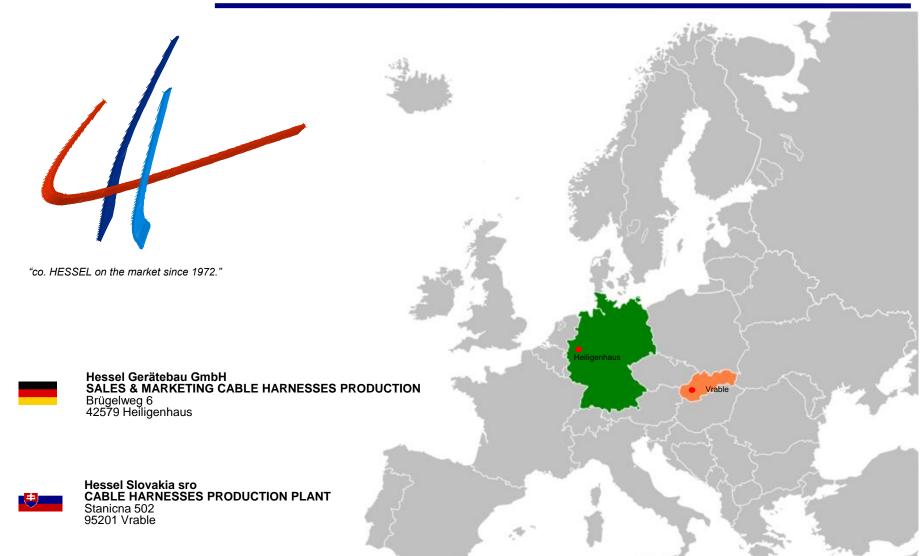


Locations Hessel



HESSEL



In-these

History:

"From wiring harness through switches production, plastic- and metal processing – company Hessel follows the requirements and specifications of the customers."

1972	foundation Hessel Gerätebau GmbH in Heiligenhaus, Germany by Reinhard Hessel production and sales of electronical units for agriculture
	start of first cable harness production in cooperation as IGS for Leoni
1987/ 88	extension of wiring harness business with Siemens and Temic (AEG-Telefunken)
1990/91	own cable harness factory established in Vrable, SLOVKIA
1993	Hessel only IGS for Daimler motor cable harnesses for Temic – than Delphi
1995	own cable harness factory established in Volovec, Ukraine
2001	Foundation of independent fourily owned Carbon fiber company, C2:
2005	Foundation of independent family owned Carbon fiber company C2i
2007	Vrable plant set-up as lead plant for process engineering and QS
2009	dislocation of complete IGS Delphi production to Delphi plants
2011	Starting to act as a full service supplier with commercial center for sales, marketing & purchasing in
2012	Heiligenhaus establishing an independend in-house testing technology production
2013	Gainning OEM customers such a Zetor, Jungheinrich, Magna Steyr, Porsche
2018	System solutions for cable harnesses, product development, clean room production
2024	

HESSEL

HESSEL SLOVAKIA PLANT



Established:01.01.1993Production place:SK - Vráble - industrial parkCEO:Mr. Reinhard Hessel

