INFORMATION SYSTEM

myGEM

Make your business **run**
like clockwork.

ADVANCED MANAGEMENT OF
IMPLEMENTATION PROCESSES, DEVELOPMENT AND PRODUCTION.

01_2024

myGEM BENEFITS

Robust features provide time savings and high productivity.

Simple operation and easy adoption.

Own economic modules, can be connected simultaneously with another solution.

Special features tailor-made eg. production management and production planning.

Mini applications for tablets and web applications meet your exact requirements.

Own team for implementation, support and future development.

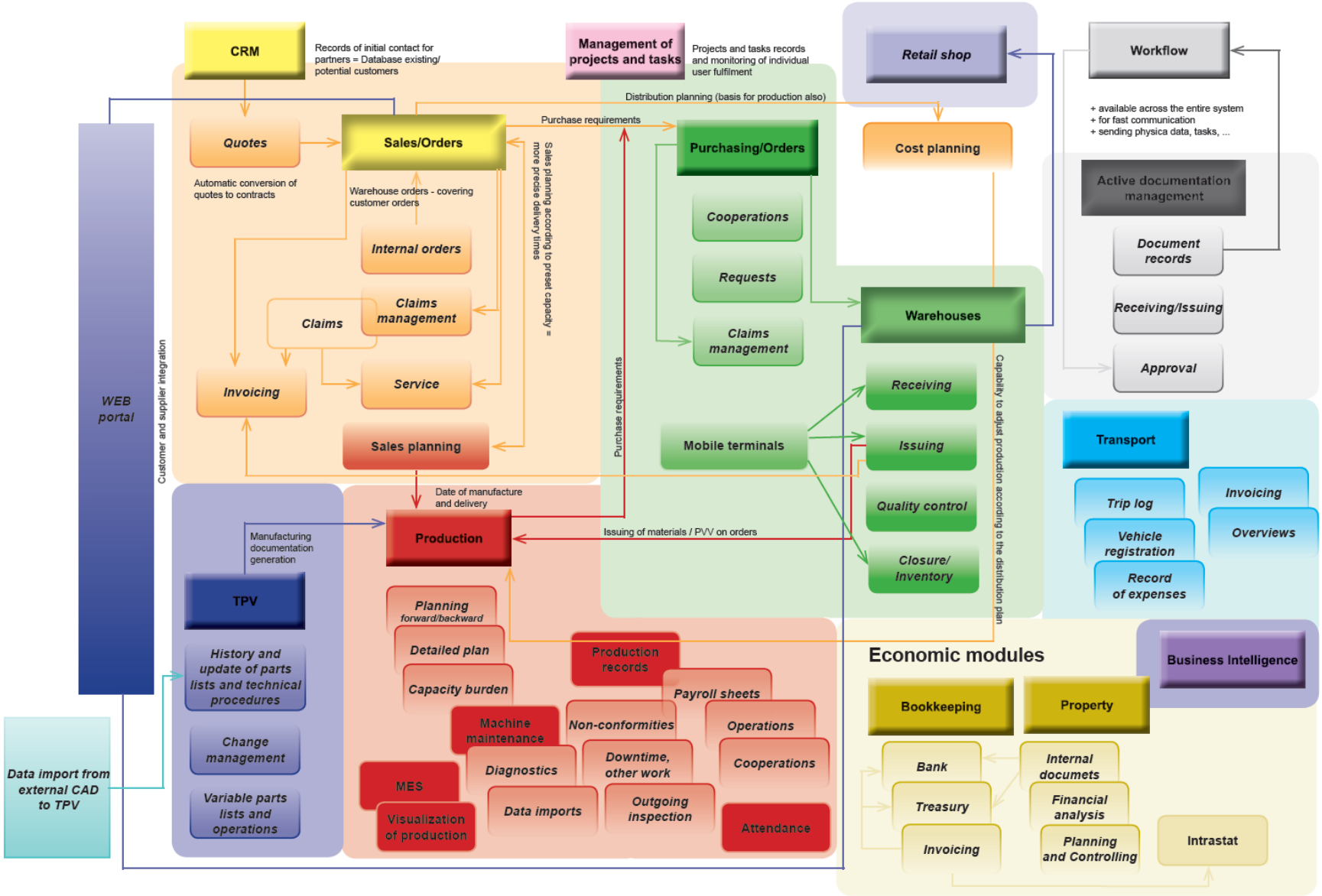
Ideas

Solutions

- Analysis
- Consultation and training
- ERP myGEM

Dynamics

myGEM DIAGRAM



LIST OF MODULES

myGEM

- Bookkeeping (UCT)
- Property (MAJ)
- Planning and controlling (PaC)
- Business Intelligence (BI)
- Company status (SF)
- Report generator InfoMaker (GS)
- Customer Relationship Management (CRM)
- Projects and tasks management (RPU)
- Logistics – Sales (LPR)
- Shop (PRO)
- Sales planning (OPL)
- Service (SE)
- Complaints from customers (REP)
- Complaint procedure (RR)
- Loading (NA)
- Planning loading (PNL)
- Logistics – Purchasing (LNA)
- Management of tools and fixtures (NA)
- Complaints to suppliers (REA)
- Intrastat (INT)
- Warehouses (SKL)
- Mobile terminals (MOB)
- Technical preparation of the production (TPV)
- Revision service for TPV (ZTP)
- Active documentation management (ASD)
- Production planning and management (RVP)
- Workshop planning (PL)
- Records of the production (RVE)
- Records of the output control and disagreements (EVK)
- Downtime and other work (PP)
- Logout of operations (OP)
- Attendance system (DS)
- Maintenance and diagnostics of machines (US)
- Workflow (WF)
- Parameterisable communication module (PKM)
- Quality management (QM)
- Transport (DPR)
- Suppliers integration (ID)
- E-shop (ES)
- Electronic communication (EDI)
- Displaying of documents (ZD)
- Production process monitoring (MVP)
- …

PRODUCT SHEETS

- A detailed description of the modules is in the product sheets.

myGEM

ŘÍZENÍ VZTAHU SE ZÁKAZNÍKEM

CRM

(Customer Relationship Management)

CRM shromažďuje **prvotní a zároveň významné informace o budoucích zákaznících.** Tato data pak slouží jako podklad pro další rozvoj vztahu se zákazníkem směřující k uzavření smlouvy a následné spolupráci (prodej, dodávky ...).

