

**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

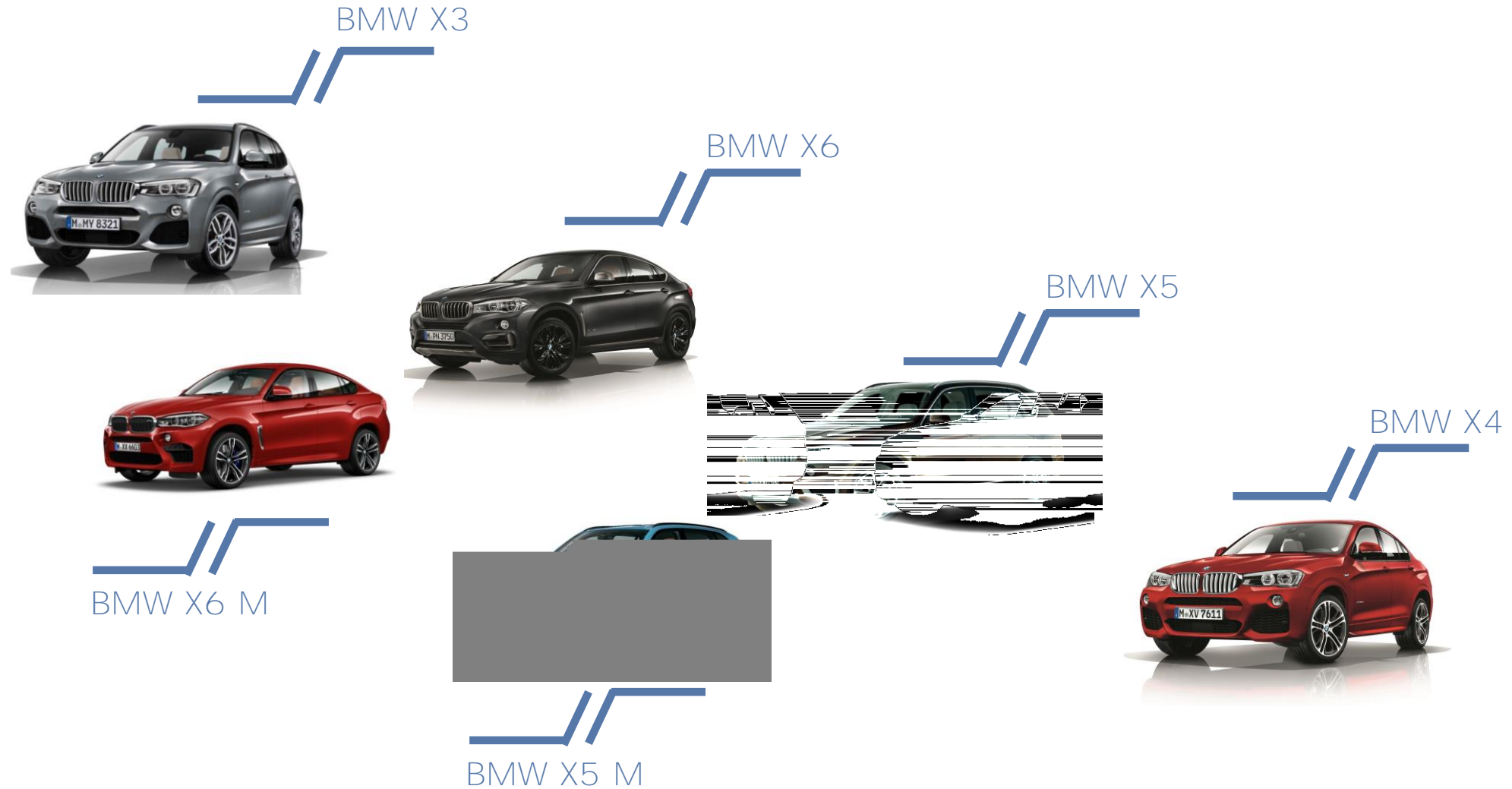
5.6 Million Square Feet

8,000 Jobs On Site

