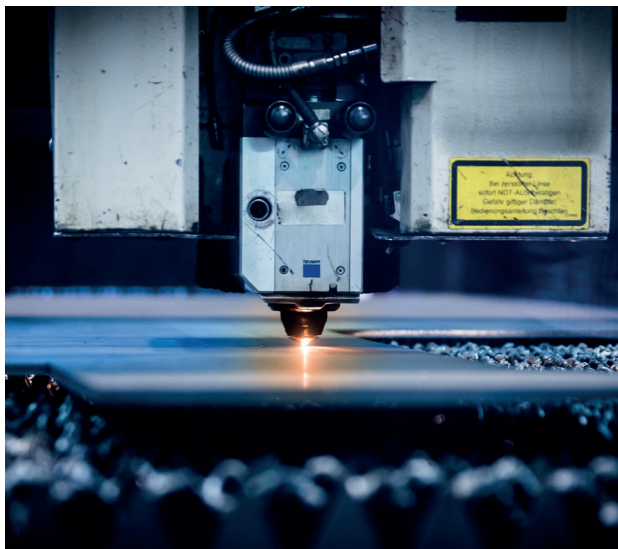




Safety first: How the adoption of international standards strengthens machinery safety in India and boosts trade



Several thousand occupational fatalities happen every year in India. This number is higher, if incidents from the unorganised manufacturing sector would be included. Only 20 per cent of India's 465 million workers are covered under the existing health and safety legal framework. One factory inspector is responsible for over 500 factories. These numbers demonstrate why machinery and worker safety are important in India.

New opportunities for the machinery industry have opened through a focus on manufacturing, especially through the 'Make in India' initiative. In 2016, the Indian government introduced the 'National Capital Goods Policy' which highlights the need of mandatory standards, minimum acceptable safety, environment and performance standards for machinery. These developments not only boost business and create an opportunity to strengthen machinery, workers and environmental safety, but they will also open doors for the machinery industry. Safety regulations that have been an established part of German and European manufacturing for many years, are new for many Indian manufacturers. The new Indian regulations will increase the demand for high-quality

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GLOBAL PROJECT *Quality Infrastructure*

The Global Project Quality Infrastructure (GPQI) of the German Federal Ministry for Economic Affairs and Energy (BMWi) engages in technical and political dialogues with Brazil, China, India, Indonesia, and Mexico to reduce technical barriers to trade, enhance product safety, and strengthen consumer protection.

GPQI serves as a platform to improve the mutual understanding of policies and regulations, and to jointly develop positions and solutions for international technical harmonisation. Common bilateral interests are the basis for the cooperation on challenges and opportunities on standardisation, conformity assessment and accreditation, legal metrology, and market surveillance with a wide range of stakeholders. These include ministries, regulators, public agencies, standards and accreditation bodies, industry experts, associations, companies, and technical and scientific institutions.

BMWi has commissioned the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH – the German Agency for International Cooperation – to support the implementation of GPQI. The project coordinates stakeholder inputs on draft regulations and standards, expert exchanges, delegation visits, and sectoral cooperations, and releases technical publications.

German machines, manufacturing components and technologies in the long run.

Recognising these developments, the Indo-German Working Group on Quality Infrastructure has taken several concrete steps. Several expert exchanges were organised to understand the challenges faced by the German machinery industry in India. This was followed-up with a high-level dialogue between the German Federal Ministry for Economic Affairs and Energy and the Indian Ministry of Heavy Industries, responsible for machinery

The project has helped to level the playing field for machinery safety in India. For the first time, comparable standards were introduced. This is a game changer since it opens up new market segments in India.

Schmersal India Pvt. Ltd. Heinrich Bruellau, Former COO

safety regulations. At the same time, based on a proposal from experts of the Working Group, the Bureau of Indian Standards (BIS), the national standards body of India, has established a new technical committee 'Manufacturing Machinery and their Safety Sectional Committee', MED 40.

Facilitated by the Indo-German Working Group, 32 Indian machinery safety standards have been established by the Committee. These standards are aligned to international standards, protecting workers and ensure Indian machine manufacturers can access international markets with more ease. They also strengthen the position of German machine manufacturers in India who are already complying with international standards.

In collaboration with the German Mechanical Engineering Industry Association (VDMA), the study 'Making Safe Machines a Standard in India' was conducted and released in 2018 by the Global Project Quality Infrastructure (GPQI). It identifies the lack of machinery safety regulations as the biggest concern for German machine manufacturers in India. The study includes a comparative

analysis of Indian regulations with reference to international standards and European machinery directives. It also provides a comprehensive overview of the current regulatory framework of machinery safety in India, and the challenges faced by the industry.

The study provides three recommendations on how to strengthen machinery safety requirements in India:

1. To introduce new regulations for machinery safety considering emerging interconnected manufacturing and review the existing ones
2. to develop a roadmap for implementing machinery safety standards and conformity assessment procedures
3. to create awareness for the importance of machinery safety and a culture of safety through the adoption of international good practices

In 2018 the Government of India has started working on an Omnibus Technical Regulation - a comprehensive regulation for machinery safety in India - which shall include safety aspects at the design stage, manufacturing, and installation of machinery. The study on machinery safety conducted by GPQI and VDMA serves as one of the references of this new regulation.

The next crucial step in strengthening machinery safety and boosting trade in India is the implementation of the new technical regulations by the industry. To support both German and Indian companies in rapidly and consistently implementing these regulations, a guideline document is being prepared by GPQI. It will provide the industry with guidance by answering questions on the applicable standards and providing good practices on how to apply and implement safety solutions at the shop floor.

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