



**CUSTOMER EXPERIENCE**



**PERFORMANCE**



**TRUST**



**COMPETENCE**



**FURTHER EXCELLENCE**



**DEVELOPMENT**



**QUALITY**



**PRODUCTIVITY**



**SUSTAINABILITY**

# HOW CAN YOU ENSURE QUALITY, SAFETY AND EFFICIENCY THROUGHOUT THE SUPPLY CHAIN?

**SUPPLIER QUALITY DEVELOPMENT SERVICES**



# QUALITY, TIMING AND COST RIGHT FROM THE FIRST COMPONENT DELIVERED



OEMs and Tier 1 & 2 suppliers trust in SGS for value chain solutions that improve quality, sustainability, efficiency and safety in the automotive industry. Our services increase suppliers performance and reduce risk by providing supplier quality development services. With a global network of offices, laboratories and testing centres we partner with manufacturers, suppliers and distributors worldwide. Our expertise facilitates the delivery of best-in-class value chain performance from automotive research and design to dealership sales and satisfaction.

## MANAGE YOUR SUPPLY BASE TO DELIVER FIRST TIME RIGHT: SOLUTIONS FOR EXCELLENCE

SGS provides supplier quality development service to gain control over your suppliers.

Supply chain get deeper and more complex while production processes get more sophisticated and have a higher share in the root cause when products fail.

1st tier supplier get more responsibility to develop their sub-suppliers, who often are not IATF 16949 certified.

All OEM and suppliers need Supplier Quality Engineers (SQE) to ensure suppliers cope with requirements in quality, on-time delivery and process control

Supplier Quality Engineers are the key for on-site support of critical suppliers during APQP, FMEA, PPAP and Run at Rate

- Passing PPAP is the key requirement for all supplier levels to start delivery to serial production
- Failed PPAP can cause dramatic financial and image consequences for suppliers
- Failure modes might be in the product or in the process

Ongoing quality crisis can be remedied by SGS SQE as remote staff on site that an OEM /1st tier can trust, to fix the process issues.

New supplier development can be performed with in depth review of the suppliers systems and processes by an industry expert

SGS has extensive experience in creating tailored solutions for the automotive industry. Our expert knowledge is relied on for excellence in vehicle design and construction, quality and safety assurance in supply chains, and consumer satisfaction in dealership operations.

CRISIS RESPONSE & PROBLEM MANAGEMENT	PREVENTION & RISK ANALYSIS	SUBSUPPLIER DEVELOPMENT	ORGANIZATION DEVELOPMENT
<ul style="list-style-type: none"> <li>• Containment                             <ul style="list-style-type: none"> <li>• Level 1 &amp; 2</li> </ul> </li> <li>• Interim process Control &amp; Management                             <ul style="list-style-type: none"> <li>• Trouble shooting</li> <li>• Material supply</li> <li>• Production quality and output</li> </ul> </li> <li>• On-site remote supplier control and support</li> </ul>	<ul style="list-style-type: none"> <li>• System and Process Audits                             <ul style="list-style-type: none"> <li>• IATF 16949 (non cert)</li> <li>• VDA 6.3</li> <li>• Process Ctrl Plan</li> </ul> </li> <li>• APQP Audits &amp; Support                             <ul style="list-style-type: none"> <li>• FMEA</li> <li>• PPAP</li> <li>• Run@Rate</li> <li>• Process Capability</li> </ul> </li> <li>• Socia Audits                             <ul style="list-style-type: none"> <li>• EHS</li> <li>• Labor</li> <li>• Business Integrity</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• PPAP and R@R support and monitoring</li> <li>• Material and fluids analysis in SGS labs</li> <li>• Parts testing in SGS labs</li> <li>• Output and production cost optimization</li> <li>• Tool tracking (readiness, relocation)</li> </ul>	<ul style="list-style-type: none"> <li>• Management System Training                             <ul style="list-style-type: none"> <li>• ISO 9001</li> <li>• ISO 14001</li> <li>• OHSAS 18001</li> <li>• IATF 16949</li> </ul> </li> <li>• Quality tools training                             <ul style="list-style-type: none"> <li>• FMEA</li> <li>• SPC</li> <li>• MSA</li> <li>• 8D</li> <li>• 5S</li> <li>• Lean 6 Sigma</li> </ul> </li> <li>• On Site Coaching</li> </ul>