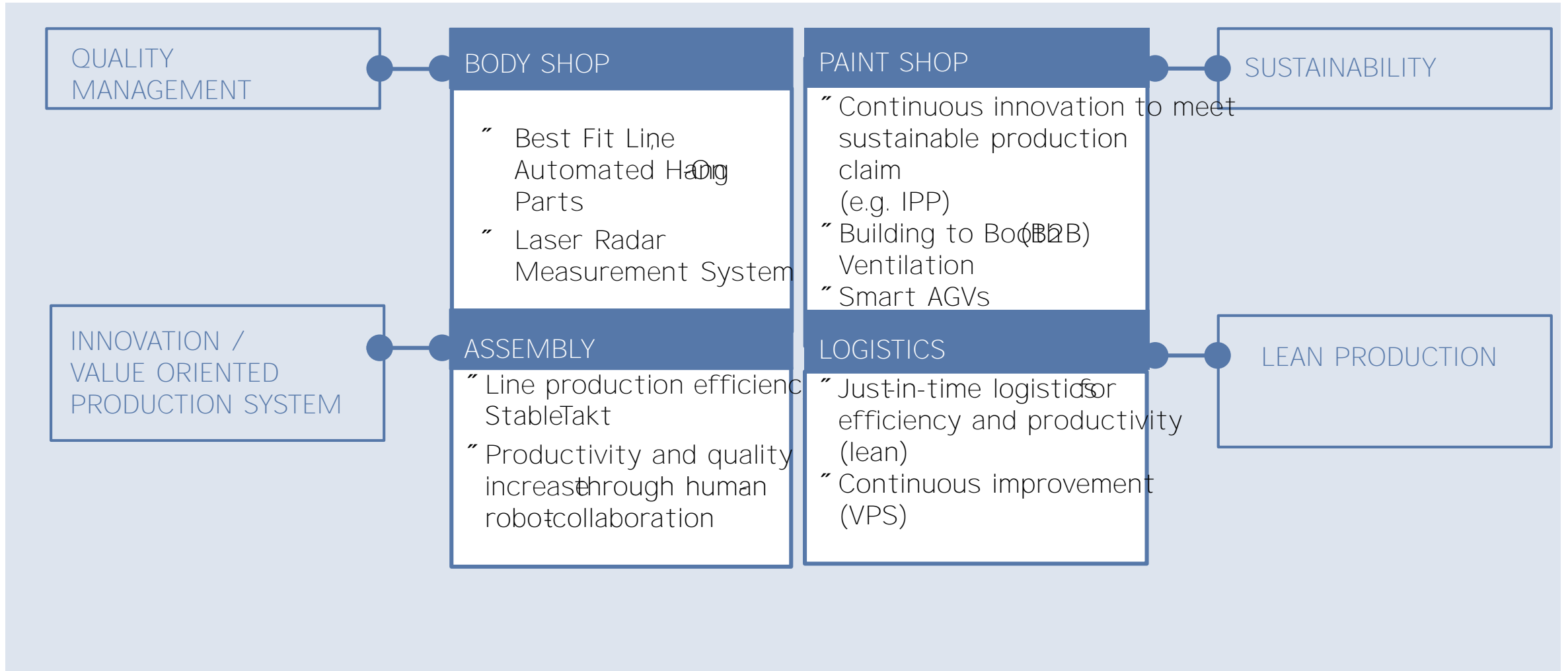
\$7 Billion Investment



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

