

## IAQ QUALITY SUSTAINABILITY AWARD 2022 ONE-PAGE SUMMARY

The One-Page Summary should be in English and submitted as Appendix 1 to your Application. It will also be published on the IAQ Quality Sustainability Award Homepage; <http://iaqaward.com> . The length of this document must not exceed 1 page.

### Project and contact details

<b>Project Name:</b> Elimination of Hazardous Lapping process from NHA manufacturing		
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### Project description

Occupational health and safety are essential for **protecting our employees, customers and the wider public from workplace dangers**. Hazardous waste generation plays a major role in occupational health and safety. Hazardous Waste generation is the major concern in manufacturing industry, which is causing many harmful effects to the environment. Hazardous waste that is improperly managed poses a serious threat to human health and the environment. Solid waste management issues rose to new heights of public concern in many areas of the world because of increasing solid waste generation, shrinking disposal capacity, rising disposal costs, and public opposition to the siting of new disposal facilities. These hazardous waste management challenges continue today, as many communities are struggling to develop cost-effective, environmentally protective solutions. The growing amount of waste generated has made it increasingly important for industries to find engineering solutions to reduce the hazardous waste.

The Vision of BOSCH Jaipur plant UDAAN 2.0 is driving the team to reduce hazardous waste generation from the plant to improve occupational health and safety of employees and stakeholders.

In BOSCH Jaipur, we are manufacturing 8 families of NHA (Nozzle Holder Assembly) which are further divided into 1257 types. Application of this NHA are gensets, stationary engines and locomotives.

The NHA is an assembly of 14 components.

The project is dedicated to component NHB (Nozzle Holder Body) where Hard stage operation of Grinding is done inhouse.

In Nozzle Holder Value stream, grinding operation done on component Nozzle Holder Body (NHB) on either of grinding machine. (1. Supfina Grinding, 2. WMW Grinding and 3. Lapping process).

On Lapping we are using a **Lapping paste** and **MTO (Mineral Turpentine oil)** which is a key source of high Hazard generation. The process also require lifting of 30 Kg Fixture through crane which is ergonomically very difficult. **(GOAL 3 & 12)**

The team used various approaches and tools to eliminate lapping process.

- *System CIP Approach(LEAN Tool) and problem solving using ISHIKAWA (RCA)*
- *Speed Week Approach(AGILE Tool)*
- *Suggestion and kaizen from Operators*

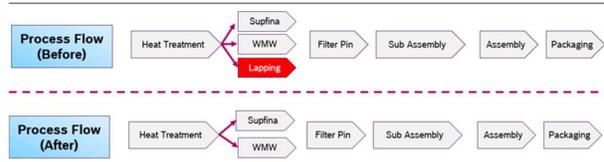
## Project leverage potential

The Lapping process for Nozzle holder Body was an 40 year old process because the NHB running on lapping are of asymmetric geometry.

But with new concept of Part Loading and unloading using new types of Aluminium grippers and WPC, team is able to establish the same on other machine and eliminate this lapping process.

This has improved competency of team.

## Picture/Image describing the project



Note. More information about the award and how to apply can be found on the [IAQ Quality Award homepage](#)