Zajišťuje tak správu a aktuální informace o **potenciálních zákaznících** – odběratelích i dodavatelích.

Shromažďuje potřebná data na jednom místě v informačním systému. Například, o jaké produkty by měl zákazník zájem, v jakém segmentu se pohybuje, **kdy je vhodné zákazníka kontaktovat** atp. Ke každému zákazníkovi lze **přiřadit veškerou potřebnou dokumentaci**, tj. poptávky, e-maily, výkresy, nabídky atp. včetně kontaktů, adres a informací. Je možné poznačit, v **jakém stádiu se tento vztah nachází** (prvotní kontaktování zákazníka, poptávko-nabídkové řízení, uzavření smlouvy, ...). Veškerá upozornění jsou zobrazována i v **Kalendáři**, který poskytuje rychlý přehled důležitých událostí a úkolů.

Tato databáze potenciálních partnerů zajišťuje možnost získání dalších obchodních příležitostí do budoucna. Nedílnou součástí modulu je i evidence a rozesílání **kampaní** (hromadné i jednotlivé).

Základní funkce

- Sledování potenciálních zákazníků (odběratelů i dodavatelů)
- Sledování milníků v procesu poptávko-nabídkového řízení, od poptávky ke smlouvě
- Identifikace potenciálních příležitostí
- Identifikace segmentů trhu a skupin výrobků
- Sledování aktivit obchodníků
- Systém upomínek a plánování aktivit (jednání, ...)
- Identifikace a svázání veškeré dokumentace ke konkrétnímu partnerovi a obchodní příležitosti (zápisy z jednání, nabídky, korespondence, ...)
- Evidence kampaní

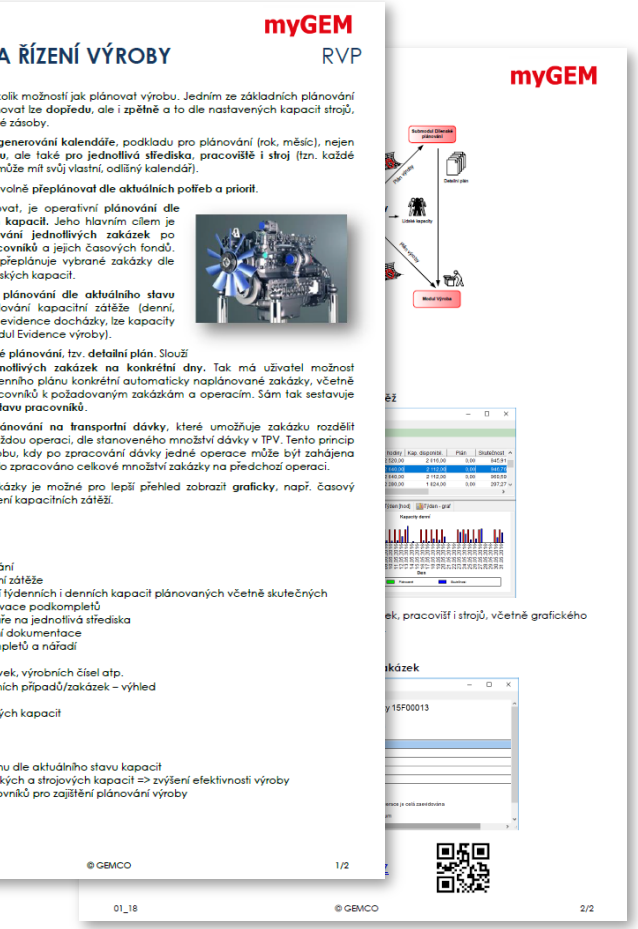
Přínosy

- Evidence a správa veškerých dat k potenciálním zákazníkům
- Plánování jednání a schůzek s možností upomínek
- Záloha a jednoduché dohledání dokumentace
- Přehled o aktuálním stavu kontaktu se zákazníkem
- Podklady pro vyhodnocení a vytipování nových příležitostí do budoucna
- Synchronizace s funkcí Kalendář aplikace Outlook

01_18 © GEMCO 1/2

myGEM

01_18 © GEMCO 2/2



myGEM

PLÁNOVÁNÍ A ŘÍZENÍ VÝROBY

RVP

Systém myGEM nabízí několik možností jak plánovat výrobu. Jedním ze základních plánování je plánování **časové**. Plánovat lze **dopředu**, ale i **zpětně** a to dle nastavených kapacit strojů, i s ohledem na materiálové zásoby.

Ocenitelnou výhodou je **generování kalendáře**, podkladu pro plánování (rok, měsíc), nejen pro celý podnik **najednou**, ale také **pro jednotlivá střediska, pracoviště i stroj** (tzn. každé středisko/pracoviště/stroj může mít svůj vlastní, odlišný kalendář).

Jednotlivé zakázky lze libovolně **přeplánovat dle aktuálních potřeb a priorit**.

Další možností, jak plánovat, je operativní **plánování dle aktuálního stavu lidských kapacit.** Jeho hlavním cílem je možnost **denního plánování jednotlivých zakázek** po zadání **nepřítomností pracovníků** a jejich časových fondů. Systém tak automaticky přeplánuje vybrané zakázky dle skutečně disponibilních lidských kapacit.

Umožňuje tím **operativní plánování dle aktuálního stavu pracovníků**, včetně sledování kapacitní zátěže (denní, týdenní). Je-li používána i evidence docházky, lze kapacity automaticky nastavit (modul Evidence výroby).

Systém umožňuje i **dílenské plánování**, tzv. **detailní plán**. Slouží k ručnímu **plánování jednotlivých zakázek na konkrétní dny.** Tak má uživatel možnost si vybrat a zahrnout do denního plánu konkrétní automaticky naplánované zakázky, včetně přiřazení jednotlivých pracovníků k požadovaným zakázkám a operacím. Sám tak sestavuje detailní plán dle **priorit a stavu pracovníků**.

