

**KUNDENBEGEISTERUNG IN SERIE:
WE DRIVE MANUFACTURING TO EXCELLENCE.**



March 26, 2015

MANUFACTURING EXCELLENCE.

MANFREDERLACHER
HEAD OF PLANT SPARTANBURG.

**BMW
GROUP**



Rolls-Royce
Motor Cars Limited

BMW MANUFACTURING CO. WHERE WE ARE NOW.

1,200 Vehicles Each Day

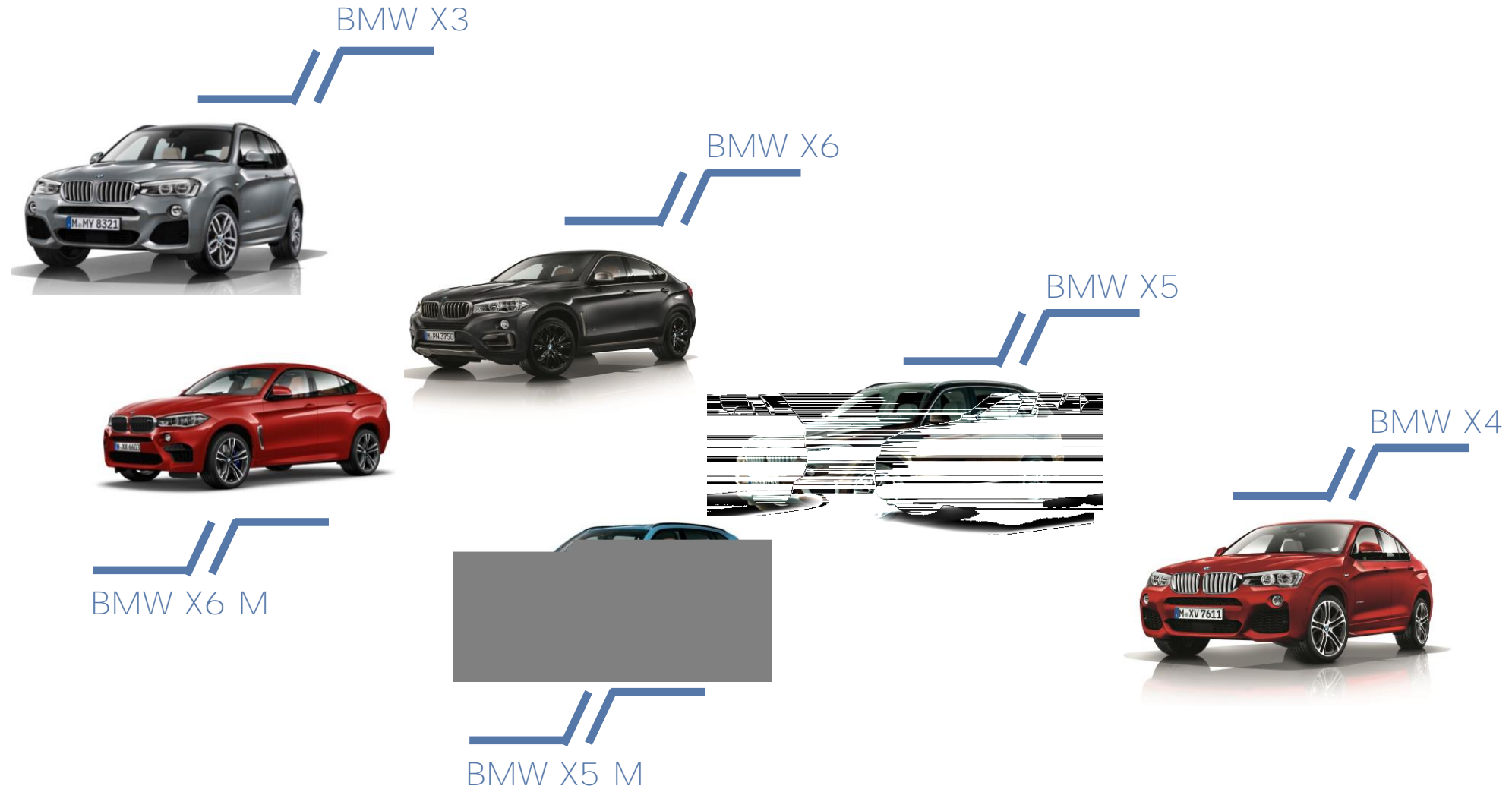
5.6 Million Square Feet

8,000 Jobs On Site

\$7 Billion Investment



BMW MANUFACTURING CO. MODEL STRATEGY.