**QUALITY**

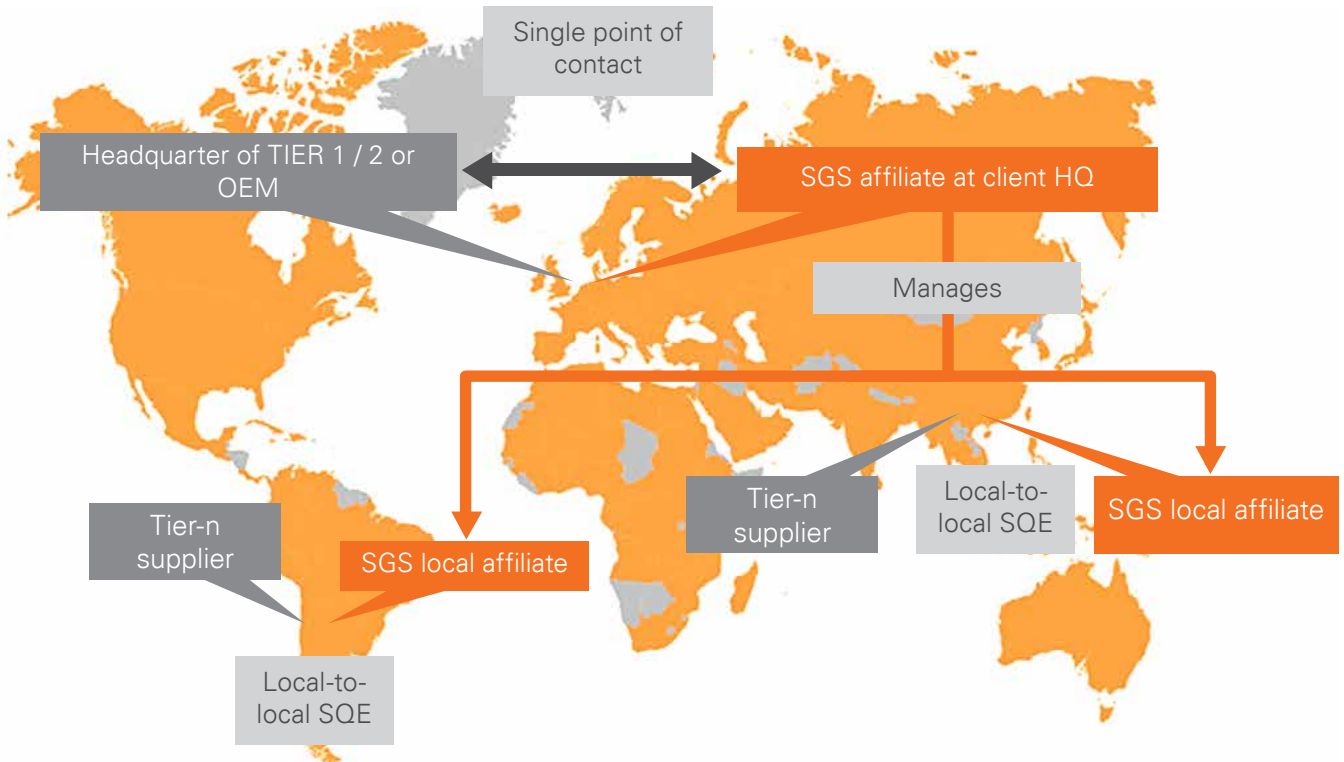
**CENTRAL CLIENT FOCUSED PROJECT MANAGEMENT WITH GLOBAL DEPLOYMENT**

As a global organization with more than 85,000 employees, SGS operates a network of over 1,800 offices and laboratories around the world. We have the ideal base for an out-of-one hand global service to support your remote supply base with trusted, calibrated and centrally managed resources.

