REMOTE ASSISTANCE

BUSINESS SCOPE: Remote online assistance based on the two way video call. Assistance is provided on A) worker to worker or B) worker to specialist scenario. Solution on Smart glasses for worker offers selection from the list of assistants and choice is done for the most suitable in current situation

Shop floor managers and specialists
- Downtime reduction and fluent work flow
- Knowledge sharing between workers and related stuff
- Repository of knowledge built for future use
- Identification of bottlenecks in workers knowledge
- Transparent information of knowledge of workers

Workers
- Video transition to smart glasses with possibility to provide guidance how the work should be done
- Documents and multimedia files can be sent
- Replacement for old fashioned paper materials and drawings which must not be carried anymore
- No need to interrupt the work and to leave the field
- Whole work can be recorded

Technologists and productivity analysts
- User friendly self-explanatory environment
- Remote assistance recordings can be analysed on which workflows workers need to be learned

Company level benefits
- Adherence to ISO Standards of the company
- Sharing information between real and digital twin of the company – **Industry 4.0**
- Work optimization based on analysis of recorded experience

BOTTOM LINE: Improved quality and productivity of human-centric shop-floor processes

TIME & MONEY SAVINGS
- Downtime reduction
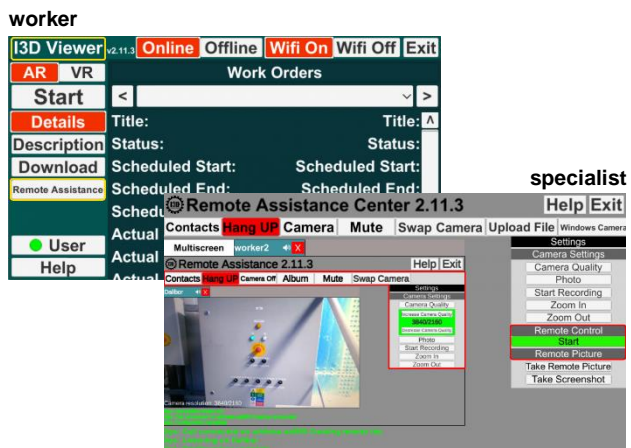- Digitized knowledge repository
- Learning in the field with remote assistant

THE I3D CONCEPT

WORKER WITH SMART GLASSES AND I3D

VIDEO STREAMING AND ASSISTANCE FROM SPECIALIST

Comment: Novitech a.s. (SK) is I3D development partner of e-Content Store S.a.r.l. (LU)

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KEY I3D INDUSTRIAL SERVICES

I3D-WF -- Workflow editor
Definition and/or update of workflows: Work locations, actions, events, resources, tools.

I3D-WO -- Work order management
Composition of work orders from defined workflow types. Schedule and Assigning work order to worker(s).

I3D-LE -- Work order learning
Delta learning of work order in VR (virtual reality) smartglass mode

I3D-WE – Work order execution
Execution of work order in AR (augmented reality) smartglass mode

I3D-WR – Work order completion reports
Work order results reports by steps and actions (worker multimedia inputs)

OPTIONAL I3D INDUSTRIAL SERVICES

I3D-RA -- Remote assistant
Online remote support for technician / worker in work order execution (I3D-WE)

I3D-OR – Object recognition
Recognition of an object (machine, product) from a set of object samples

I3D-NW – New worker learning
Offline VR learning of workflow by a new worker. Test capabilities of worker.

I3D-ML – Multilanguage
Working language(s) and local company settings

I3D-VT -- Industrial virtual tour
VR presentation - virtual tour of plant (Smart glass and desktop). Navigation to work order locations.

I3D-MW – Multiply workflow management
Workflows managed by events based on workers´ inputs set during their work order executions

I3D-OC -- Optical character recognition
Value inputs to work order can be collected from OCR, barcode or QR code

I3D-AR -- Alarm receiving centre
Two-way live video streaming, with availability to connect to third party video streaming server

I3D-AP -- Interfaces / connectors
APIs to connect with ERP (SAP, Oracle) and process control systems (IoT) of Client

CLIENT SUPPORT SERVICES

I3D-S0 – Pilot use case service
Technical assistance in pilot use case selection, design and implementation (max. 2 months) – free

I3D-S1 – Trainings of client team
Web meeting and on-site trainings of shop floor managers, technologists and workers

I3D-S2 – Help desk services
7/24 help desk services

I3D-S3 – Custom SW development
SW development in integration of I3D services with client IT systems