Automotive Lean Production Award

Award & Study Questionnaire 2026

20 years of

AUTOMOTIVE LEAN PRODUCTION AWARD & STUDY

AUTOMOBIL PRODUKTION **AGAMUS** CONSULT

Application until May 16 2026

Award Ceremony: ALP Congress on 24 – 25 Nov 2026

A joint initiative by

AUTOMOBIL PRODUKTION **AGAMUS** CONSULT

Automotive Lean Production Award
The 2025 winners in 6 categories

OEM
Porsche Leipzig GmbH, Germany

Part Supplier
BMW Group Plants Landshut & Wackersdorf,
Production Cockpit, Germany

Digital Use Case OEM: Smart Safety
Iveco Valladolid, Spain

Digital Use Case Supplier:
Enhancing Quality in Semiconductor
GlobalFoundries, Dresden, Germany

Special Award: Digital Mindset
SEAT S.A. Martorell, Spain

Special Award: Rapid Transformation
Gebauer & Griller Kabelwerke Gesellschaft m.b.H.,
Vienna, Austria

Award ceremony 2025 at the winner of 2024: Volkswagen Poznań hosted the congress in Poland. (from left to right) Jose Arreche Artajo (SEAT S.A. Martorell), Pascal Nagel (Automobil Produktion), Dr. Manfred Horstmann (GlobalFoundries), Dr. Werner Geiger (Agamus), Gerd Rupp (Porsche Leipzig GmbH), Markus Ganahl (GG Group), Dr. Holger Fastabend (GG Group), Wolf Duwenkamp (BMW Group), Marc Kräutle (Agamus), Jose Manuel Jaquotot Herranz (Iveco Valladolid)

Automotive Lean Production
Study and specialist congress

The industry magazine Automobil Produktion and Agamus Consult are conducting the **Automotive Lean Production** study for the 20th time in 2026. The comprehensive study focusses on the implementation of lean production structures in the European automotive industry:

What makes **lean** so successful in practice? Which lean components are implemented and how? Which results are achieved in terms of quality, costs and delivery performance achieved? How is lean knowledge developing knowledge develop in the personnel structure? How does the **digitalisation** of the production effect the manufacturing systems? What about the application of lean tools and **sustainability**?

The internal engagement with lean structures alone during the processing of the questionnaire is already value-adding (Lean Expertise of Agamus Consult from 20 years of ALP initiative)

Participation is **free of charge**. Just send in the attached questionnaire (German or English). The only condition: The plant must have more than 250 employees.

On request, **all participants** will receive an **individual evaluation with benchmarks** of international comparison.

The best plants are nominated for the **Automotive Lean Production Award** and additionally evaluated on site. The final evaluation is followed by the

> **Automotive Lean Production Congress with award ceremony on 24–25 Nov 2026 at Porsche Leipzig**

At the high-calibre event, the winners will present their successful projects to the automotive industry. All with one goal:

To learn from the best:
Excellence in Lean & Digitalisation

Also on the programme: topical specialist presentations, roundtables, workshops – and of course the festive award ceremony in the 5 award categories.

The winners can receive an editorial profile from the industry magazine Automobil Production for positive communication in the media.

The Automotive Lean Production Initiative:
A joint initiative of Automobil Produktion and Agamus Consult.

Participating in the competition was a worthwhile opportunity for us to measure ourselves against other plants in an international benchmark comparison and to be comprehensively evaluated by the Agamus experts. Recognizing potential and continuously improving our production environment – that is in line with the Porsche pioneering spirit. As the winner in the OEM category, we will host the 2026 congress. I look forward to welcoming you to the Porsche plant in Leipzig in November 2026."

Gerd Rupp, Managing Director of Porsche Leipzig GmbH, Germany

Learning from the other automotive players and reflecting on our achievements helped us to define the next steps on the (never-ending) way of lean & continuous improvement.

The study is an excellent opportunity for the benchmark and for critical talks with the Agamus experts to understand our advantages and gaps to become successful in the future."

