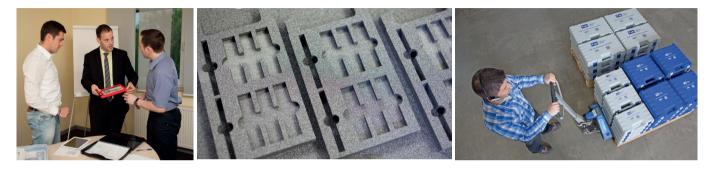
Therefore, we give our customers on-site advice for providing them a professional and personal presentation of our products and services.

We discuss with you your individual requirements and wishes so you will finally get what you need.

Because your sales and brand succes is our brand essence!

- ✓ Personal presentation and consultation directly on-site
- Discussion of your individual project requirements and wishes
- Initiation of sampling according to your requirements
- ✓ Finalising discussion
- ✓ Extensive field-service in Germany and Europe
- Your Key Account Manager as well as the internal sales team will answer your questions at any time





Our service covers the most important areas of the value chaim for simplifying your project realisation: An **extensive sales structure** ensures a prompt costumer consulting so we can coordinate the next project steps. W.AG is characterised by the excellent service in **sampling**. Thus, you can experience your individual packaging solution early in the development phase. For realising an optimum in your external design we cover the **complete settlement of the pre-print stage** for screen printing, pad printing and in-mould labelling. **Logistics services** like a prompt transportation processing are complementary services of W.AG for a smooth dispatch process. You receive your ware to the right place at the right time.

- ► Individual extensive customer consulting through Key Account Manager and internal sales team
- Sampling according to customer specific requirements and needs
- Settlement of the pre-print stage for screen printing, pad printing and in-mould labelling
- Logistics services

NEW: IN-MOULD LABELLING (IML) FOR SWING

AND JAZZ!

LET BRILLIAN THEMS



We offer case solutions for different industries and markets:







In-Mould-Labeling available for:

TEKNO, BEAT and MAMBO

W.AG Funktion + Design GmbH Wiesenweg 10 36419 Geisa Germany

> Phone + 49 (0) 36967.6740 Fax + 49 (0) 36967.674240

> > E-mail: info@wag.de www.wag.de

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