



# QUARRY ACADEMY

Improving Processes. Instilling Expertise.



# Welcome

John Watson – Joe Antonelli



QUARRY  
ACADEMY

Improving Processes. Instilling Expertise.

**DYNO**  
Dyno Nobel



**SANDVIK**

# Program Agenda

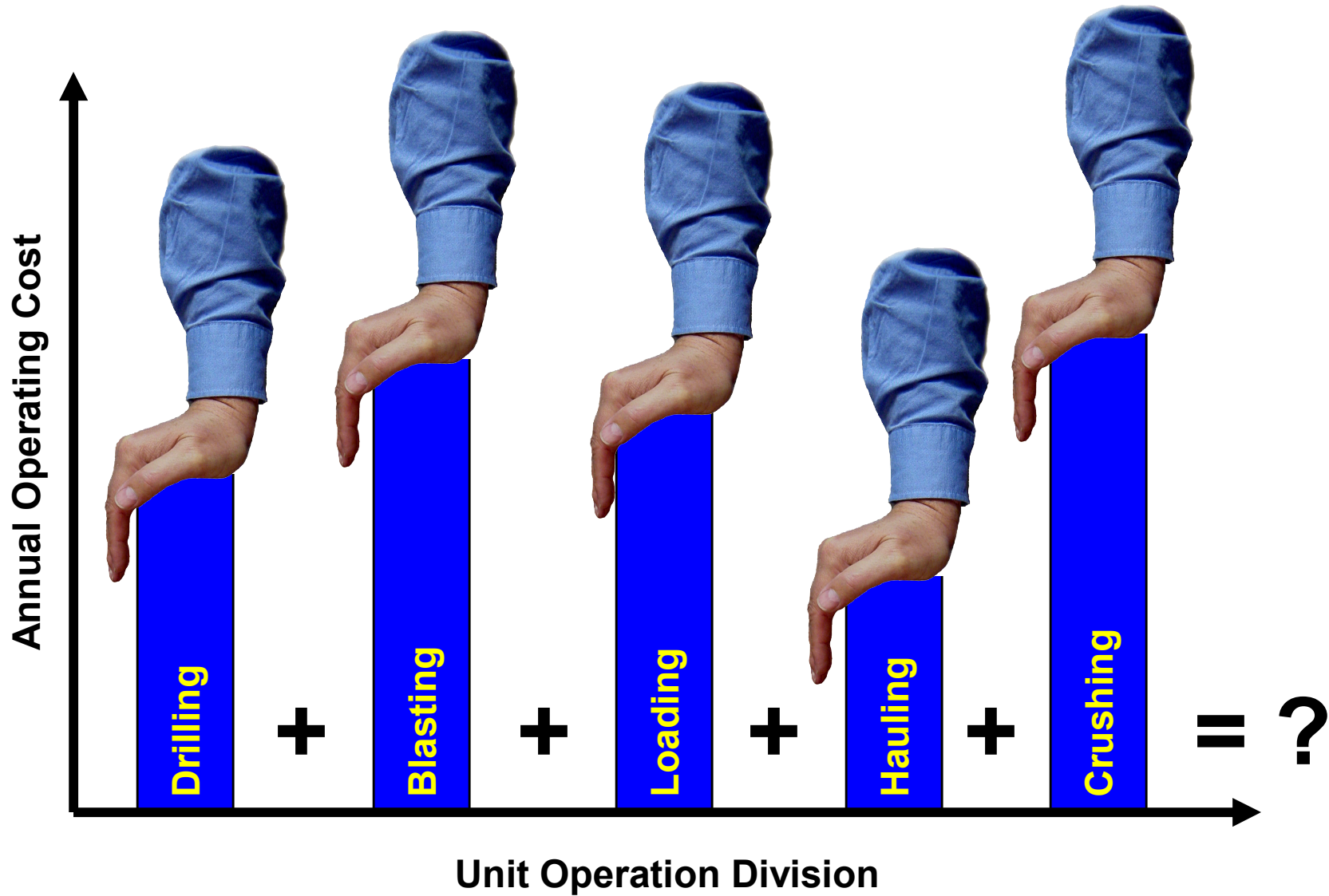
- **Program Overview/Agenda**
- **Today's activities**
- **Safety – Logistics (site protocol)**
- **Introduction of faculty**
- **“Clicker” systems test**
- **Anti-trust reminder**
- **Value chain concept**

Activities that we have seen and grown up with:



How do we look at them? What are our assumptions?

