



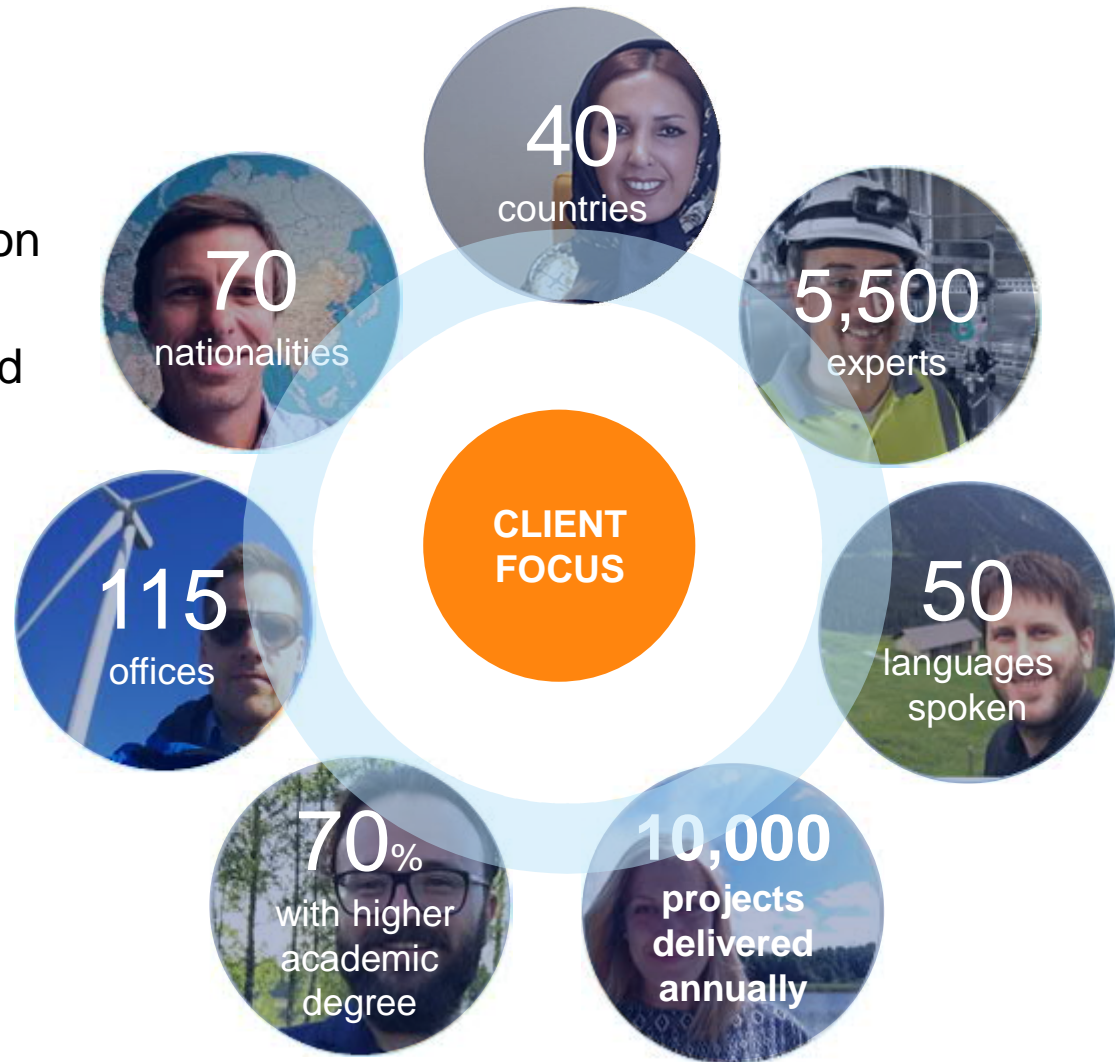
LATEST VR-TECHNOLOGY IN PLANT ENGINEERING PÖYRY FINLAND OY

Jari Laitinen, Jani Peltopuro 29.10.2018



WE ARE PÖYRY – THE CONNECTED COMPANY

- Delivering consulting, engineering, project execution and operational services.
- Global community of talented people working closely with clients locally.
- Inspiring new solutions by connecting deep expertise and profound insight.
- Contributing to projects that make a difference.



