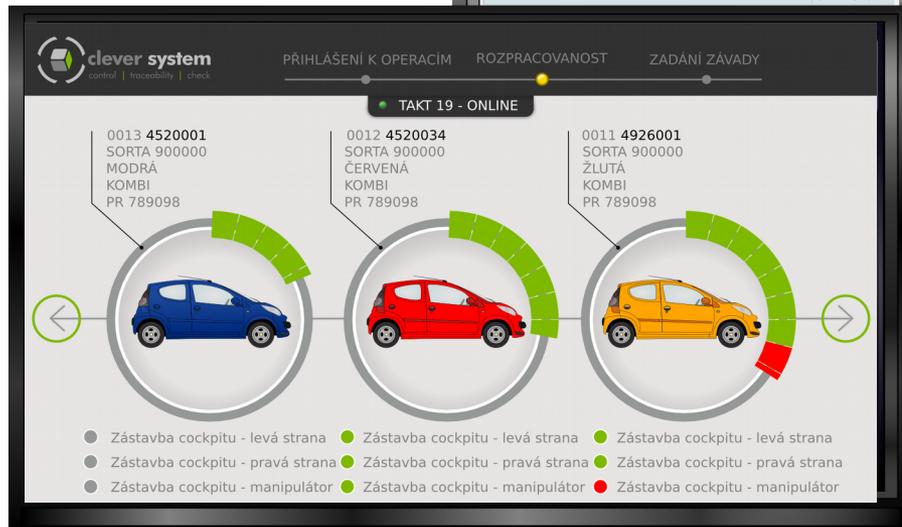


# MES Clever System Applications



**clever system**  
control | traceability | check

PŘIHLÁŠENÍ K OPERACIM    ROZPRACOVANOST    ZADÁNÍ ZÁVADY

TAKT 19 - ONLINE

0013 4520001 SORTA 900000 MODRÁ KOMBI PR 789098	0012 4520034 SORTA 900000 ČERVENÁ KOMBI PR 789098	0011 4926001 SORTA 900000 ŽLUTÁ KOMBI PR 789098
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- Zástavba cockpitu - levá strana
- Zástavba cockpitu - pravá strana
- Zástavba cockpitu - manipulátor



**clever system**  
control | traceability | check

Pracoviště linky MB

OMS BROWSER

linka 1    Clever Time Tracker

EB66875 #156

Pracoviště linky MB

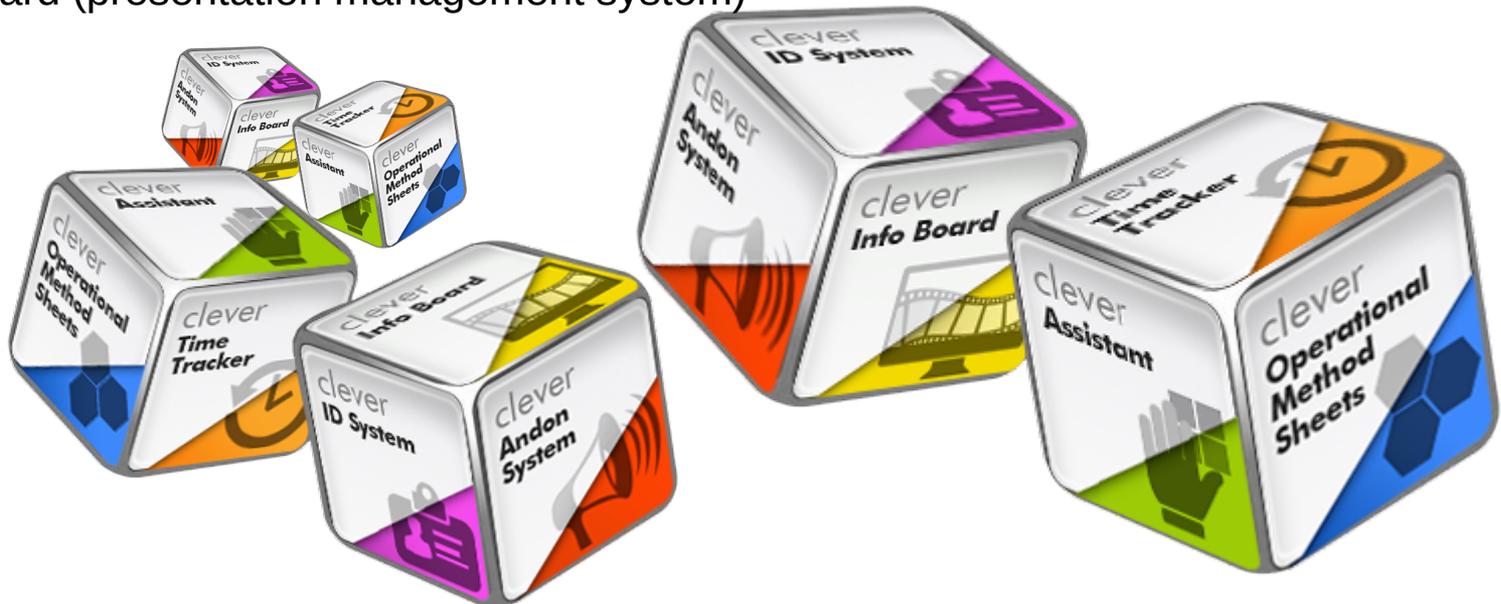
PO dokončení stojan 1  
PO dokončení stojan 3  
PS ZBP montáž  
PS výstupní kontrola

