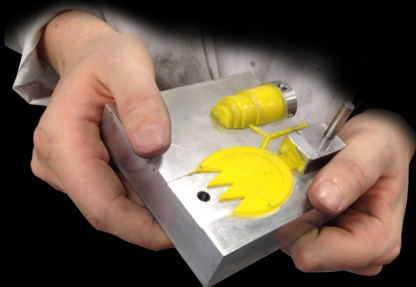




A group task was set to manufacture a widget, this spork would be used at Wimbledon supporting the brand HEAD. The spork comes in 2 parts, which have screw threads to twist together securely. The block was mainly machined on the CNC with various tools for the cavities, due to the finger insert being cylindrical this had to be turned on the lathe to create the stepped effect. Once the making of the mould was complete it was ready to be used in the injection moulding machine.



HEAD

Time Considerations: 8hr/week

Time Available

Weeks: 13

Days: 91

Hours: 2080

Minutes: 124,800

Seconds: 7,488,000

Seconds: 7,488,00

3million

Order

2,496,000

3,328,000

3 widgets/mould

4 widgets/mould

Another task was to solve a set problem: To make 3million widgets in 3 weeks. The workings out are stated.



WIDGET MANUFACTURE

WIDGET VOLUME

TOTAL Volume
8135.41mm

Spork Head

3109.90mm

Finger Part

5024.51mm

7.73g

Total Weight

4sec

Injection Time

5sec

Disassembly Time

9sec

Time Cycle Time

FINAL FIGURES



3,328,000 widgets



328,000 surplus



82,000 extra injections



205 extra hours

3weeks to manufacture

unnecessary turning machines
on/off=more manufacturing costs