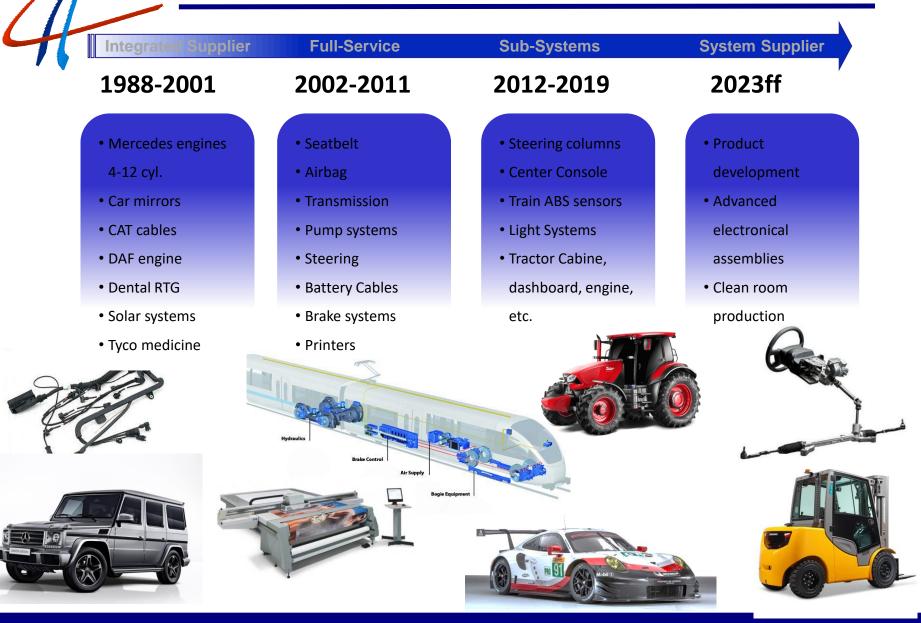


- very good high way connection, Bratislava/Vienna airport within 2hrs
- plant area of 20ts sq. metres
- wide Automotive management systems experiences
- in house engineering, tooling, testing technologies
- JIT, JIS, VMI, CONSI logistic systems
- automotive, Office technique, Motor sport, Agriculture
- Turn over growth from 4.7mio in 2011 to 12.7mio in 2024

"Our production facilities are full property of Hessel group."



Scope of production

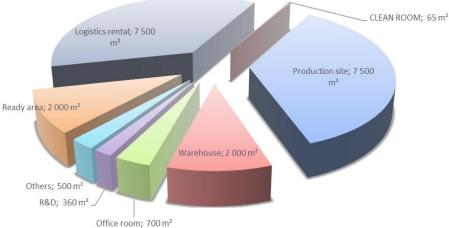


HESSEL

2024







"Our production facilities are full property of Hessel group."



Production site	7 500 m²
Warehouse	2 000 m²
Office room	700 m²
R&D	360 m²
Others	500 m²
Readyarea	2 000 m²
Logistics rental	7 500 m²
CLEAN ROOM	65 m²



About us – production scope

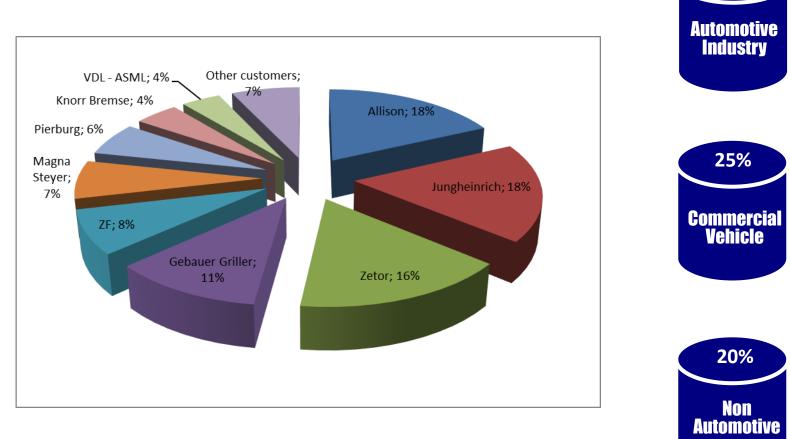
"With our production locations in eastern europe we provide our customers competitive products in high quality."





HESSEL 2024 - turn over split

55%





"From wiring harness through switches production, plastic- and metal processing – company Hessel follows the requirements and specifications of the customers."