OUR CORE ELEMENTS ARE EVEN VISIBLE AT EVERY STEP OF OUR VALUE CHAIN.



SUSTAINABILITY WITHIN THE BODY SHOP: BEST FIT. AUTOMATED HANG ON PARTS.



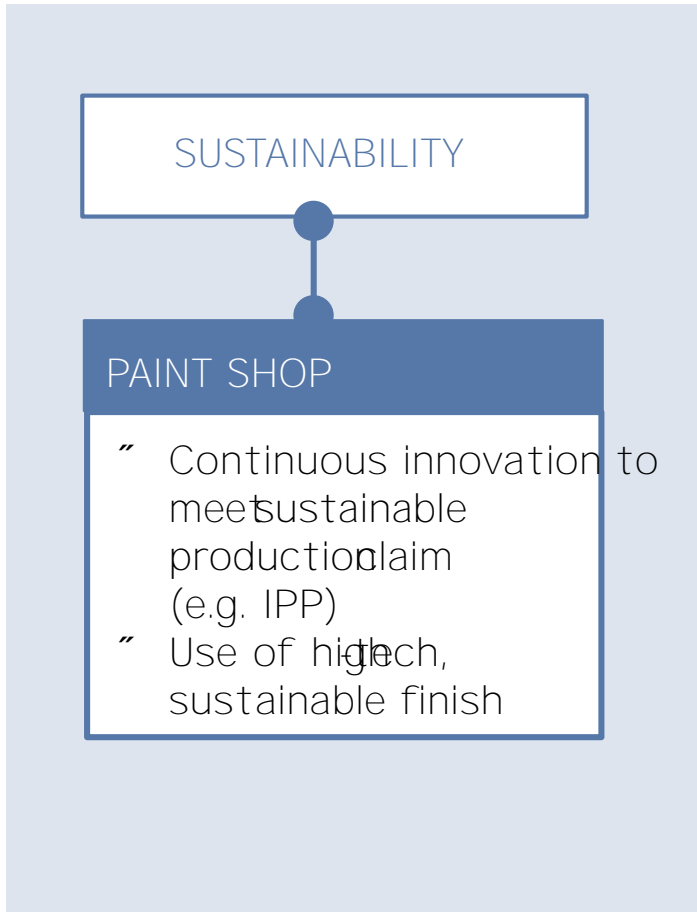
QUALITY MANAGEMENT

BODY SHOP

- “ Best Fit Line, Automated HangOn Parts
- “ Laser Radar Technology

- “ Three dedicated lines for X5/X6 models, another for X3 and a third for the X4.
- “ Lines operating fully automated process for hang on parts (doors, hood, gate), the first in the BMW Group Production Network.
- “ Body shop operating 1400 robots
- “ Laser Radar Technology installed at the end of lines to measure entire BIW, sends data

SUSTAINABILITY WITHIN THE PAINT SHOP: INTEGRATED PAINT PROCESS.



