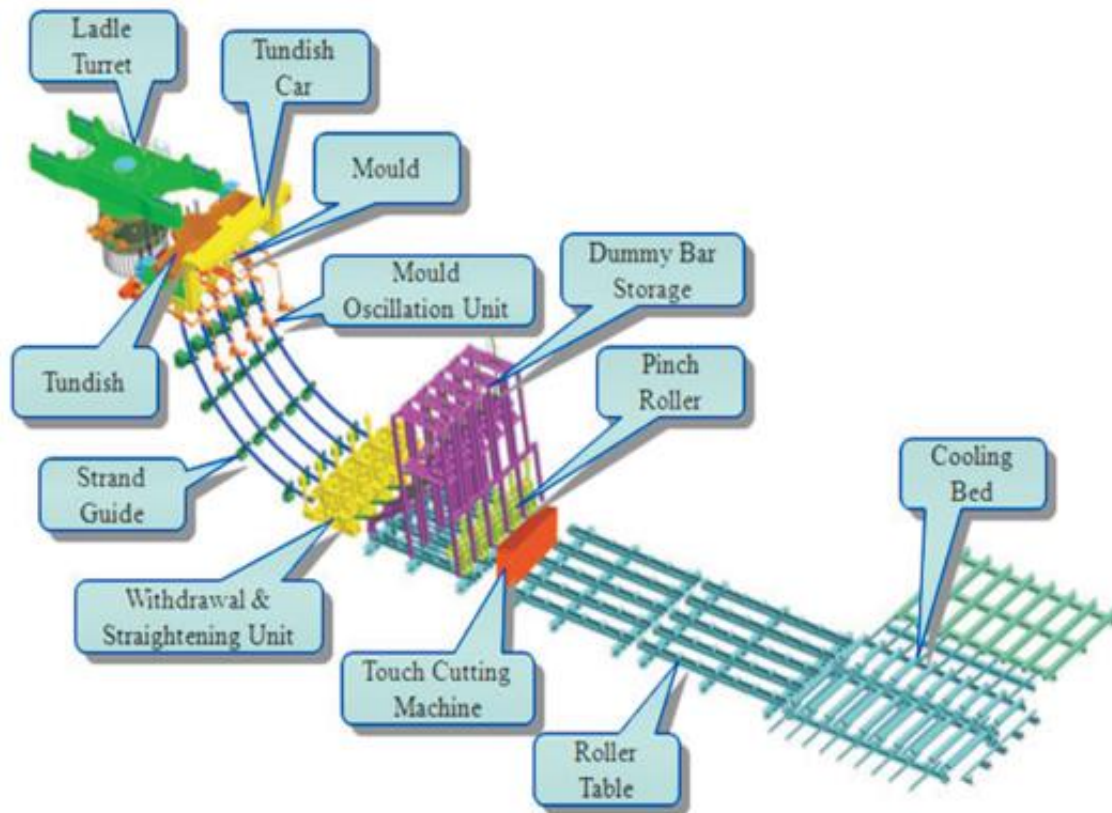


LASER ALIGNMENT OF CONTINUOUS CASTING MACHINE



Input data required from Customer:

1. Elevation, extrados and CCM center benchmarks
2. Casting radius value

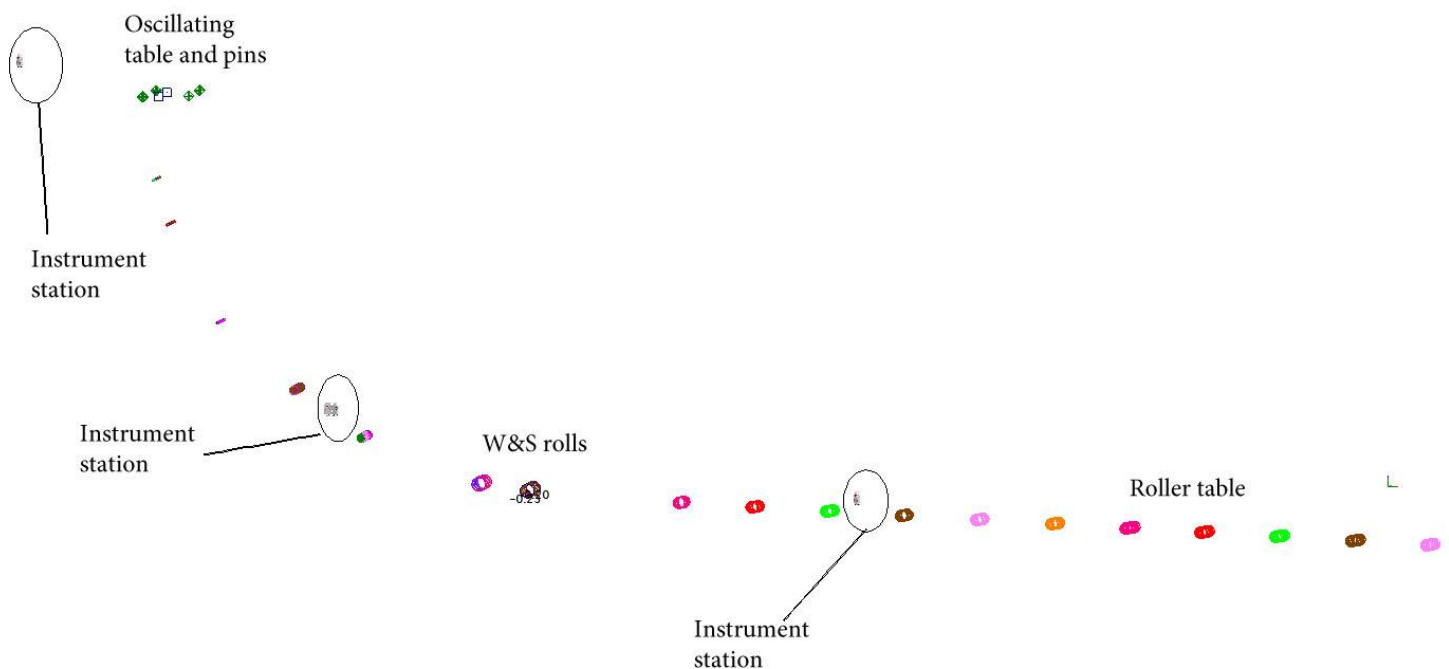
Output after alignment:

1. Casting floor equipment alignment:
 - oscillating table elevation
 - pins position
2. Cooling chamber:
 - Movable and fixed sector hooks alignment to the casting radius
 - Guiding rolls alignment to the casting radius
3. Withdrawal and straightening unit:
 - W&S unit rolls alignment to the casting radius

4. Dummy bar parking device alignment on extrados and elevation
5. Cutting torch unit guiding rails alignment to strand center
6. Roller table rolls elevation and strand center alignment.

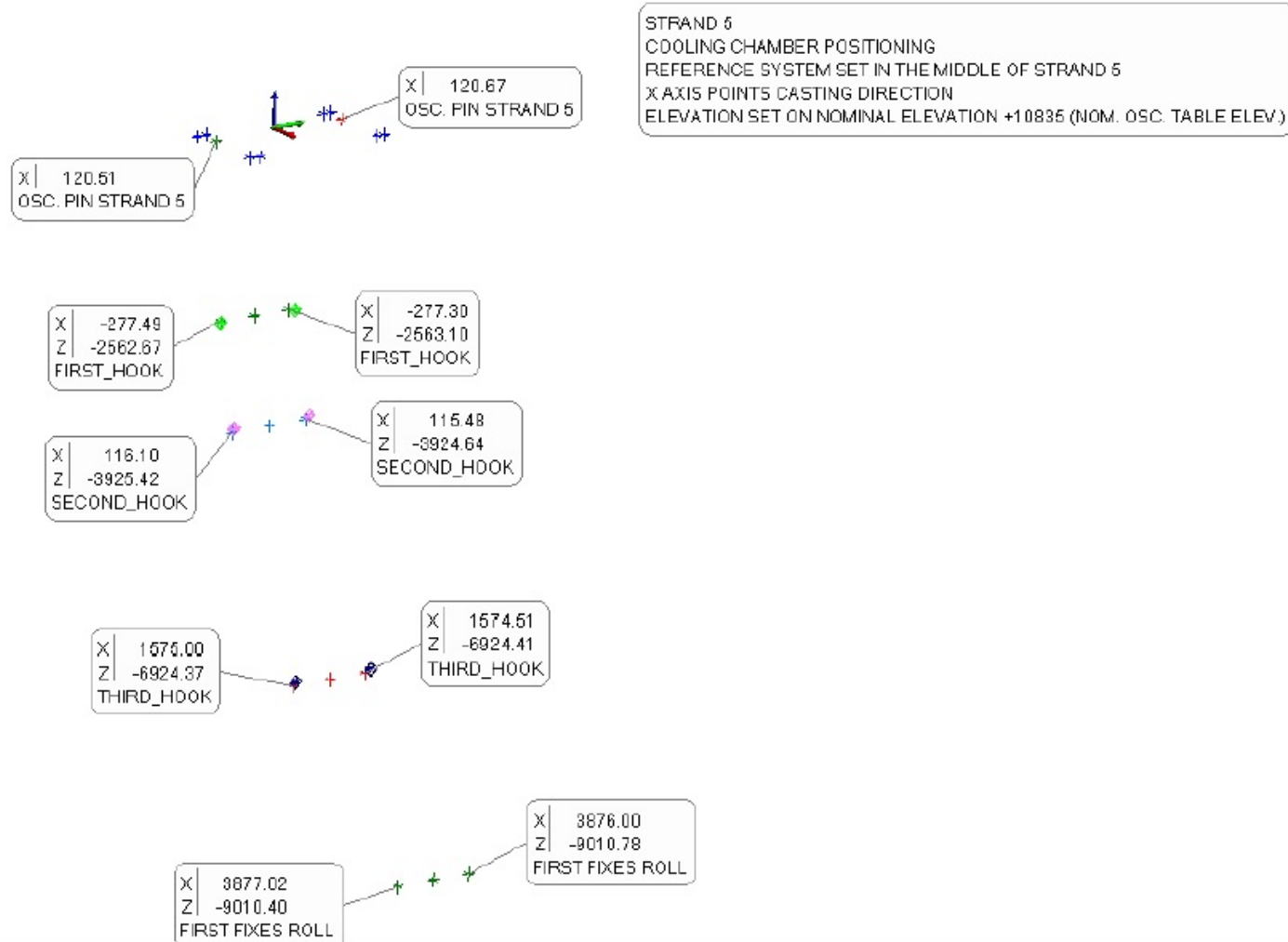
Advantages of laser alignment:

1. Accuracy of measurements is maintained over big distances (320m)
2. Software integration due to multi station functionality allows you to tight up all object (virtually not visible from one position) in one 3D image which allows you to acquire any relative dimension/position in space
3. Time savings: fast instrument installation, measurement acquisition and results reporting.



REPORT EXAMPLE

Report can be customized to the Customer requirements.





Oscillation tables



Cooling chamber rolls and sectors