Advantages:

- Single point of contact with central project management and reporting
- Local-to-Local Supplier Quality Engineers, supported - if needed - by global experts
- No language and cultural barriers
- Local cost structure and rates – no global travel cost
- Faster response, sustainable solution

**OUR EXPERTISE INSPIRES BEST-IN-CLASS VALUE CHAIN PERFORMANCE.**



*Example how it can work: SGS local Supplier Quality Engineers work local or regional to ensure best in class services – in time – in budget.*

## CRISIS RESPONSE & PROBLEM MANAGEMENT

SGS SQEs can work as immediate response force to your supplier quality organization, to ensure a fast and competent response to quality issues in production, during launch phase or in the advance planning phase.

CONTAINMENT	SUPPLIER QUALITY ISSUE RESPONSE	ON-SITE VS REMOTE	LAB SUPPORT
<ul style="list-style-type: none"> <li>• CSL 1 &amp; 2                             <ul style="list-style-type: none"> <li>• Physical parts sorting CSL2</li> <li>• Supervision of CSL1 at suppliers</li> </ul> </li> <li>• Material supply control</li> <li>• Production process control</li> </ul>	<ul style="list-style-type: none"> <li>• SGS Quality managers fixing quality issues at suppliers during                             <ul style="list-style-type: none"> <li>• Regular production</li> <li>• Tool changes/tracking (PPAP)</li> <li>• Relocations (PPAP)</li> <li>• Design changes (PPAP)</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• SGS Quality Engineers can fix problems at supplier site in country or at remote locations</li> <li>• SGS will organize a single point of contact for clients</li> <li>• Global resource deployment to ensure local-to-local communication</li> </ul>	<ul style="list-style-type: none"> <li>• SGS can offer to support supplier with Lab services:</li> <li>• CTS Technical laboratories for auto parts raw materials</li> <li>• OGC labs for fluids</li> </ul>

## PREVENTION AND RISK ANALYSIS

Prevention is the best way to avoid a crisis. SGS SQE are trained to look behind the surface and identify systematic shortcomings of suppliers processes, organizations and systems. Based on our extensive IATF 16949 knowledge, our SQE can review processes according to the key requirements of the standards such as PPAP, or simply conduct formalized process audits such as VDA6.3 process audits or an extensive audit of the Process Control Plan (PCPA)



**TRUST**

APQP TO PPAP SUPPORT	SYSTEM AUDITS	PROCESS AUDITS
<ul style="list-style-type: none"> <li>• SGS Quality Engineers fix problems at supplier from APQP to PPAP                             <ul style="list-style-type: none"> <li>• FMEA to PPAP</li> <li>• Tools management</li> <li>• Manufacturing process issues</li> <li>• Supervision of CSL1 at suppliers</li> <li>• Quality control issues</li> <li>• Subsupplier management</li> <li>• Prepare R@R</li> <li>• Process control plan audits</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• SGS Quality Engineers can audit supplier locations to comply with industry standards                             <ul style="list-style-type: none"> <li>• Quality standards</li> <li>• Environmental standards</li> <li>• Occupational health and safety</li> <li>• Labor conditions</li> <li>• Sustainability</li> <li>• Customized audit programmes</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• SGS Quality Engineers review production processes according to world class process audit standards like                             <ul style="list-style-type: none"> <li>• VDA 6.3</li> <li>• Process Control Plan Audits (PCPA)</li> <li>• Customized performance assessments</li> </ul> </li> </ul>

**SUBSUPPLIER DEVELOPMENT**

Your OEM direct suppliers often rely on a deeper chain of tier –n sub-suppliers to provide parts, components or raw materials. These supply chains can be very in-transparent to tier 1 or OEMs and might require on-site local resources to understand the complexity of the relation and the true status of a project.