Další výhodou je tzv. **plánování na transportní dávky**, které umožňuje zakázku rozdělit na několik dávek, resp. každou operaci, dle stanoveného množství dávky v TPV. Tento princip umožňuje průběžnou výrobu, kdy po zpracování dávky **jedné operace** může být zahájena práce na další, aniž by bylo zpracováno celkové množství zakázky na předchozí operaci.

Veškeré zaplánované zakázky je možné pro lepší přehled zobrazit **graficky**, např. časový průběh zakázek či zobrazení kapacitních zátěží.

Základní funkce:

- Operativní plánování
- Sledování kapacitní zátěže
- Grafické zobrazení týdenních i denních kapacit plánovaných včetně skutečných
- Automatické rezervace podkompletů
- Plánovací kalendáře na jednotlivá střediska
- Tisk veškeré výrobní dokumentace
- Plánování podkompletů a nářadí
- Odchylkové řízení
- Sledovatelnost dávek, výrobních čísel atp.
- Simulace obchodních případů/zakázek – výhled
- Vývojové zakázky
- Plánování dle lidských kapacit

Přínosy:

- Rychlá změna plánu dle aktuálního stavu kapacit
- Zjištění „rezerv" lidských a strojových kapacit => zvýšení efektivnosti výroby
- Snížení stavu pracovníků pro zajištění plánování výroby

01_18 © GEMCO 1/2

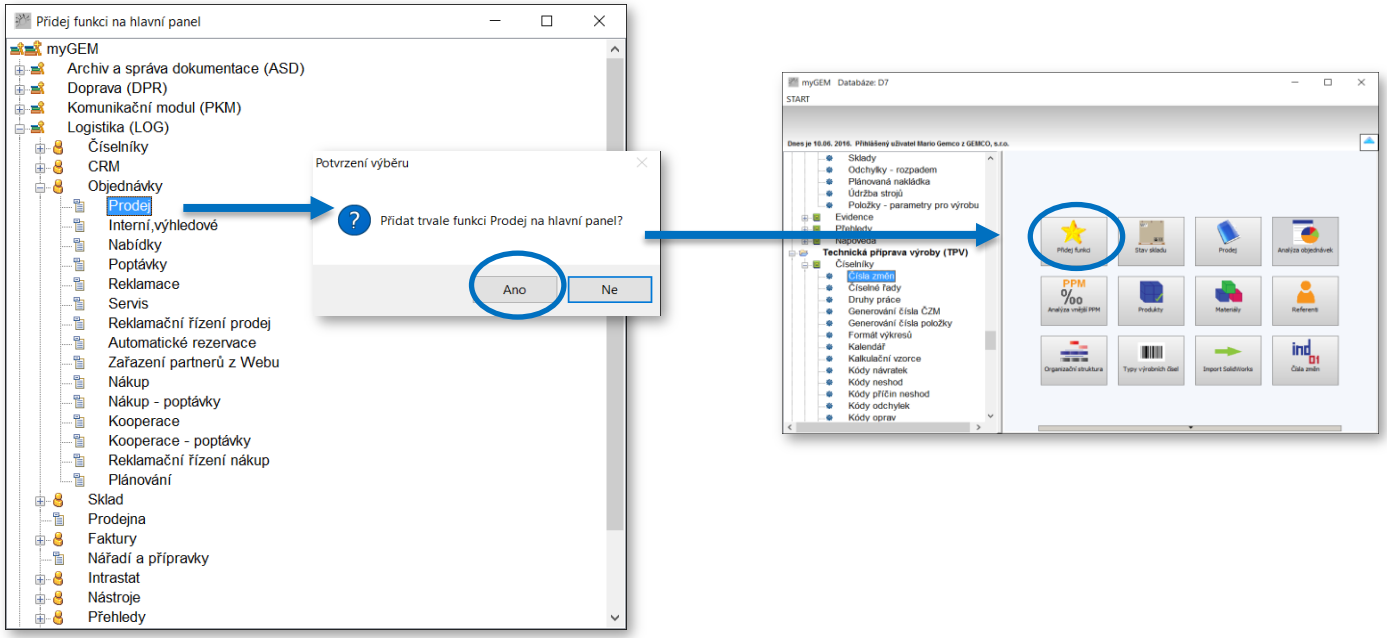
myGEM

01_18 © GEMCO 2/2

WORKSPACE

myGEM

- myGEM offers **intuitive** mouse **control** and full keyboard controls
- for simple work in windows the **desktop workspace** is ready
- IS allows you to **log in only once,** namely with direct access **to all modules for which the user has rights**
- using the **Add function button** can easily add selected and **frequently used functions** directly into the window after starting



TECHNOLOGY myGEM = INVESTMENT PROTECTION

- **Data layer**
  - We use an Oracle database for storing data and ensuring data consistency through trigers. Oracle is a modern multi-platform database system with highly advanced data processing options, high performance and easy scalability.

    We are **Orac[redacted]ner**.

    ORACLE

  - Data management and creating stored procedures in PLSQL language used the tool Toad for Oracle. It is
    the most advanced and widely used Oracle DB tool of its kind from DELL

    Toad World
    Community-Driven Innovation

- **Presentation layer – „Thick client“**
  - It is about the basic environment in which users work. For its work high-performance object-oriented tools for enterprise application development are used.

- **„Thin client“**
  - Applications are primarily designed to run in the internet browser window or mobile phones. In this environment we create a **fully-fledged solution** for myGEM.
  - **The ionic framework (mobile app framework)** is a complete SDK (Software Development Kit). It was built on top of AngularJS (application platform) and Apache Cordova (mobile application development framework); Ionic provides tools and services such as CSS, HTML5 and Sass.

  - These languages and libraries are managed by through the Visual Studio Code development environment. This editor is newly defined and optimized for creating modern web and cloud applications.
  - Since 2022, they have been developed in the .NET Core 7 environment with an emphasis on high application security.

HOW TO IMPLEMENT

- Implementation typically consists of several steps and a specific timetable is drawn up for a particular project.