Lukas Hlava, Plant Director TE Wört/Dinkelsbühl, Germany

GlobalFoundries is proud to be the first semiconductor company ever to receive the Lean Manufacturing Award from Agamus. The Lean Manufacturing Workshop gave us the opportunity to better understand the challenges of the automotive industry. GlobalFoundries continues to expand this growing field by providing 'Essential Chips'. Combining the key principles of the lean manufacturing approach with digital solutions has huge growth potential, which is central to both the automotive and semiconductor industries."

Dr. Manfred Horstmann, SVP GFES & GM European Fabs, GlobalFoundries

I am pleased that the (2025) edition of the respected Automotive Lean Production Congress (took) place in Poznań, a city where development and tradition complement each other. Here, at the Volkswagen Poznań plant, we have been proudly producing the Volkswagen Caddy for more than 20 years. At our plant, we focus on innovative solutions in processes and technology. This makes it a perfect place for discussions and the exchange of experiences on the topic of LEAN in the automotive industry."

Stefanie Hegels, Plant Manager Volkswagen Commercial Vehicles, Poland

A. Contact data

1	Name and job title of respondent:		
2	Company and address:		
3	Phone number:		
4	E-mail:		
5	What is the exact designation of your unit (company, plant, …) you are participating with in the study? Hereafter always designated as plant:		
6	State your plant's two most important products:		

		YES	NO
7	Do you wish to apply for one of the awards for your plant? (upon request you will receive the results of the study even if you do not apply for the award)		

B. Structural data

8	How many employees work at your plant?	
9	What is the ratio of direct employees in relation to the entire workforce? (direct employees = spend at least 80% of their attendance on value adding activities)	%
10	How high is the proportion of women from the management level of team leader to top management?	%
11	What is the turnover rate of direct employees? (direct employees = spend at least 80% of their time on value-adding activities)	%
12	What is the turnover rate of indirect employees? (Indirect employees = spend less than 80% of attendance on value-adding activities)	%
13	What is the absence rate for direct employees? (direct employees = spend at least 80% of their presence on value-adding activities)	%
14	What is the absence rate for indirect employees? (Indirect employees = spend less than 80% of attendance on value-adding activities)	%
15	What is the span of control of the lowest management level (e.g., team leader, foreman)?	
16	What is the share of direct value-adding working time in the total working time of the lowest management level?	%
17	What were the sales of your plant in the last fiscal year?	Mio. €
18	What percentage of your turnover do you generate directly with companies from the automotive industry?	%
19	How do you supply your customers? (Please differentiate according to the following types in percent by value of goods)	
	Batch (lot sizes)	%
	Just in Time (JIT)	%
	Just in Sequence (JIS)	%
20	What are the main production technologies at your plant? (Please rate the distribution of your direct production employees)	
	Assembly	%
	Robot welding (e.g. body shop)	%
	Casting (metal)	%
	Pressing, punching, forging ... (metal)	%
	Machining (shape cutting)	%
	Painting, powder coating, heat treatment, electroplating…	%
	Plastics processing (e.g. injection moulding, thermoforming, RIM process)	%
	Manufacturing of electronic parts (e.g. SMD assembly)	%
	Other (please specify): _____	%