# Cost Optimization According To The Accountants Balance Sheet.

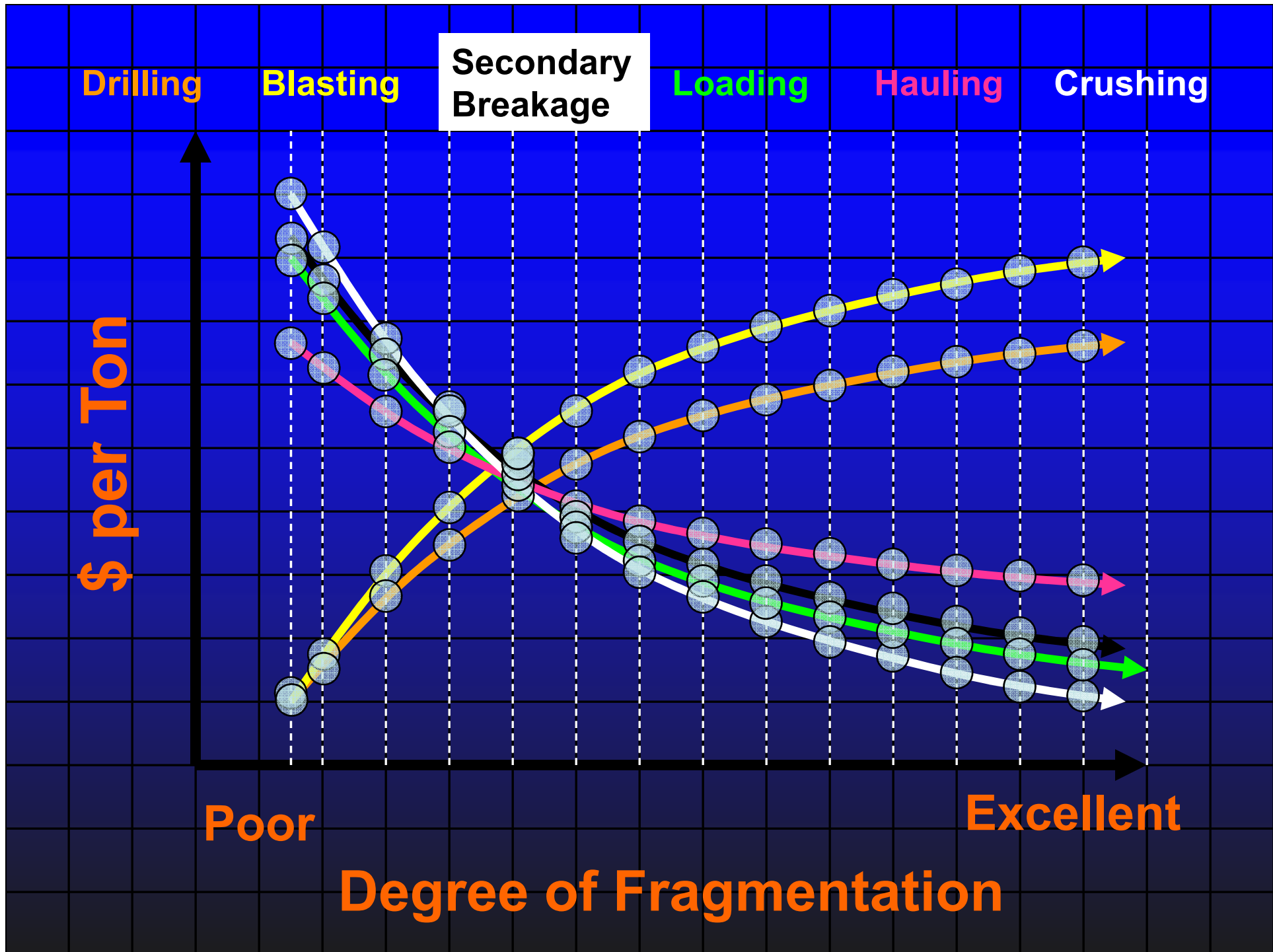


# “Optimality Zone”

+ optimum

- Total Cost -