PO dokončení stojan 2  
PS montáž PO + PS  
ZS dokončení 1  
ZO dokončení ZO 4  
Logistik manipulátor 3  
ZO sponkování  
ZO - koryto  
Trenink direct 4

**CLEVER Soft s.r.o.,**  
Sluneční 127, Kolín II, 280 02  
tel.: +420 321 751 081, e-mail: info@clever.cz

# CLEVER System

- ✓ MES - Production line control
- ✓ OMS - Operational Method Sheets (Records and distribution of production documentation)
- ✓ ID System (Applications based on people identification with the help of cards or chips)
- ✓ Andon System (workplace situation monitoring)
- ✓ CTT Clever Time Tracker (production monitoring and visualisations)
- ✓ Info Board (presentation management system)



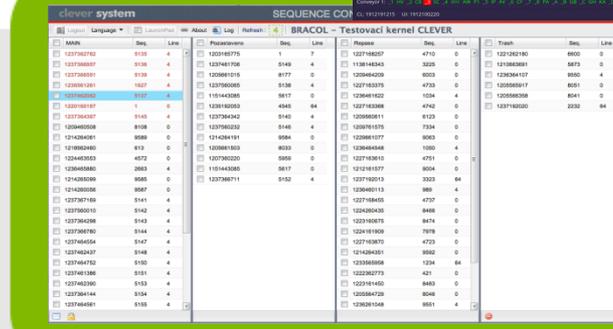
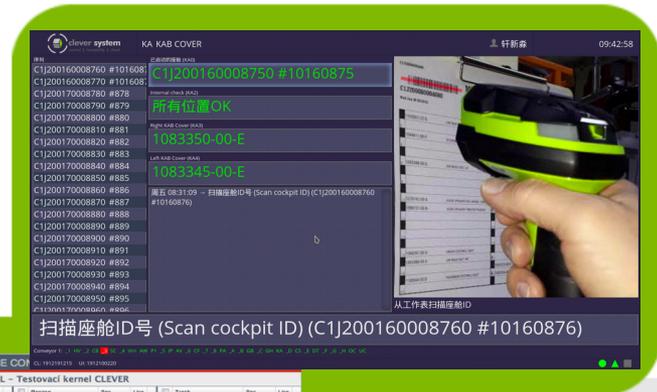


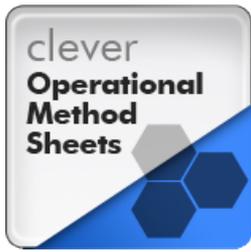
# MES

## Clever Client & Kernel

Application for production management, control traceability.