C. Lean – structure and implementation level

	To what extent have you sustainably implemented the following Lean production practices at your plant?	NOT IMPLEMENTED	PILOT	HALFWAY	EXTENSIVELY	COMPLETELY
21	**5S** Sort, set in order, shine, standardise, sustain					
22	**FMC – Flexible Manpower Cell** A working environment in which people and machines can quickly adapt to changing customer demands					
23	**Flexible working hours** e.g. flex time accounts					
24	**Flow production** Layout of the workstations corresponds to the material flow; synchronous and interlinked processes					
25	**Group / team work models** Multiple qualifications, partly autonomous teams					
26	**Kaizen- / CIP-Workshops** Continuous improvement workshops with the employees who take part in the process					
27	**Supplier development** Proactively develop the supplier to extensively integrate material and information flows					
28	**Cyclic material supplier in production** Milkrun, waterspider, etc.					
29	**Levelling of production** Smoothing of customer call-offs with the aim of producing constant quantities at defined intervals for a defined period					
30	**Poka Yoke** Avoidance of defects by a special design of the material or the manufacturing process; fail-safe processes, test equipment, and facilities					
31	**Q-Tools** QFD, FMEA, 6-Sigma, 8D-Reports, A3-problem-solving process, etc.					
32	**Fast response systems** Standardised event- and time-driven escalation routines that provide the necessary resources in the event of problems; e.g. rip cord					
33	**Fast setup** Fast tooling to flexibly respond to customer requirements; goal: reducing stock and increasing flexibility					
34	**Standardised workflows** Clearly visualise workflows, defined operator cycles dependent on the customer tact time; goal: process reliability and efficient employee deployment					
35	**Standardised KPIs** Key figures, that represent the necessary efficiency ratios (OEE, workforce productivity, complaint files) at production group level and are aggregated to area codes					
36	**TPM – Total Productive Maintenance** Maintenance strategy, autonomous maintenance, management of external services, spare part management, workload planning and scheduling in maintenance					
37	**Pull production control** Pull principle driven by demand, self-regulated control loops					
38	**Visual Management** Visual marking of standards in the flow of materials and information, so that deviations become obvious and countermeasures can be taken immediately					
39	**Value stream methodology** Graphical visualisation of the material and information flow as a map and as a design, determination of the total lead time and the included non-value adding activities					
40	**Shop floor Management** Leading on the spot; standardised work and control loops for employees and managers					

D. Introduction of Lean	YES	NO
41 **Since when** (year) **have you been introducing Lean principles and tools to an appreciable extent?**		
42 **When** (year) **was the last restart or the last refresh of the production system performed?**		
43 **Do you perform maturity assessments on the status of your production system?**		

If yes: Which maturity level shows your plant? (rate positive 0-100%; if you use a stage model, please refer to the highest stage)	%
44 **How many exempt lean experts** (FTEs) **who do not perform a line function do you have per 100 employees?**	

45 **What were the relative improvements in percent that you achieved as a result of your lean activities in the last two years? What will be the relative improvements you plan to achieve in the next two years?** Regarding:	IMPROVEMENT OVER THE LAST 2 YEARS	IMPROVEMENT IN THE NEXT 2 YEARS
Productivity	%	%
Cost reduction	%	%
Internal PPM	%	%
Supplier's PPM	%	%
PPM to customers	%	%
Lead time	%	%
Inventory	%	%
OEE	%	%
Reaction speed	%	%
Flexibility	%	%
Ergonomics	%	%
Other (please specify): _____	%	%

46 **How many suggestions for improvement are submitted per employee per year?**	
47 **What proportion of the improvement suggestions led to savings expressed in 'Euros'?**	%

E. Digitalisation – structure and status of implementation					
To what extent have you sustainably implemented the following digitalisation modules at your plant?	NOT IMPLEMENTED	PILOT	HALFWAY	EXTENSIVELY	COMPLETELY
48 **Virtual reality for workplace design and worker training** The workplace is virtually tested after planning and freed from weaknesses. For effective training or a shortened start-up, the workers are then trained at the virtual workplace					
49 **Use of assist systems for workers** Workers use assist systems based on the networked infrastructure for various tasks in manufacturing/assembly					
50 **Use of mobile assist systems for the lower management level in production** The lower management level in production uses mobile assist systems based on the networked infrastructure for management and control tasks					
51 **Human-robot-collaboration** Operators share their workspace with robots without separative protection devices (maintaining same safety level). Work steps between humans and robots can be combined individually					
52 **Intuitive methods of robot-programming** Robots are no longer plain-text programmed, but are now installed by teach-by-demonstration (human demonstrates assembly operations), by app or speech-based solution					
53 **Inline component manufacturing using additive processes** Use of additive processes to manufacture components in order to meet increasing individualisation of customer requirements (batch size 1, reduction of lead times, reduction of logistics costs)					
54 **Integrated quality assurance system** In the event of quality issues, the system intervenes in the control loops in real time and initiates processes to solve the problem (Closed-Loop)					

