



July 25th Planning Meeting Minutes

Action items

1. We will use the Digital Twin logo (#2) with neutral colors for the perimeter.
2. DMG and Hyundai will demonstrate at IMTS
3. DMG and Makino will demonstrate at JIMTOF
4. Combine stages 1 and 2 to make a 3-axis demonstration
5. Combine stages 3 and 4 to make a 5-axis demonstration
6. Create short probe programming to enable an alternate, fast stage 4 validation
7. Create probing program for the stage 2 to 3 transition (two holes plus upper rear corner)
8. Ask Hyundai to select a new location for the positioning holes that meets the constraints of their fixture.
9. DMG or Hyundai to obtain six IMTS guest exhibitor badges for the Boeing and STEP Tools team.
10. DMG to complete the Digital Twin logo (#2) with neutral colors
11. Sid to obtain large eps for MTCConnect logo, Rich to obtain same for OMAC, Martin to obtain same for STEP, Larry to obtain same for QIF.
12. Renishaw to install probing cycles on the DMG machine at Pfronten and for IMTS
13. Renishaw to install probing cycles on the Hyundai XF6300 for IMTS
14. Extend AP238.org or OMAC.org or 23247.org to include information on a new “vendor neutral” Digital Twin Factory.

Going Forward Plans

1. Start a Digital Twin Factory using the existing fishhead demonstrations and extend to include protocols for linking machines, changing tooling, loading solutions, etc. (<http://fishhead.steptools.com:8081/8082/8083/8084>).
2. Distribute business cards and stickers at IMTS to promote participation in the new factory and to publicize the demonstration to be given at the ISO Industry day.
3. Demonstrate the new factory by giving demonstrations of synchronized physical and virtual machining at the ISO Industry data in Chicago.
4. Invite further participation in the digital twin factory by asking vendors and industry to
 - a. Add additional machines and other devices to the factory
 - b. Place exemplar test parts for manufacturing in the factory
 - c. Write processes that use the factory to make virtual parts
 - d. Develop new applications to make the factory more efficient
5. Promote the new digital twin factory in the media.

July 25, 2018

DRAFT AGENDA
IMTS and JIMTOF Grand Challenge Planning Meeting
July 25, 2018

Day 1

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|---------|--|
| 07:30AM | Badging at Boeing Building 10-20 |
| 08:00AM | Move to BR&T lab
<i>Sid Venkatesh and David Odendahl, Boeing</i> |
| 08:30AM | Roughing and Probing Stages 1 and 2
http://fishhead.steptools.com:8081/
<i>Sid Venkatesh, Boeing</i> |
| 09:30AM | Finishing and Probing Stages 3 and 4
http://fishhead.steptools.com:8084/
<i>David Odendahl, Boeing</i> |
| 10:30AM | Return to Building 10-20 |
| 11:00AM | Digital Twin Manufacturing
Discussion and recommendations
Martin Hardwick, STEP Tools |
| 12:00PM | Sandwich lunch |
| 01:00PM | Logos, posters, stickers and banners |
| 02:00PM | Logistics, sign up procedures
Publicity and Press Releases |
| 03:00PM | Break |
| 03:30PM | Demonstration by Sandra Haege of 3D AR applications |
| 04:00PM | Going forward plans
<i>JIMTOF and ISO Industry day in Chicago</i>
<i>The virtual 3D digital factory</i> |

Logo Variante 2