Diagnostics → Solution proposal → Preparation of the software solution → Implementation and training → Operation and maintenance

- **Typical steps and milestones of implementing ERP solutions:**

- **Diagnostics** (local surveys, data samples, real document patterns, ideological suggestions of requirements)
  - Understand well the company environment and identification of areas requiring improvement:
    - assembling a customer team
    - Team Leader and responsible solvers for each area
    - detailed gathering of information about processes, practices, press releases, specific requirements, other systems required for integration

- **Solution proposal** (workshops, discussions with key users and the whole team)
  - Developing of defined requirements as assignments for consultants and programmers according to customer requirements and expectations.
    - parameterization
    - special adjustments (integration, new features, adjustments, ...)
    - database conversions

  Determining the conditions for changes mainly in the main process (standard, quick change, ...).

- **Preparation of the software solution** (analytical, programming and control work)
  - Include specific requirements in the software:
    - finishing the special requirements according to the proposal of the solution
    - testing and checking
    - analysis of the database

HOW TO IMPLEMENT

Implementation and training (detailed implementation plan, training)

- Ensure mastering the tool for the main process, including specific requirements:
  - experienced consultants will explain the complex system by individual parts and the course of the entire order
  - training of management, administrator, users ... effectively leads to understanding and mastering the tool for managing the main process and economic modules
  - together with you set up and control the level of the database
  - trial operation of the entire system
  - releasing the system into routine operation

Operation and maintenance

- Ensure the stable operation and system development :
  - determining the way of participation of the supplier due to the client's requirements
- Ensuring the stable operation – helpdesk:
  - hot-line
  - mode 7x24, or other
  - system development (update, upgrade)

Client support in dealing with marginal situations. Compliance with the legislation of the state (country) where the information system is operated.
Monitor client needs and processes changes so that software tool (parameterization, ...) improves processes efficiency.

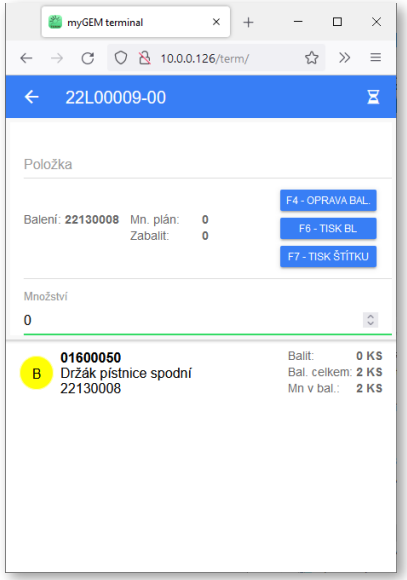
EXAMPLES OF SPECIAL ADJUSTMENTS

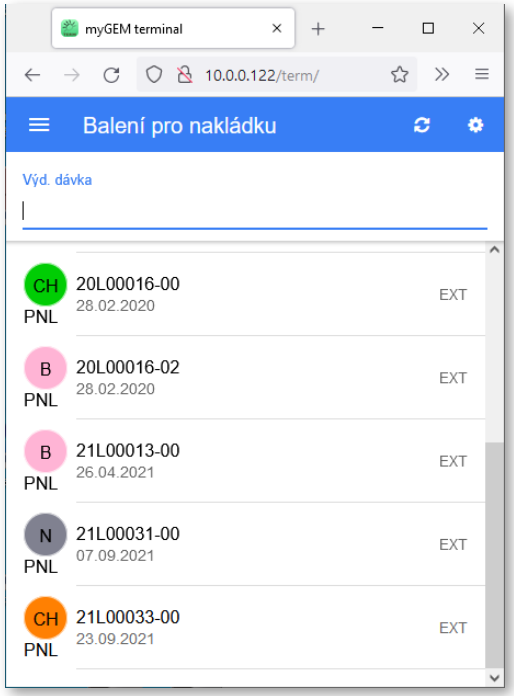
myGEM

- **Product Configurator – rapid creation of virtual product according to the specific customer needs**
- **Loading and packaging solutions**
- **COC sheets (Certificate Of Conformity)**
- **Technical cards printed online, exporting to a central database**
- **Dispensing dose and mobile terminals, barcodes and QR codes**
- **Distribution of documentation to the machine**
- **Type technological procedures – parameterized for different types of production**
- **Exceptions – a tool for configuration management in production**
- **Collecting data from production equipment**
- **Links to web – selling products, spare parts**
- **Applications for mobile phones – the company status, tasks monitoring, sales**
- **Bulk functionality – Example 5 functions in one "click" to minimize open windows**
- **Integration with external programs – ENOVIA PLM, SolidWorks, ...**
- **Special methods of production planning**
- **…**

WEB APPLICATIONS

- Above the myGEM system it is possible to operate online **Web applications** that communicate via the service online with the database server.
- Applications are standardly ported to mobile devices.

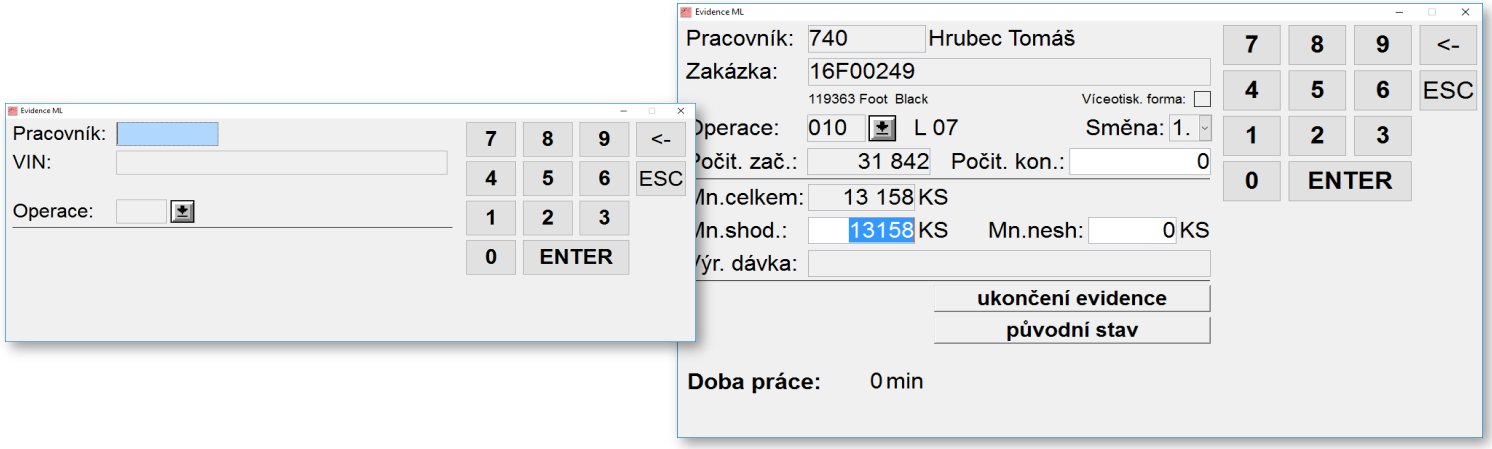




MINI APPLICATIONS

myGEM

- We are able to prepare so-called **„mini applications“** for special process requirements. These applications are specially compiled modules for specific customer.