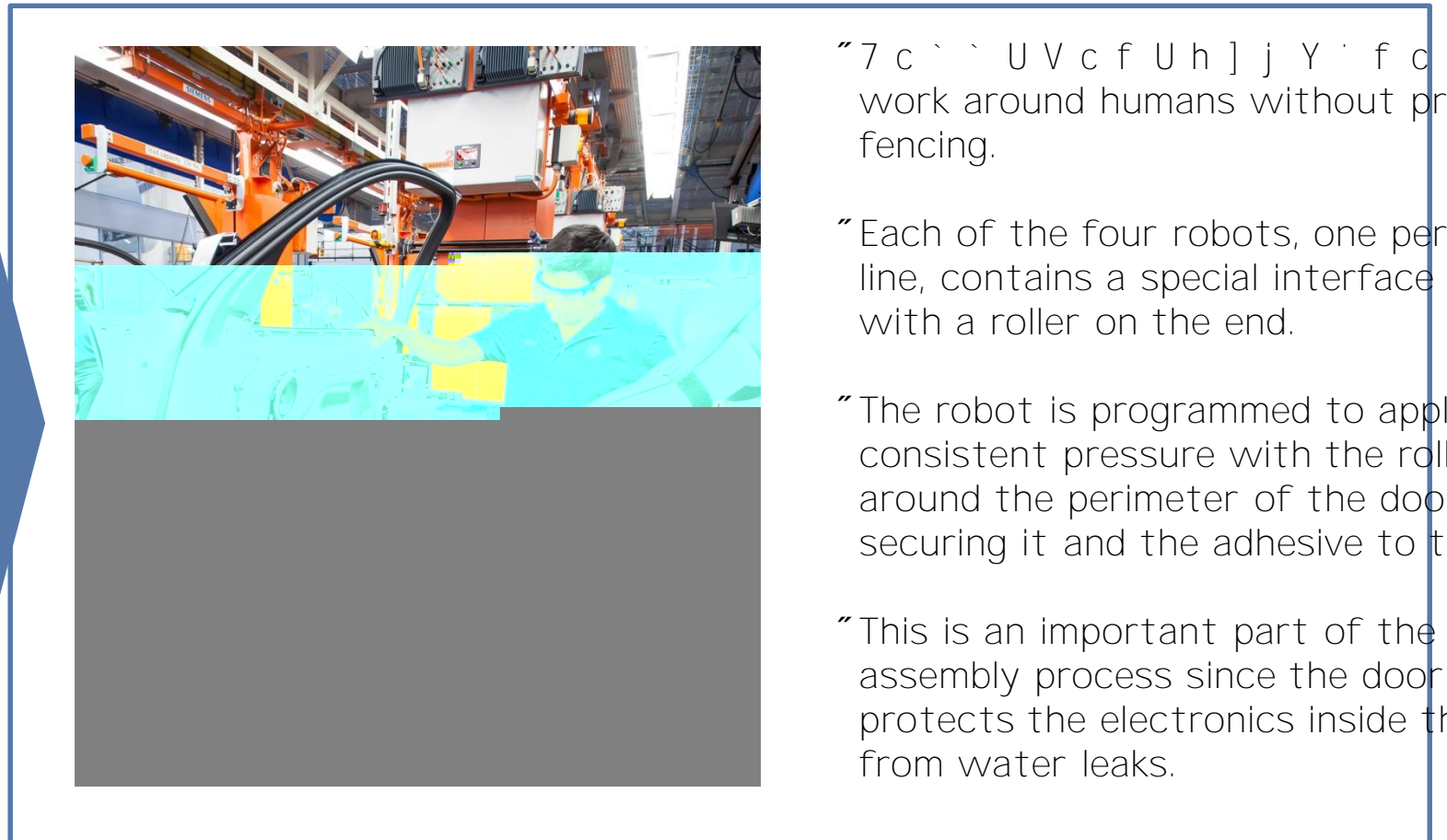
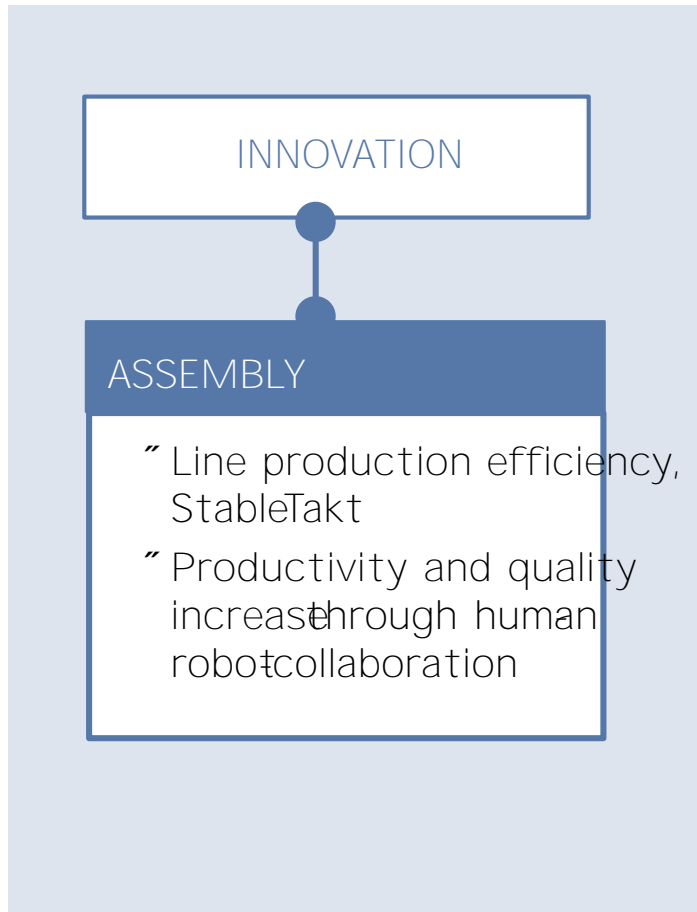
SUSTAINABILITY WITHIN THE PAINT SHOP: INTEGRATED PAINT PROCESS.