- Sequence checking
- Display working instructions
- Previous work station checking
- Checking of correct part assembling
- Poka-yoke checking
- Tightening torque (D-connection) checking and tightener management
- Serial number records
- Real-time measurements
- Picking parts from shelves
- (Pick to light)
- Input signals
- Visual checking
- Inspection cameras

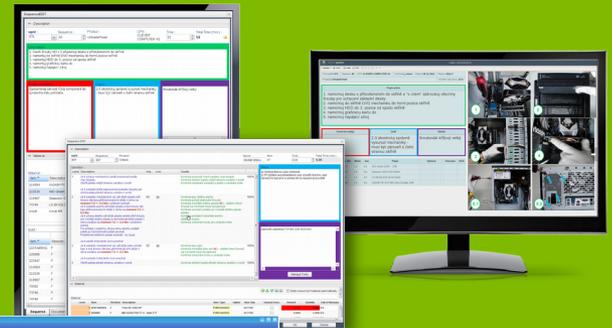
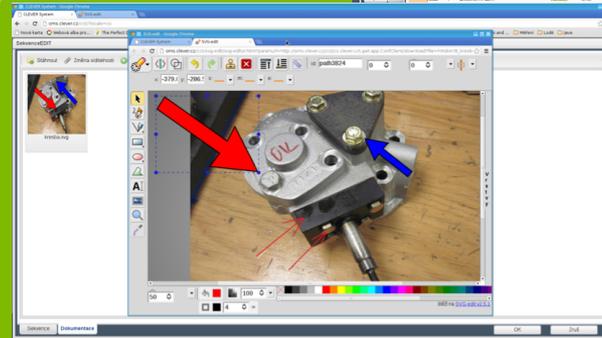




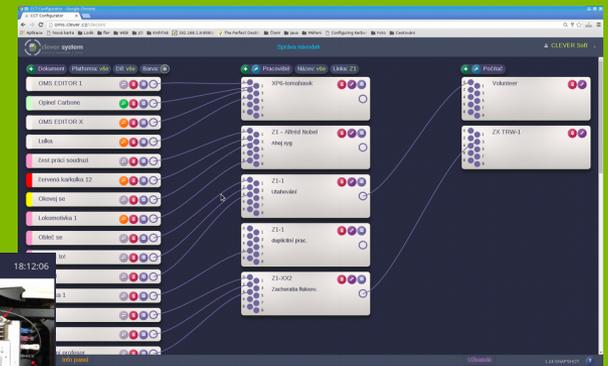
# Operational Method Sheets

Application for managing technological processes and their displaying at workplaces.

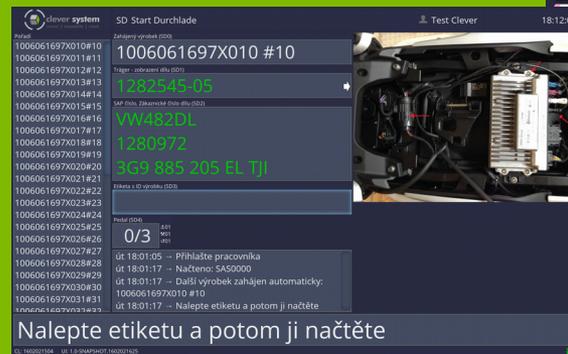
It is possible to create a set of technological processes, pictures and other documents for every product.



The type and status of document editing is highlighted with colours.



Operational method sheets for corresponding operations can be displayed on dedicated OMS terminal or in the application Clever Client.





# ID System - Training register

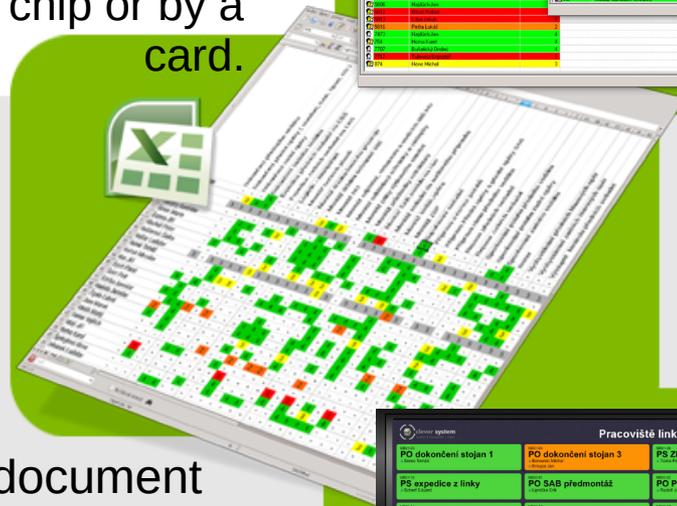
The application provides an overview of operator training for working on workplaces of a production line. It uses people identification by a chip or by a card.