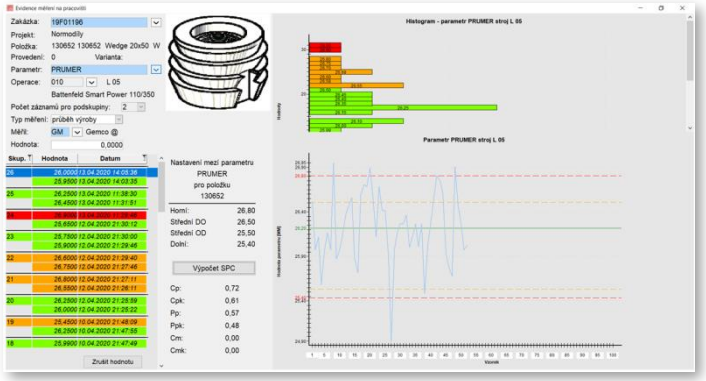
EXAMPLES OF OTHER MODULES

- **Quality management modules**
- **Paperless production**
- **Automated warehouse Kardex Remstar**
- **Sprinter**
- **Online process analysis**
- **Accountancy**
- **EET**
- **EDI**
- **PKM**
- **Business Intelligence**

QUALITY MANAGEMENT MODULES

myGEM

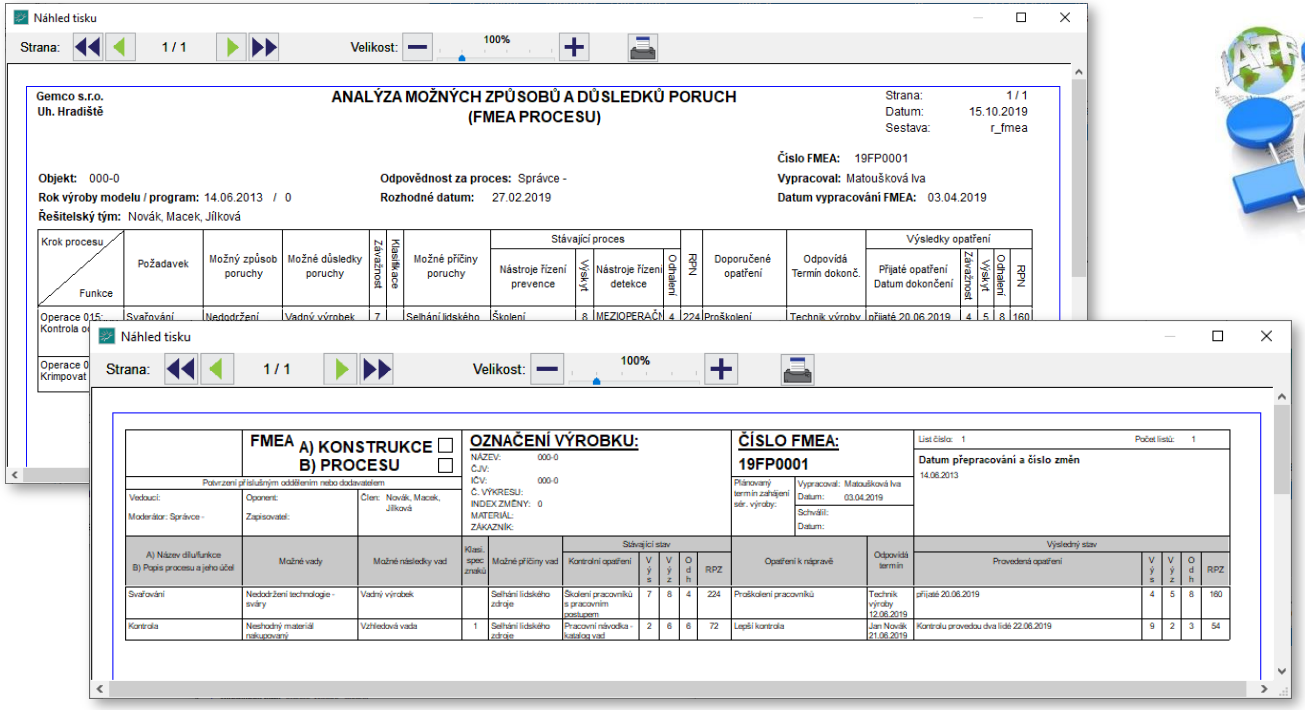
- The system works **online** with standard myGEM data and is supplemented by robust modules of selected Core Tools.
- Includes:
  - FMEA process/product
  - Control plans
  - Module for measuring process values and SPC evaluation (P_{PK}, C_{PK} …)
  - Nonconformance management and 8D report, Complaints procedure
  - Project and task management
  - KPI (Key Performance Indicators)
  - Multilayered audits LPA
  - …



- The necessary data is stored only **in one place**, special modules use it appropriately.