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55 **Predictive maintenance** By determining optimal maintenance times based on real time monitoring, errors can be prevented by maintenance or early repairs					
56 **Augmented reality** Maintenance and repairs can be supported with the help of displayed virtual objects (for better explanation)					
57 **Flexible manufacturing concepts** Production facilities have a modular design and can be flexibly adapted or expanded. Technological components can be replaced according to the plug & play principle with minimal integration effort and immediately integrated into the production process.					
58 **Digital shop floor management** Relevant shop floor data are available at multi-sites in real time (enhancing knowledge management) and being reviewed on a virtual board by all stakeholders					
59 **Digital integration of value chain partners** All partners worldwide (suppliers, customers, service providers, etc.) are using the same up-to-date data pool					
60 **'Digital twin' of the real production** All equipment, products, plants as well as their conditions are clearly monitored, mapped and interconnected into a virtual representation (digital world)					
61 **Digital platform controls the real production** A manufacturing-process-platform based on the 'digital twin' controls the production and logistics in real time by autonomously adjusting the work organisation when changes of the 'twin' occur. (Integration of industrial engineering, planning, production control and management of production and logistic into one platform)					
62 **Digital integration of manufacturing and logistics** Changes in the manufacturing process (e.g. product is manufactured at a different working station) update automatically related logistics processes and the simulation- and production-planning tool of the digital world					
63 **Process mining** Business processes are automatically mapped and analysed (e.g. divergences from standards) based on process log data from IT systems					
64 **Digital tools for achieving sustainability goals** Digital tools and platforms are used to monitor CO2 emissions in real time and support strategies for achieving carbon neutrality					
65 **Automated Intralogistics** Automation of internal material flow using Automated Guided Vehicles (AGVs) or mobile robots. Recurring transport tasks (e.g., tugger trains, line supply) are executed autonomously					
66 **5G Campus Networks** Operation of a factory-owned 5G network for real-time communication, enabling a large number of sensors and autonomous robots to be networked securely and without interference					
67 **Cybersecurity & Data Security** Holistic protection of production facilities against cyberattacks through segmentation, real-time traffic monitoring, and protection concepts for legacy systems (existing assets)					

F. Lean and Industry 4.0 – prerequisites, culture change, future trends	
68 **To what extent do you agree with the following statements regarding the interaction of Lean and Industry 4.0?** (please rate with 0: don't agree to 3: fully agree)	0 - 3
Lean is the prerequisite for a successful implementation of Industry 4.0	
Industry 4.0 will replace our previous Lean activities	

69 **To what level are goals for the following topics broken down in policy deployment (hoshin kanri)?** (please tick the appropriate box)	TOP MANAGEMENT	MIDDLE MANAGEMENT	FOREMAN/ GROUP LEADER	TEAM LEADER	OPERATOR	N.A.
Lean						
Digitalisation						
Sustainability						

70	**Penetration level of smart applications/technologies?** With reference to:	
	How much of the assembly do you do with sensitive lightweight robots?	%
	What proportion of internal transportation is carried out by AGVs?	%
	What is the proportion of picking processes that are fully automated without manual effort? (Picking, transport, and delivery to the assembly line)	%
	What is the proportion of manual picking processes supported by 'Pick-by-X' technologies (e.g., Pick-by-Light, Pick-by-Voice, Pick-by-Vision, etc.)?	%
	What proportion of your internal material flow is tracked online (e.g. via RFID, UWB)?	%
	What proportion of the systems do you maintain 'condition based' – i.e. based on condition monitoring?	%
	What proportion of manual quality controls have been replaced by smart solutions (e.g. camera systems) in the past 5 years?	%
	What proportion of training in your factory takes place via virtual systems (e.g. E-Learning, VR, AR, Remote)?	%
	What level of digitisation does your shop floor management have at the lowest cascade (Number of processes predominantly supported by digital solutions / Total number of shop floor management processes)?	%
	What proportion of production starts do you do virtually in advance?	%
	What proportion of administrative processes are supported by a digital workflow?	%
	How many digitisation projects has your factory completed in the last 12 months? (Minimum duration: 3 months, cross-departmental, reporting at least at the level of technology management (e.g., assembly management))	#
	What proportion of your machinery is connected to a central data system (e.g., MES) with automated data collection?	%