PAINT SHOP

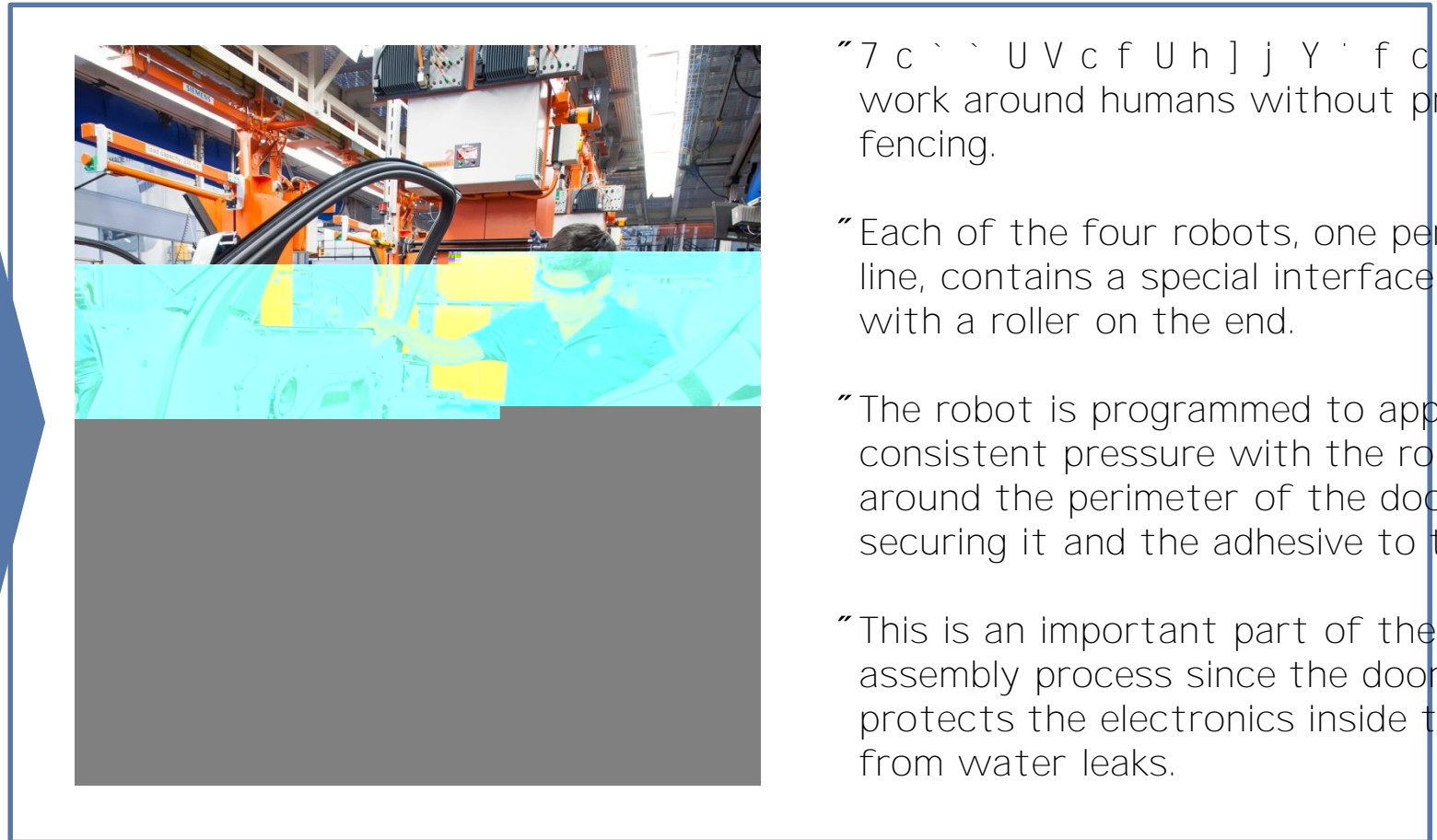
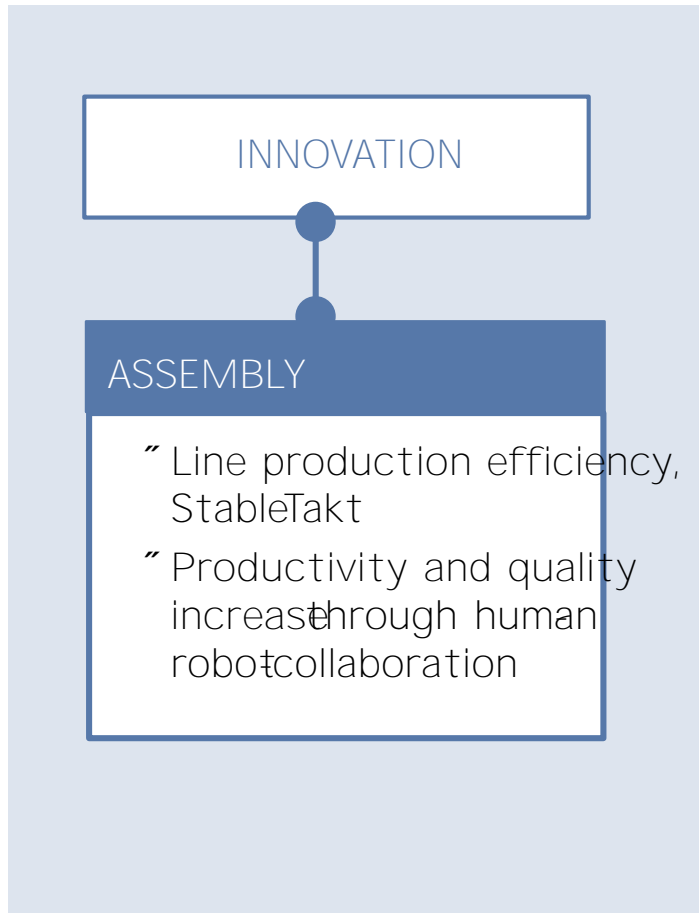
- “ Continuous innovation to meet sustainable production claim (e.g. IPP)
- “ Use of high-tech, sustainable finish