# Combined Unit Operational Costs

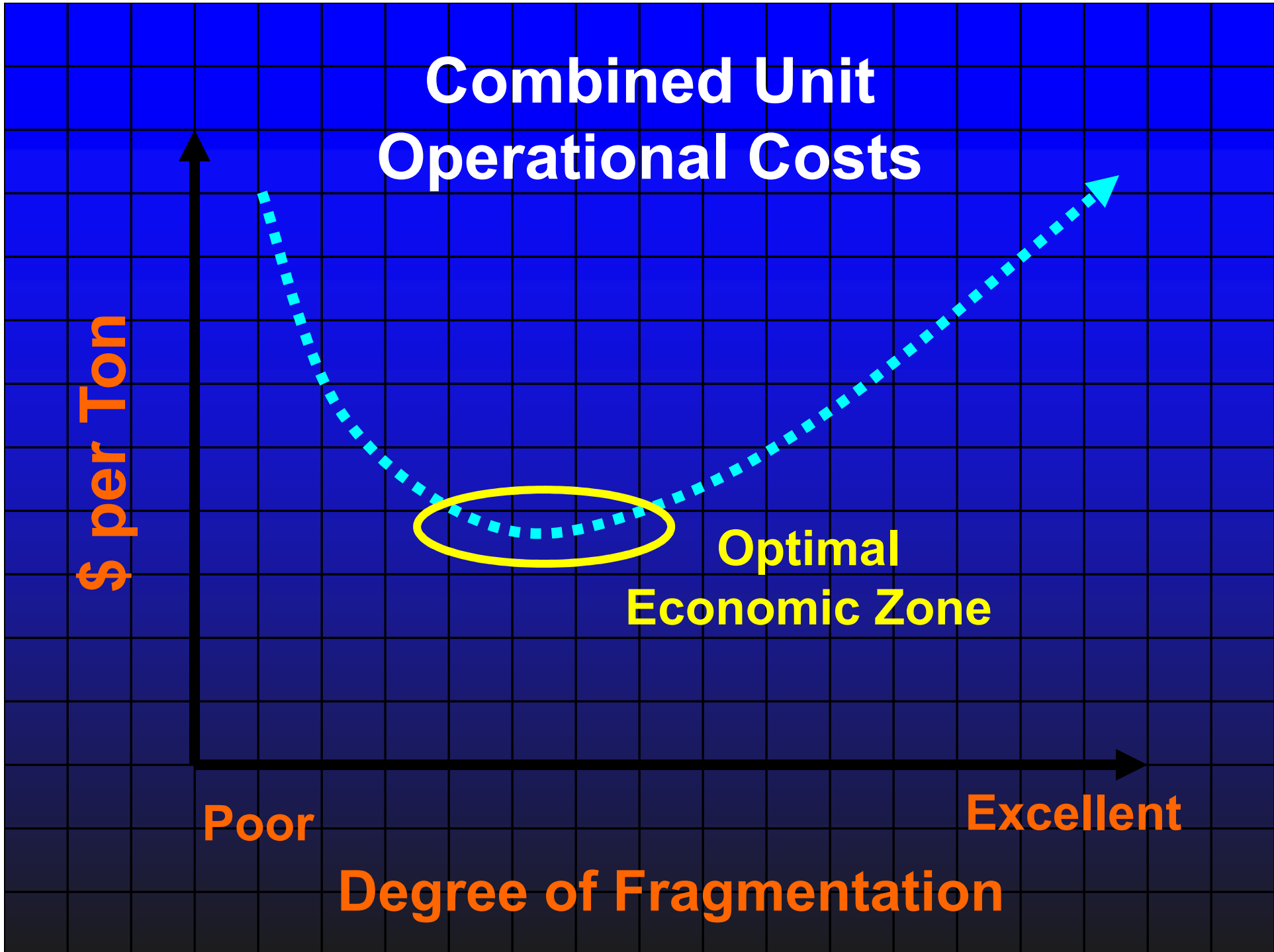
\$ per Ton

Optimal  
Economic Zone

Poor

Excellent

Degree of Fragmentation





# The value chain . . . .