71	**AI Technology** (Please check the applicable boxes)	OPTIMISATION OF PRODUCTION PROCESSES	CONTROL AND ADAPTATION OF PRODUCTION WORKFLOWS	PREDICTIVE MAINTENANCE	AUTOMATION OF ADMINISTRATIVE TASKS	DECISION-MAKING SUPPORT	QUALITY IMPROVEMENT	OPTIMISATION OF RESOURCE UTILISATION	HUMAN-MACHINE COLLABORATION	IMPLEMENTATION OF SUSTAINABILITY GOALS
	Symbolic AI: Rule-based systems using logic and knowledge representation for problem-solving.									
	Machine Learning: Algorithms that learn patterns from data for prediction or classification.									
	Deep Learning: Neural networks with many layers for complex pattern recognition.									
	Evolutionary Algorithms: Optimisation through selection, mutation, and recombination based on biological principles.									

	Digital CIP Lab	YES	NO
72	**Is there a 'Digital CIP Lab' in your plant in the sense of a defined organisational anchoring of the creation of No-/Low-Code Apps/Automations in the specialist departments** (e.g., contact persons, coordination, Key User Network)**?**		
73	**Is there a standardised process for the submission and prioritisation of Use-Cases** (Intake, Backlog, Pitching etc.)**?**		
74	**Are there employees in the specialist departments who create digital solutions** (e.g., Apps/Workflows) **themselves** ('Citizen Development')**?**		
	If yes: Is there a qualification model for these employees?		
	If yes: Is there a certification model for these employees?		
	If yes: Are these employees allowed to create Apps/Automations independently in a Test-/Sandbox environment?		
	If yes: Are these employees exempt from work on a pro rata basis?		
75	**Is there an approval process for the decentralised Apps/Automations before productive use** (Review of Data/Security/Support)**?**		
76	**Are there defined roles for data responsibility for relevant data sources?** (e.g., Data Owner = functionally responsible; Data Steward = operational maintenance/provisioning/access)		
77	**Is it defined how data responsibility is divided into domains** (e.g., Process, Plant-/Machine-, Quality-, Logistics-, Master Data)**?**		
78	**Is there an overview/documentation of the relevant data sources, permissions, and responsibilities** (Data Catalog)**?**		
79	**Is there monitoring of data quality** (Completeness, Plausibility, Timeliness)**?**		
80	**Are there rules/mechanisms regarding Data Protection & IP/Copyright** (esp. GenAI: Prompting, Guardrails, Logging)**?**		
81	**Which statement applies to your plant?** (Please only one answer per statement)		
	We can quantify the effort for the creation of No-/Low-Code Apps/Automations.		
	We can quantify the benefit of No-/Low-Code Apps/Automations.		
	What is your ratio of benefit to effort (e.g., saved Euros or hours/invested Euros or hours)		
82	**Is there a named Owner incl. Operations/Support** (Maintenance/Updates, Incident-Process) **for productive** (post Go-Live) **Apps/Automations?**		
83	**How many so-called Low Code APPs** (e.g. PowerAPPs) **are created in your plant per 1,000 FTE per year?**		

	G. Sustainability		
84	**How high is the share of renewable energy in total consumption?**		%
85	**How high is the share of self-generated energy in total consumption?**		%