- To support quality, it is integrated into standard modules, e.g.
  - Comprehensive change service - over design and production data
  - Detailed traceability to products and their variants and designs
  - Demonstration of Flow process
  - Process analysis in terms of added value and losses
  - Project and task management
  - …

- Benefits:
  - **The necessary evidence** from the process is **quickly available** for a specific project, order or product
  - Easy orientation and fast data availability
  - Seamless data validity, data is true and error-free
  - Labor savings, **data is created** directly in the process **only once**
  - Prepared **reports for proving**



PAPERLESS PRODUCTION

myGEM

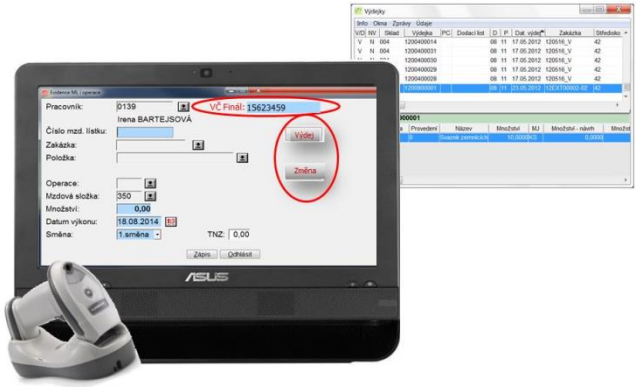
- This is the effective use of mobile devices such as tablets in production and the sharp reduction in paper documentation. Documents and myGEM functions for each **role** are available on the device, for example: **production manager, foreman, labourer, inspector, warehouse worker, expedition worker,** simple applications are built up according to the role.
- The big advantage is that valid **documents** are **available online** and important **records**, such as release of the operation, release of the exit control, start or end of work, are **recorded on-line**.
- Using this principle leads to **time savings** and better **adaptation to changes.**
  Applications are developed in the easiest way for users, to make them virtually instantly used.
- Progressive approaches are used for solution, such as QR codes, special signing devices, all of these help to minimize paper documentation.

Safe = Product documentation in one place

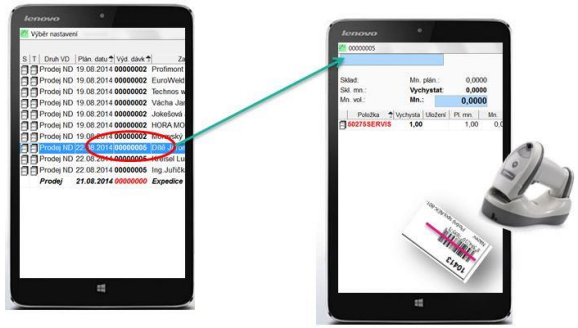
- In common practice happens that documents are created in more systems. It can be mentioned as an example PLM for the grafic editors CATIA, SolidWORKS. To make production work with the right data, we have developed simple **communication between the various external editors and the TPV module**. Each component has assigned, apart from the BOM (Bill Of Materials) or the technological procedure, also other **important documents and data**. As an example, we include CAD, NC data, assembly instructions, inspection, measurement protocols, proof of functional test.
- The product „goes“ through the entire process of implementation and always has the current data available according to which production takes place. This principle makes it possible to produce highly personalized products at a low price.
- All product documentation is in electronic form and is available anywhere and is fully changed (valid status, history, content changes).

PAPERLESS PRODUCTION

- **Issue for the order/Evidence of Time card**
  - **Realized issues** in any way will be automatically displayed as standard in the **Warehouse – Issue slips.**



- **Issue of expedition – example**
  - Taking the barcode of the dispensing batch on the expedition or picking from the list of prepared batches we prepare the expedition of orders by individual recipients.



AUTOMATED WAREHOUSE KARDEX REMSTAR

myGEM

- The information system **myGEM** is **linked online** with the **Kardex Remstar** warehouse system.
- It is a top innovation in storage area, warehouses optimization, processes of preparing for dispatch, cost cutting and high labour productivity.

- *Source of images: www.kardex-remstar.cz*

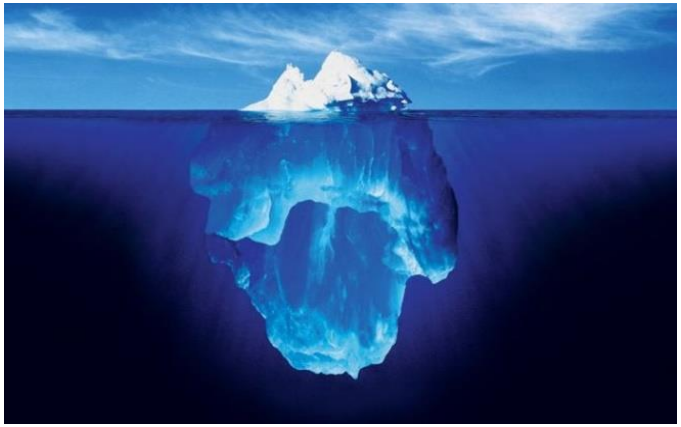
SPRINTER

- **SPRINTER** allows you to **analyse** online data from your processes and **dramatically improve productivity.**

- Examples of savings:
  - **30% reduction** in delivery time
  - **100% control** of inventory
  - a substantial **increase in the use of workers**

- „What is **really important** is usually not seen at first glance; it remains hidden.“
  Sometimes this approach is called the „**Iceberg theory**“.

- To look „beneath the surface“ and **uncovered a range of problems**, we need information about the „real“ behaviour of the processes.
  Results of analyses of specific cases are **surprising!**