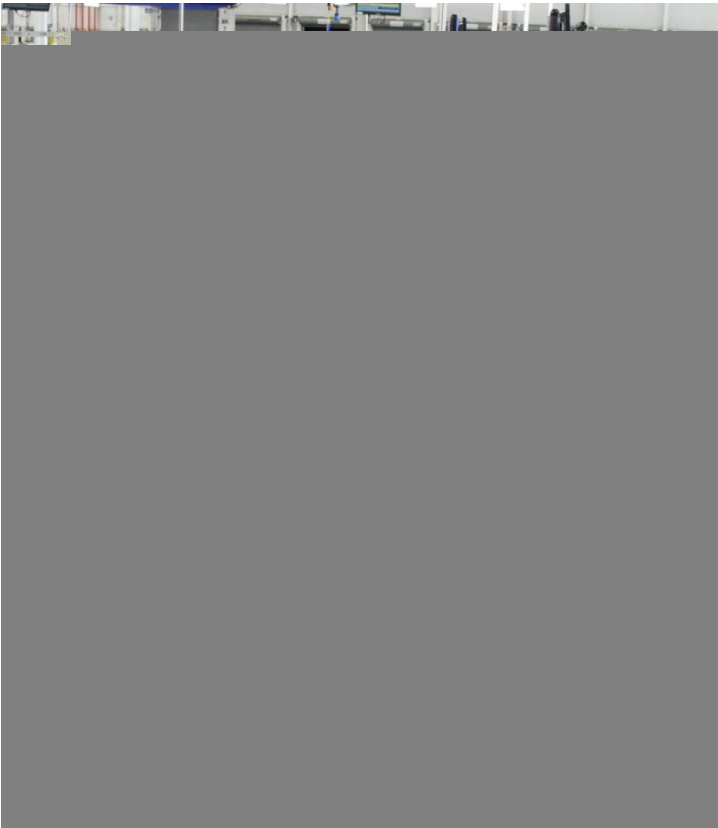
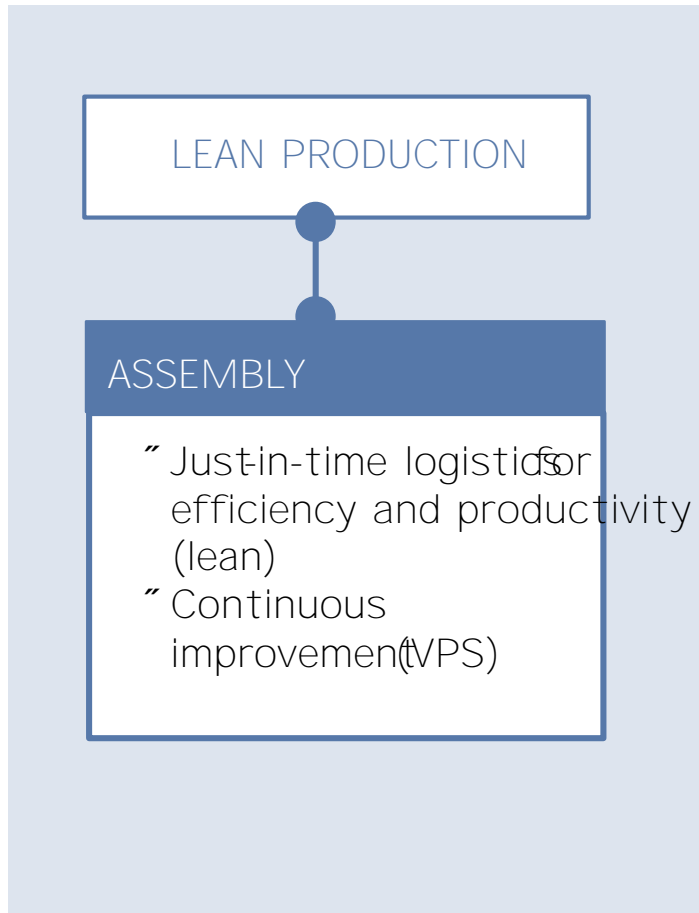
“ In the Paint Shop, the Integrated Paint Process (IPP) technology integrates the primer coat process into the top coat process eliminating three process steps: primer, primer over and primer finish.

“ 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

to lean manufacturing.

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**