Since 2023 acting as a CLEN ROOM producer acc.to ISO 6 standard









NEW OPPORTUNITIES 2025:



HESSEL

Ontime

budget

PPM 2023:

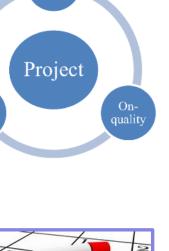
Number of claimed parts: 13 pcs Number of shipped parts: 2 448 352 pcs

Total PPM : 5,31

Delivery performance 2023:

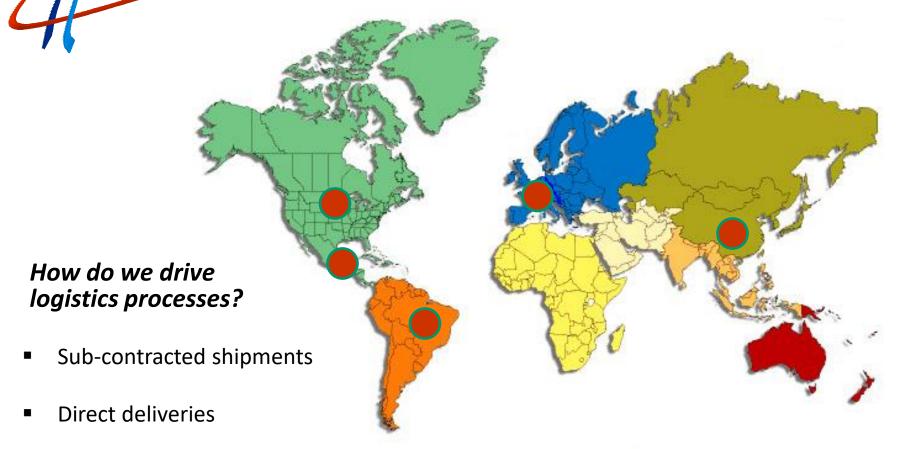
Total performance: 95,1%

"Quality of our products and customer satisfaction is our permanent priority"





Logistics



- Just-In-Time deliveries
- Vendor-Managed-Inventories



Quality



TUVNORD



Management system as per IATF 16949:2016 (1st edition, 2016-10-01)

Evidence of conformity with the above standard has been furnished and is certified for

Hessel Slovakia s.r.o Staničná 502 952 01 Vráble Slovakia

USI: TW2YXA

Scope

Manufacturing of cable harnesses

without product design responsibility (according to section 8.3) with the remote functions according to appendix

IATF Registration No. 0515060 Certificate Registration No. 44 111 097261



This certification was conducted in accordance with the IATF "Rules for achieving and maintaining

IATF recognition

Issue date: 2024-05-06

Expiry date: 2027-05-05





UV NORD CERT Gmbb

IATF 16949

"Quality of our products and customer satisfaction is our permanent priority"

TÜVNORD



Management system as per EN ISO 9001:2015

The Certification Body TÜV NORD CERT GmbH hereby confirms as a result of the audit, assessment and certification decision according to ISO/IEC 17021-1:2015, that the organization

Hessel Slovakia s.r.o. Podháj 133 841 03 Bratislava Slovak Republic

at location: Staničná 502, SK - 952 01 Vráble

perates a management system in accordance with the requirements of EN ISO 9001:2015 and will be assessed for conformity within the 3 year term of validity of the certificate.

Scope

TŪV#

Manufacturing of cable harnesses.









TUVNORD

ISO 9001

HESSE

Management system as per EN ISO 14001:2015

TÜVNORD

Certification body No. 3258 of the company TÜV NORD Czech, s.r.o., certifying management systems, accredited by ČIA according to ČSN EN ISO/IEC 17021-1:2016, hereby confirms that the organization

Hessel Slovakia s.r.o. Podháj 133 SK- 841 03 Bratislava



production site: Staničná 502, SK - 952 01 Vráble

CERTIFICATE

operates a management system in accordance with the requirements of EN ISO 14001:2015 and will be assessed for conformity within the 3 year term of validity of the certificate. Scone

Production of cable harnesses.