SPRINTER

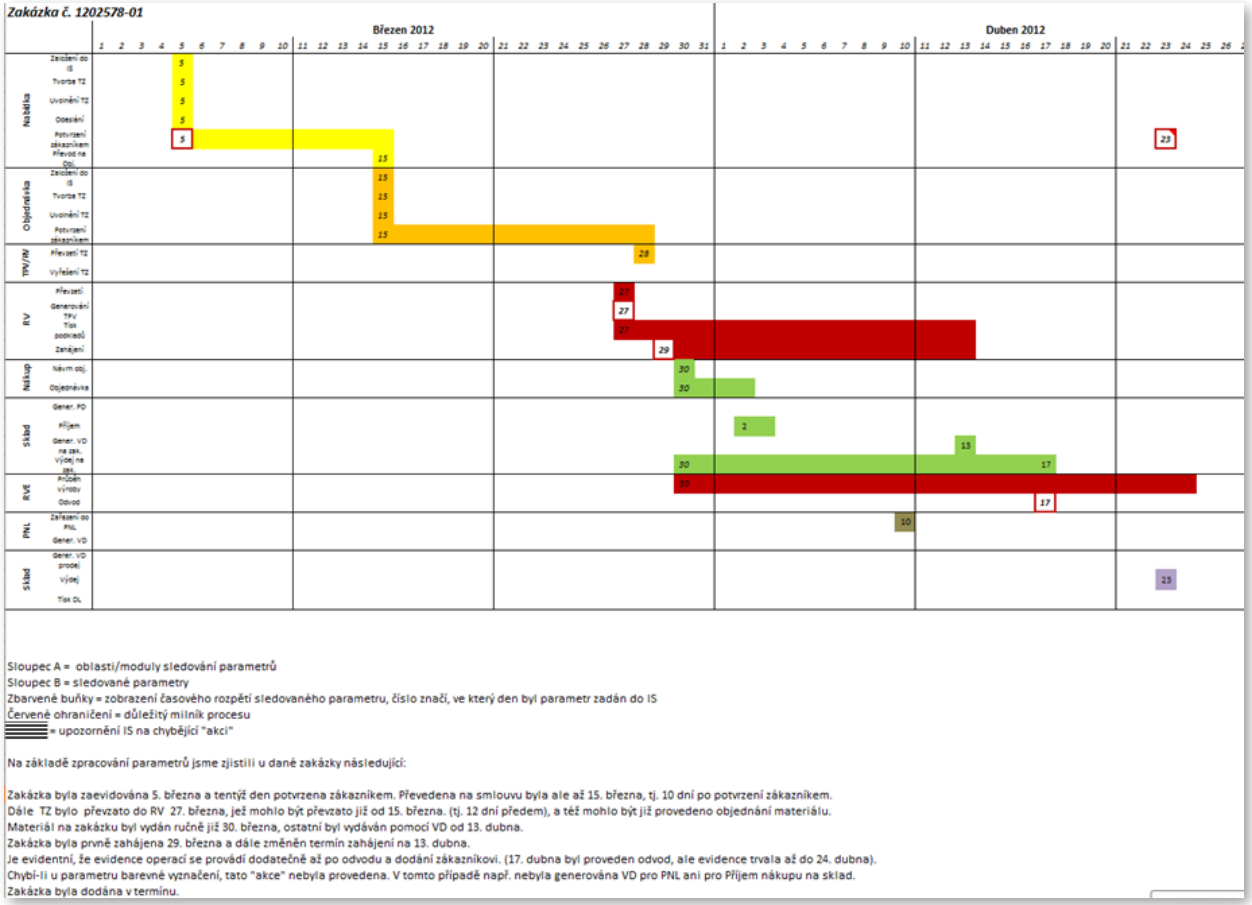
- That which threatens out timing it is usually very simple. There is a lack of materials for production, for example.
  - Do we really have these activities under control?
  - Why not order and deliver materials on time, who and what is holding-up the whole process?

- For these and many other questions we have prepared a **series of on-line tools and views** that quickly provide data to significantly improve productivity in your organization.

ONLINE PROCESS ANALYSIS

myGEM

- Example of a specific order analysis and resources consumption survey.



- *Finding time losses during the fulfilling the order*

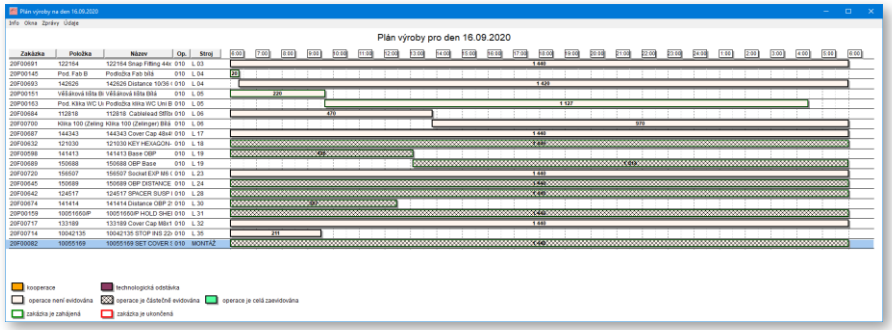
MANUFACTURING EXECUTION SYSTEM MES

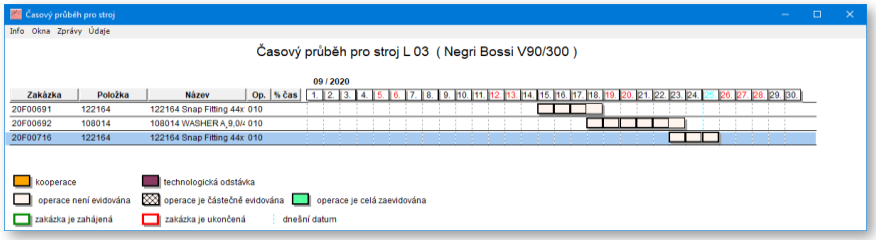
- The in-depth modules of the information system serve as the basis for the compilation of executive process control and especially production. These are mainly **TPV modules, production management and planning, maintenance, process monitoring, change service, distribution of machine documentation**. In these cases, we often address specific customer requirements, which are processed in the form of, for example, **special functions or mini applications.**

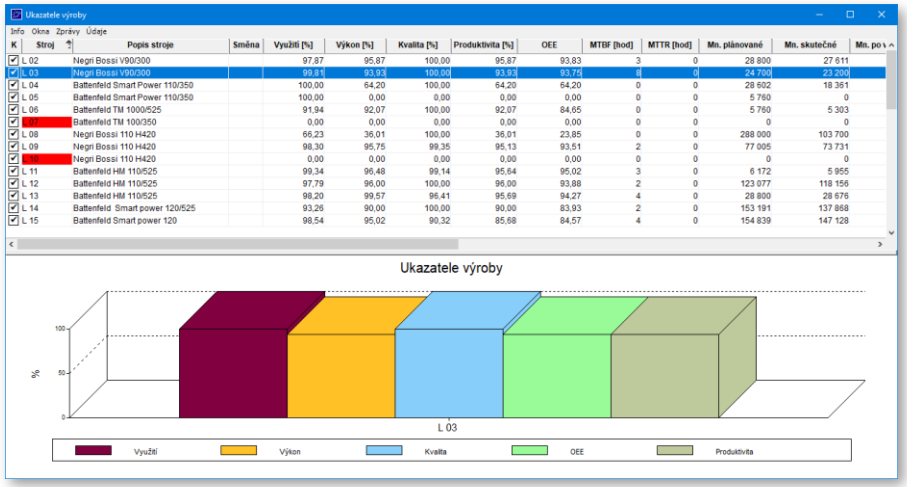
- The customer has fully covered all important requirements and **complex processes are handled by a specially developed tool**. This creates a „simple“ tool for relatively complex processes. Part of the solution is the online reading of values, e.g. from assembly machines, lines, injection molding machines (NOK, OK, cycle times,…).

