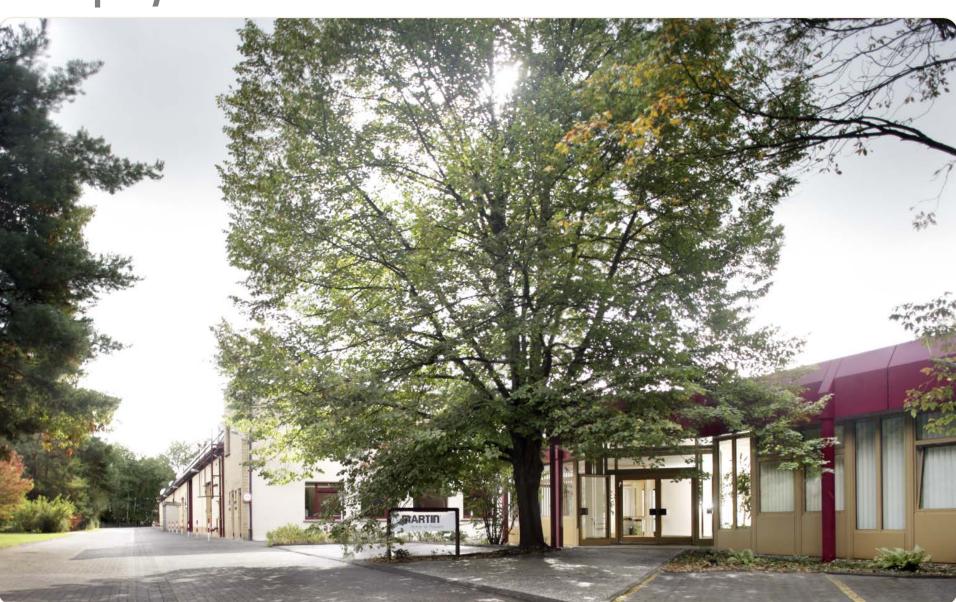
### **Georg Martin GmbH**

We are your partner for precision

## **Company & Services**



### **Key Information**











No customer > 10 % of turnover 20 customers = 50% of turnover 800 active customers in 2016

#### **Certifikates:**

DQS

- EN 9100
- ISO 9001: 2008 • ISO 14001: 2004

#### **Customer Approvals:**

- AIRBUS GROUP (PFC)
   IPCA+ result 95%
- UTC
- Rolls Royce
- SAFRAN Group
- Airbus Helicopters
- Bombardier Aerospace

#### **Product specifications:**

ABS1507, ASNA0115, LN29557, AMS-DTL-22499, MIL-DTL-22499

#### **Services and Abilities**





- Design consultancy
- Built To Print
- Collaborative product development: light weight design with hybrid parts
- Proactive product development (shims)
- Own tool-making (CAD + CAM)
- Lot sizes 1 to 500,000 p.a.
- Customized kitting, EDI, VMI, ...
- Surface and Heat treatment with partners
- Lean manufacturing consulting:
  - "How to save time and money with shims"

### **Sub-Assemblies**











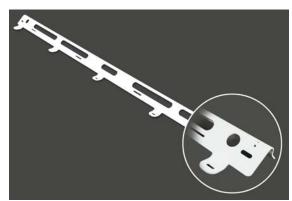
Paper gripper	Suction roll ring	Center wheel with cap	Fixation plates
Printing industry	Printing industry	Automotive	Aircraft Interior
Achievement	Achievement	Achievement	Achievement
Collaborative redesign: to reduce weight and cost.  Critical: conceived to always stay in position during operation	Collaborative redesign: parts were milled out of the block before: Weight & cost reduction.  Critical: tightness for suction function	Design simplification for low volume p.a  From deep-drawn 1 piece to 2 parts, assembled by brazing.	Aluminium bending with riveted nut plates.  Maximum length 1022 mm.  In-house forming and assembly.

# **Components**









Protective ring	Protective cap	Fixation plate
Helicopters	Ship building & automotive	Aircraft interiors
Significant aspect	Significant aspect	Significant aspect
12 pcs/p.a.	100 to 300.000 pcs/p.a.	120 pieces p.a.
Combination of deep- drawing & laser cutting & bending Diameter = 260 mm	Manual single production / hydraulic press  Diameter = up to 230 mm	Bent and formed aluminum alloy.  Length 1000 mm.

### **Punching and bending process**





#### Aircraft Construction

Cabin area and chassis\*

#### Significant aspect

Cutting, bending, deep-drawing, several assembly methods

Length max. 1020 mm

Bending max. 36 tons; Deep drawing 160 tons hydraulic; Punching 120 tons mechanical

(\*similar to the above drawing)

### Shims









Peelable, Laminated	Solid	Edge welded	Solid Tapered
All industries	All industries	All industries	All industries
Advantages	Advantages	Advantages	Advantages
<ul> <li>One flexible part</li> <li>Metal &amp; plastic</li> <li>Sealing function</li> <li>0.01 – 0.1 mm</li> <li>precision</li> <li>Size range 4 -</li> <li>1200 mm</li> </ul>	<ul> <li>Resistant</li> <li>0.005 - 10.0 mm</li> <li>Size range 3 - 2000 mm</li> <li>Grinded</li> <li>Assortments &amp; kitting</li> <li>Metal &amp; Composite</li> </ul>	<ul> <li>Like a mini - assembly kit (thick &amp; thin)</li> <li>Very easy to peel</li> <li>Re-use of released foils</li> <li>High temperature</li> <li>Min. 0,005 mm</li> </ul>	- Ideal solution for conical gaps



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