- ISO 9001:2015
- ISO 14001:2015
- IATE 16 949:2016
- UL Wiring harnesses

HESSEL

(DAkkS

Our products

CABLE HARNESS PRODUCTION

- safety
- airbag
- ABS sensors
- system
- battery
- complex harnesses



- steering column switches
- micro switches
- switches for door lock systems



HESSEL

Our products



"We can process materials (PE, PP and PA) from 10g to 1kg."

- tooled moulded parts
- injection moulded inserts

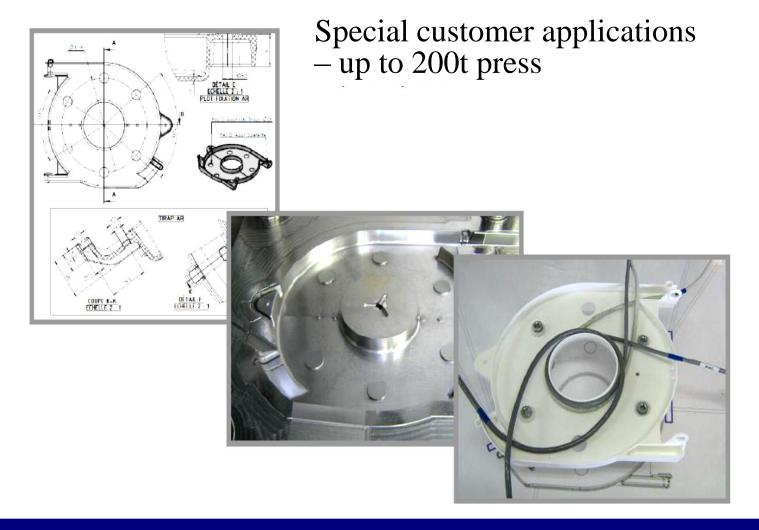






OVERMOLDING

"We can process materials (PE, PP and PA) from 10g to 1kg."





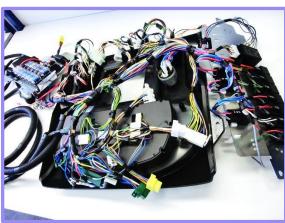
Our products

ADVANCED ASSEMBLY UNITS

"from wring harnesses up to complex solutions"

- Hessel cable harnesses applications
- Cabin dash-boards
- Cabin side panels







HESSEL

TESTING SYSTEM PRODUCTION:

"100% of our cable assemblies are proofed by final electrical test made by HESSEL"

8888

TESTING TECHNOLOGIES:

- Testing modules
- Test board, functionality approval, non-conform parts damage
- Assembly boards with modules for housings, terminals, cable clips, open end
 - active function direct EK testing after assembly
 - passive modules support for assembly
- Helping tools
- Poka-Yoke tools
- High Voltage units
- Leakage testing units

Engineering

CUTTING AND CRIMPING:

"More than 60 mio cutted leads per year"



16 Komax cutting Maschines



"Up to 10 mio single crimps" From 32AWG up to 70mm²"

Crimping Tools:

Schäfer, Hanke, Schleuniger, Mecal, TE

CUTTING AND CRIMPING:



- " > 10mio manual crimps per year"
 - simple crimp
 - double crimp
 - strip-crimp
 - splice
 - IDC





OTHER TECHNOLOGIES:



Inkjet datamatrix marking



Wire marking



Tube heat shrinking



Special coatings application



Wires twisting

ULTRASONIC WELDING



CLEAN ROOM PRODUCTION:

"since 2023 we are acting as a clean products supplier for chip market"





" we meet standard ISO 6 according to ISO 1644-1 : 2015, ASML cleanless level GRADE 4"

HESSEL

DESIGN / DEVELOPMENT:

PORSCHE CENTRE CONSOLE and STEERING WHEEL

- project driven between Porsche / Hessel
- Hessel cable harnesses design
- complete testing /simulation technology