The photograph shows the interior of a paint shop with a white ceiling and fluorescent lights. A large, solid grey rectangle is placed over the lower portion of the image, obscuring the details of the shop floor and equipment.

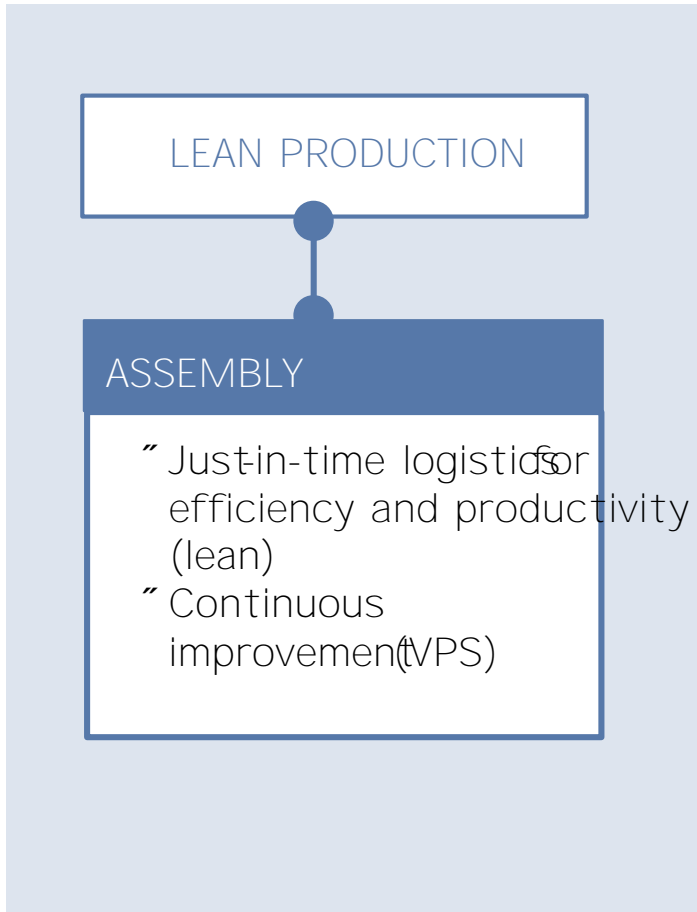
“In the Paint Shop, the Integrated Paint Process (IPP) technology integrates the primer coat process into the top coat process eliminating three process steps: primer, primer over and primer finish.

“This more efficient method combined with the latest in robot application equipment, as well as a ventilation technology, yields an ultra high-performance paint shop that has reduced energy consumption by 30%, carbon emissions by 43%, VOCs by 7% and wastes 2% less than conventional technology.

SUSTAINABILITY WITHIN ASSEMBLY: COLLABORATIVE ROBOTS.



SUSTAINABILITY WITHIN LOGISTICS: SUPERMARKETS AND AUTOMATED GUIDED VEHICLES (AGV).



Value-added production

developed to create:

- ” repeatable, robust processes
- ” improve logistics flow
- ” implement value stream optimized principles, and
- ” pinpoint and eliminate waste in the process

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MANUFACTURING EXCELLENCE.

BMW GROUP CAPITAL MARKETS DAY, SPARTANBURG, MARCH 2015

**BMW
GROUP**