An overview of managed documents is available for each operator.

Application is able to export a matrix of documents managed by operators.

After a setting of a new level of a document management, an announcement of the training is issued by the system.

An operator puts his signature on it by a reading of his ID card on a terminal. A login to a workplace can be conditioned by a managing of a needed document.





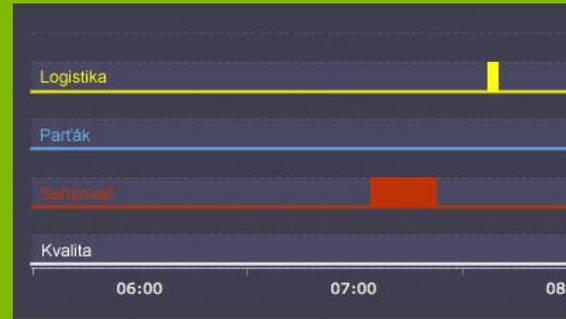
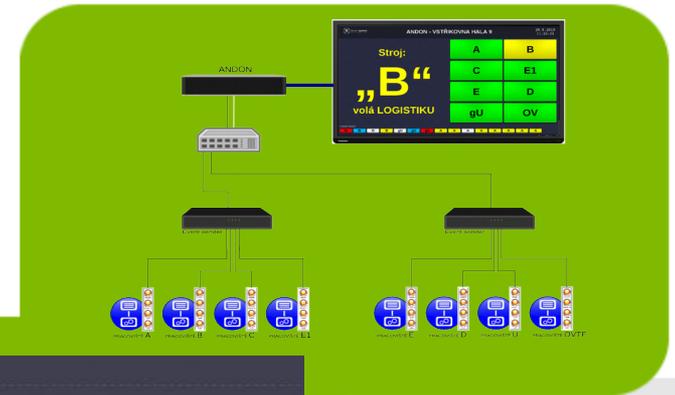
# Andon System

Application for visualisation of workplace situation and for calling for maintenance.

The workplace situation is operated by pressing a button or by an appropriate sensor. The system saves history of the workplace situation.

Each status can be assigned a different sound/melody.

On Andon screens it is possible to display other visualisations and presentations with the help of Info Board application.



The main Andon screen displays the following information:

- Header: ANDON - VSTŘIKOVNA HALA 9
- Machine status: Stroj: "B"
- Call for maintenance: volá LOGISTIKU
- Grid of status buttons:

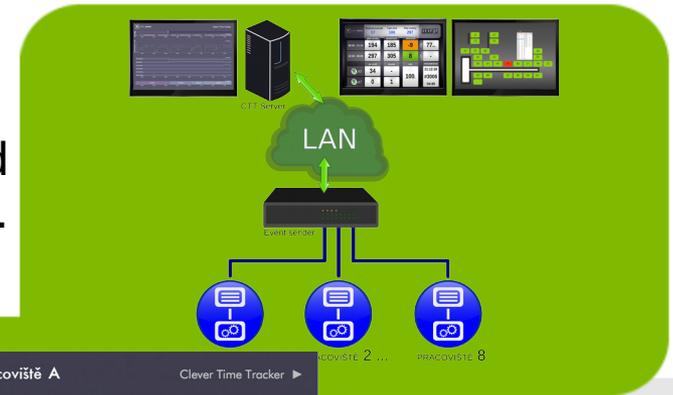
A	B
C	E1
E	D
gU	OV

At the bottom, there is a row of small status indicators: B, B, B, B, gU, gU, gU, A, A, A, A, A, A, A, A.



# Clever Time Tracker

Applications for recording events and their visualisation.



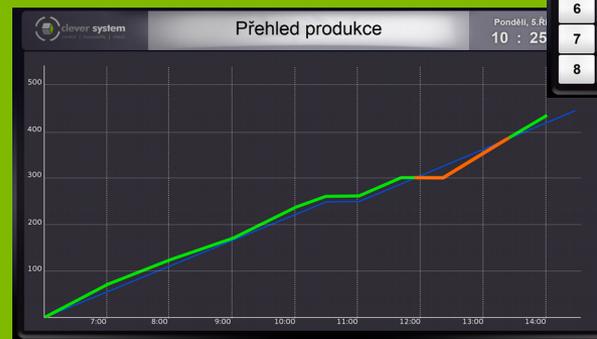
Figures and events from various systems or sensors can be recorded.