ENERGY



INDUSTRY



INFRA

CONNECTING COMPETENCE ACROSS A GLOBAL NETWORK



PROJECT LIFECYCLE SERVICES

Operations support
 Operational Improvement
 O&M Management
 Outsourced Operations

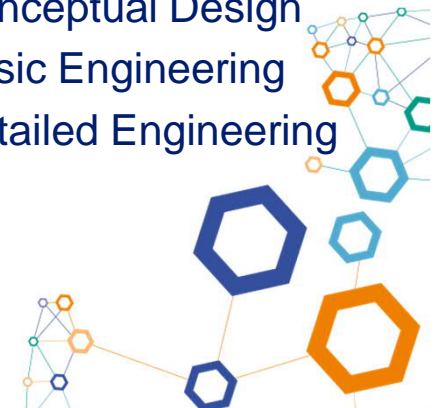
Project implementation
 Site Supervision
 Project / Construction
 Management
 EPCM
 EPS / EPC



Management consulting
 Strategy
 Markets
 Transactions
 Operational Services
 Biofutures

Engineering services
 Technical Consulting
 Conceptual Design
 Basic Engineering
 Detailed Engineering

Consulting. Engineering. Projects. Operations.



WE ARE INVESTING HEAVILY IN #POYRYDIGITAL SOLUTIONS

Pöyry Innovation Link:

enabling utilities to keep track of the constant flow of new ideas generated in the energy sector

Building Information Modelling:

revolutionising the engineering process and culture – going beyond 3D by augmenting spatial dimensions with time and cost

Smart Water: taking advantage of the latest digitalisation techniques in fluid mechanics to create world-class water treatment plants

Smart Forestry: contributing unique insight and powerful analytical tools for strategy and operational excellence in forestry, wood and biomass supply chain

Pöyry Smart Site: optimising the processes and operations of the entire site. Supporting the creation of sustainable solutions by utilising digitalisation, systems intelligence and big data

LATEST VIRTUAL REALITY? 😊



LATEST VIRTUAL REALITY!



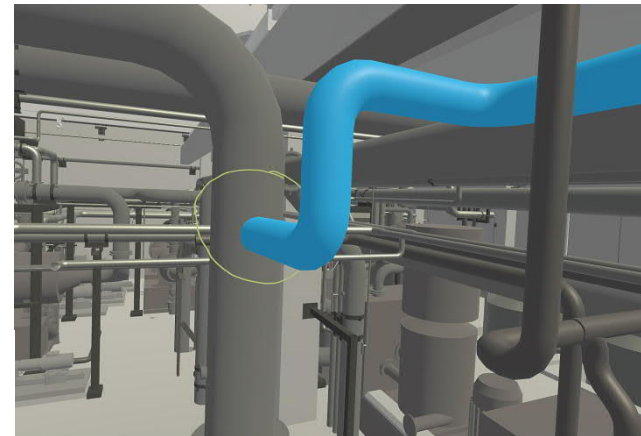
DEMO



PÖYRY VIRTUAL SITE DESIGNER - INTERACTIVE VIRTUAL REALITY FOR EFFICIENT DESIGN

Pöyry Virtual Site Designer application enables designing in VR environment from multilocations

- Super visual and interactive environment
- Easy to perceive the big picture and the smallest details
- Multisession environment enables several users around the globe at the same time
- Interactivity complements the VR experience
- Plan the modifications by measuring and marking the places
 - Add piping or other modules to the site
 - Add notes and export them after the session
 - Usage of common mobile platforms



PÖYRY VIRTUAL SITE DESIGNER – USE CASES

- During engineering and planning phase
 - Realistic environment you can walk in and see all the details
 - Realistic view to all measurements inside and outside the site
 - Agree and make changes to the plan with any stakeholder
 - Design review with multiple stakeholders without getting into the same room
- During running the operation
 - More effective maintenance
 - Optimisation of change planning and management
 - Always up-to-date digital asset of the site area
- Training the new employees / visitors
 - Realistic training environment either alone or using the multisession feature
 - Efficient – can be done outside the mill area
 - Safe environment

HOW TO GET PÖYRY VIRTUAL SITE DESIGNER IN USE?

It starts with establishing of 3D environment either design model, laserscanning or photogrammetry

- What is all about
 - Cloud based VR environment
 - Compatible to any VR hardware and controllers (HTC Vive is recommended)
 - Client software running on high-end PC with powerful display controller required (Specification available)
- Pöyry delivers
 - Cloud server setup
 - Client subscription
 - Training day for setup and usage guidance
 - Support for the service
- Customer responsibility
 - PC hardware purchase according the guidance
 - VR equipment (glasses, controllers and beacons)
 - Space with network connection
- Service options
 - PC hardware and VR equipment
 - Installations and configuration
 - Additional training day(s)

THANK YOU!

Interested in implementing VR? Don't hesitate to contact!

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