86	**What was the relative improvement in percentage terms that you achieved through your sustainability activities in the last two years? What relative improvements do you plan to achieve in the next two years?** Regarding:	IMPROVEMENTS OVER THE PAST 2 YEARS	IMPROVEMENTS IN THE NEXT 2 YEARS
	GHG emissions (according to the Kyoto Protocol)	%	%
	Amount of waste	%	%
	Water consumption	%	%
	Energy consumption	%	%
	Share of recycled materials	%	%
	Media consumption (compressed air, coolant, ...)	%	%
	Others (please state): _____	%	%

		YES	NO
87	**Have you defined annual target values for the sustainability indicators from question 86?**		
88	**Have you defined a target year for the plant's CO2 neutrality?**		
	If yes: By when would you like to achieve this goal?		Years
89	**What proportion of the material used** (including auxiliary and operating materials) **is waste** (e.g. also rejects, offcuts, residual quantities) **that is not recycled?**		%

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H. Value Stream Performance		
90	**What is the proportion of material cost in relation to the total turnover?** (raw materials and purchased parts)	%
91	**In what kind of delivery are these materials been supplied?** (please specify each as a percentage by value of goods)	
	Batch (lot sizes)	%
	Just-In-Time (JIT)	%
	Just-In-Sequence (JIS)	%
92	**How many days supply** (own + consigned) **of finished goods do you maintain on average?**	
93	**How many days supply** (own + consigned) **of raw materials do you maintain on average?**	
94	**What is the frequency of production of A-products?** (one answer only, please)	
	Several times a day	
	Every day	
	Every third day	
	Every week	
	At intervals longer than weekly or irregularly	
	Unknown / not analysed	
95	**What is your plant's service level** (on time in full deliveries) **from your customers' perspective?** (order placement date, delivery date)	%
96	**What is your suppliers' customer service level from your plant's perspective?** (order placement date, delivery date)	%
97	**What is the average overall equipment effectiveness** (OEE) **as a percentage of total production time at bottleneck processes/machines?**	%
98	**What is your direct customer complains rate?** (product and logistics defects only)	PPM
99	**What is your first-pass yield?**	%
100	**Number of days without reportable accidents**	days
101	**Number of near-accidents per thousand hours of attendance**	

I. Best Practice Example "Digital Use Case" (Optional)	
102	**In the category "Digital Use Case", we are also awarding prizes for individual projects and not just entire works. Each participant has the opportunity to apply for one of the coveted awards with a successful digitisation project that improved the KPIs of the value stream. Please present your project in a separate documentation, whose form we leave up to you. In particular, please address the following aspects of the project.**
	Name / Designation
	Start and end date
	Target
	Essential contents / milestones
	Improvements attained (qualitative, key figures)
	Innovations / what distinguishes the project in particular?
	Experiences / lessons learned
	Rollout / further implementations planned

Fill in and send via e-mail to: lean.award@agamus.com

Award & Study 2026: Application & Dates

Automotive Lean Production – Award & Study
Automotive Lean Production – Award & Study is an initiative of Automobil Produktion and Agamus Consult. Data from the questionnaire is stored electronically by Agamus Consult for evaluation purposes and will not be passed on to third parties. The use of the data for statistical purposes is exclusively anonymised. Personal data will only be used for queries for the purposes of the study. Of the award winners only the company names are published.

Application deadline: 16 May 2026

More information and download questionnaire:
www.automotive-lean-production.de/en

Fill out the PDF locally on your PC, save, complete and e-mail directly to:
lean.award@agamus.com

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Photo: Porsche Leipzig

20th Congress
Automotive Lean Production 2026

Welcome to Porsche Leipzig

24 – 25 November 2026

The host organisation for 2026: Gerd Rupp (Porsche Leipzig GmbH), between (left) Dr. Werner Geiger and (right) Marc Kräutle.

Photo: Porsche Leipzig

- Presentations of the award winners
- Festive presentation of the awards
- Exclusive tour of the Leipzig plant

Photo: Porsche Leipzig

Automotive Lean Production Award & Study

at Porsche Leipzig, 24 & 25 November 2026

20 years of

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