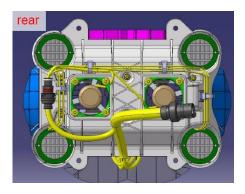


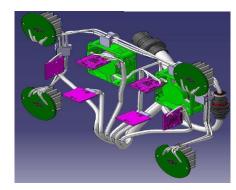




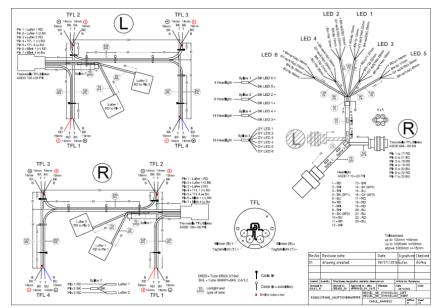
Engineering

DESIGN / DEVELOPMENT LED LAMPS:





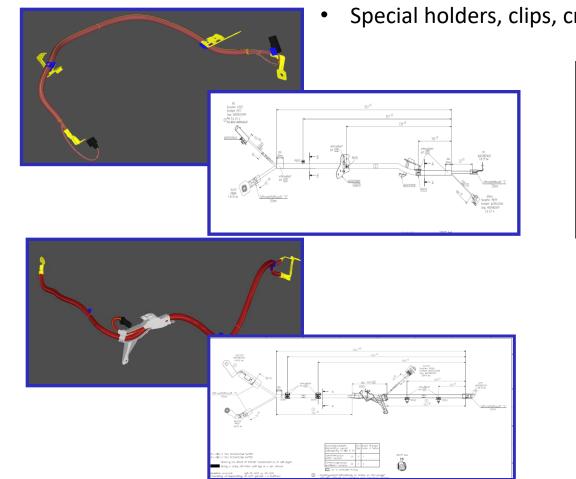




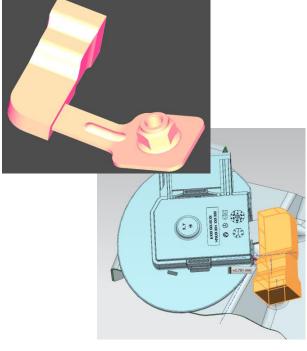




DESIGN / DEVELOPMENT:



• Special holders, clips, crimp area protection designes

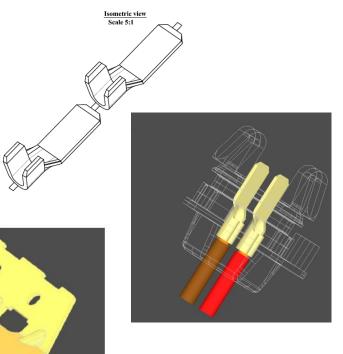


Engineering

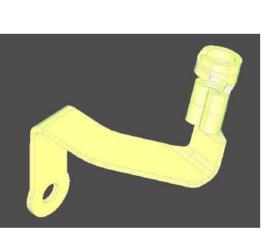
DESIGN / DEVELOPMENT SPECIAL TERMINALS:

design and counstruction of unique terminals

- customized dimensional solutions
- material thickness up to 2.5mm²





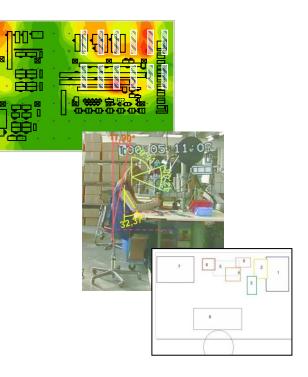






Company cooperation partners:

- Faculty of Engineering, SUA Nitra
 - Co-supervision of MSc thesis
 - Input in educational process
 - Final thesis projects
- High school of technicals, Zlate Moravce
 - Dual education practical placements
 - Training of future technical positions





Key Strenghts:

- ✓ Close to customer
- ✓ High flexibility
- ✓ Slovakia location still enables to offer competitive pricing
- ✓ Automotive experienced management
- \checkmark High Know-How, long term experiences in cable harnesses production as well as its

advanced electronical assemblies such a control panels, driving KITs etc.



www.hessel.eu