The figures to be saved can be visualised in various ways.

Přehled produkce							Pondělí, 5. Říjen 2015 10 : 25 : 30	
Výrobní cíl / směna			417	pojist. zásoba	15	práce		
h	od - do	B	Cíl		min.			
1	6 - 7	0	56	59	8	0	KOKPITY	
2	7 - 8	0	56	60	8	0	SOUČET 440	
3	8 - 9	0	55	56	16	0	PRACOVNÍCI	
4	9 - 10	0	56	62	18	0	PERSONÁL 40	
5	10 - 11	30	28	32	14	0	PPH	
6	11 - 12	0	55	61	15	0	PRODUKTIVITA 1.47	
7	12 - 13	0	56	53	20	0		
8	13 - 14	0	55	57	18	0		

Final presentations are displayed in a standard browser or can be shown with the help of Info Board application.





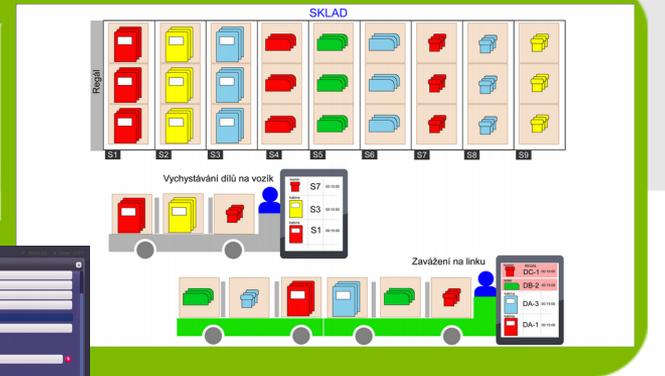
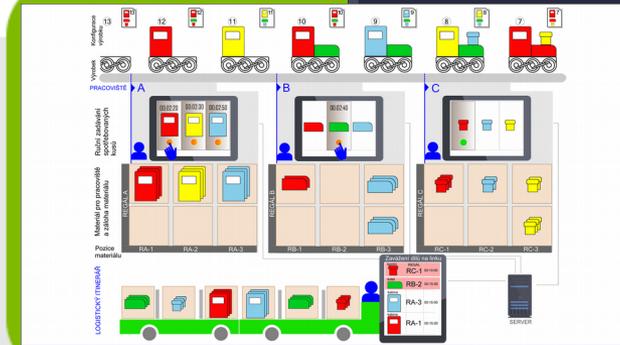
# Clever kanban Production logistics Workstation supply management App

Based on product configuration, consumption of particular part variants and materials on individual workstations is recorded by the system.

Once materials are depleted a supply order is automatically generated for the order picking workstation in storage or sent to a worker's mobile terminal.

Consumed production parts can be mapped to operations in the configuration interface.

Consumption is always registered to the workstation that performed the operation.



Kontrola	Pracovní stanice	Materie	Množství
Kontrola 1487023	Kontrola 1487023		1
Kontrola 1487024	Kontrola 1487024		1
Kontrola 1487025	Kontrola 1487025		1
Kontrola 1487026	Kontrola 1487026		1
Kontrola 1487027	Kontrola 1487027		1
Kontrola 1487028	Kontrola 1487028		1
Kontrola 1487029	Kontrola 1487029		1
Kontrola 1487030	Kontrola 1487030		1
Kontrola 1487031	Kontrola 1487031		1
Kontrola 1487032	Kontrola 1487032		1
Kontrola 1487033	Kontrola 1487033		1
Kontrola 1487034	Kontrola 1487034		1





# Clever Info Board

Web application for making clips and presentations. It enables planning and timing their display.

Clips can be put together from pictures, web presentations or videos. Pictures can be edited with the help of an in-built editor.

Finalized clips can be put into groups. Groups can be assigned definitions as to where and when they should be displayed.

Info Board terminal, Andon terminal or OMS terminal can be used for the display.