SGS SQE can help to go the next steps and expand their focus from the requested tier n to the relevant tier n+1, n+2 etc. to ensure processes are setup, executed, controlled and managed also for critical sub-suppliers.

SUBSUPPLIER DEVELOPMENT	NEW SUPPLIER ASSESSMENT AND DEVELOPMENT
<ul style="list-style-type: none"> <li>• SGS quality engineers can perform all activities mentioned before, around the globe with tier-n sub-suppliers</li> <li>• Local services</li> <li>• Global alignment and standard</li> <li>• Tracking of tools and production equipment                             <ul style="list-style-type: none"> <li>• Tool &amp; equipment readiness</li> <li>• Tool relocation</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• SGS quality auditors assess new / potential suppliers for a 1st tier:</li> <li>• Quality management system</li> <li>• Production facility</li> <li>• Process capability (PCPA, VDA 6.3)</li> <li>• Raw material</li> <li>• Business continuity</li> <li>• Information security</li> <li>• Sustainability</li> <li>• Social accountability</li> </ul>



**TRAINING AND ORGANIZATION DEVELOPMENT**

Prevention and organizational development can ensure that quality problems are avoided before they can happen. SGS can support with extensive training on supplier quality related issues and quality management system.

Key quality tools such as 8D, 5S etc. play an important role in the problem management process and should be trained to suppliers’ staff in regular frequencies.

M SYSTEM TRAINING	Q TOOLS TRAINING	ON SITE COACHING
<ul style="list-style-type: none"> <li>• ISO 9001</li> <li>• ISO 14001</li> <li>• IATF 16949</li> <li>• Sustainability</li> <li>• Business continuity</li> </ul>	<ul style="list-style-type: none"> <li>• FMEA</li> <li>• SPC</li> <li>• MSA</li> <li>• 8D</li> <li>• 5S</li> <li>• Lean 6 Sigma</li> </ul>	<ul style="list-style-type: none"> <li>• SGS SQ Engineers can support suppliers on site in the optimization of processes and controls</li> </ul>

**SGS SUPPLIER QUALITY DEVELOPMENT SERVICES HELP YOU TO MAINTAIN CONTROL OVER SUPPLY CHAINS AT ANY COMPLEXITY**

**RELATED SERVICES**

SGS experienced laboratories around the world are well renowned and largely accredited for testing of raw materials, parts and components or chemicals and fluids

SGS can provide independent testing of those in our own accredited labs and provide evidence to both the supplier and the client about the technical characteristics

- Chemical tests
- Mechanical tests
- Functional safety
- Homologation
- Electromagnetic compatibility (EMC)

Examples for these services are our competence centres for oil and fuel

- Oil analysis
- Global fuel survey

- Other labs provide specialized services regarding development and validation of automotive components:
- Traction and propulsion batteries
- Material testing for durability and emissions
- Safety and functional testing
- Carbon fibre composite materials analysis
- PPAP lab and testing support
- Failed part analysis (root cause analysis support for development warranty and recalls)
- Product recall response and crisis management





**FURTHER EXCELLENCE**



**SUSTAINABILITY**

#### **ABOUT SGS**

SGS is the world's leading inspection, verification, testing and certification company. SGS is recognised as the global benchmark for quality and integrity. With more than 85,000 employees, SGS operates a network of over 1,800 offices and laboratories around the world.

Enhancing processes, systems and skills is fundamental to your ongoing success and sustained growth. We enable you to continuously improve, transforming your services and value chain by increasing performance, managing risks, better meeting stakeholder requirements and managing sustainability.

With a global presence, we have a history of successfully executing large-scale, complex international projects. Our people speak the language, understand the culture of the local market and operate globally in a consistent, reliable and effective manner.

---

To learn how sgs can help you visit [www.sgs.com/automotive](http://www.sgs.com/automotive) or contact [automotive-solutions@sgs.com](mailto:automotive-solutions@sgs.com) for more information

[WWW.SGS.COM](http://WWW.SGS.COM)

WHEN YOU NEED TO BE SURE