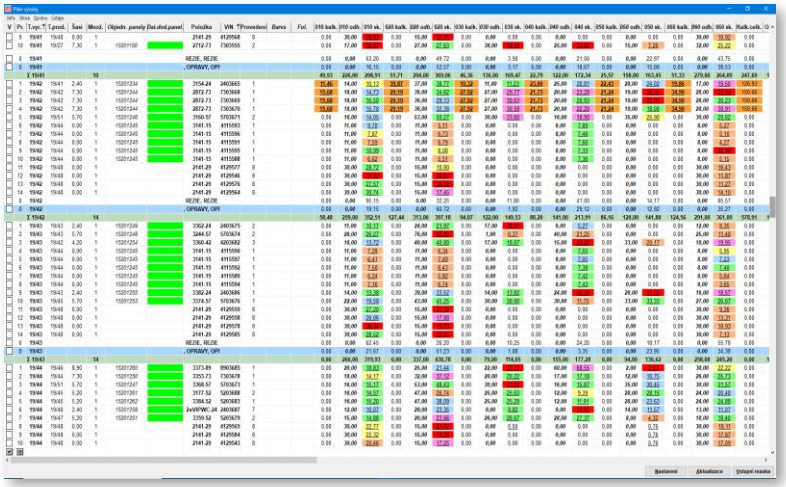
- Examples of MES are applications in the following areas:
  - Production of final products with configurator – consumer goods
  - Engineering
  - Prototype production for the automotive industry
  - Serial tools
  - Plastic production
  - Production of plastics, including assembly of subassemblies
  - Production for the army

- This solution increases production performance, quality and significantly saves workers.









ACCOUNTING

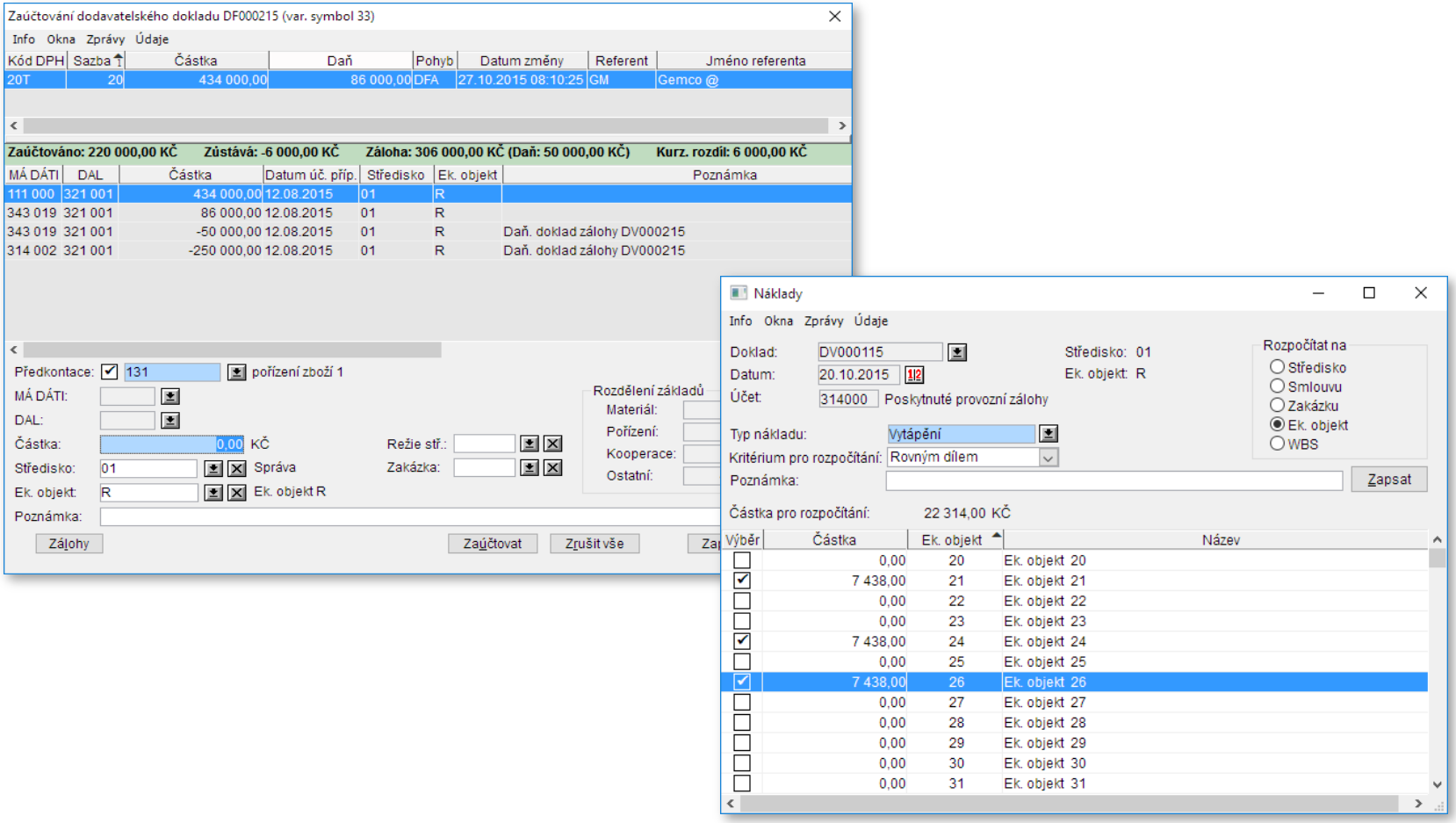
- Standard features for management accounting agenda. Parametric construction enables its use in any types of organizations of various sizes and activities:
  - **Invoicing**
  - **Treasury**
  - **Financial planning**
    - comparing the plan and reality monthly, cumulatively, …
  - **Property**
    - automatic control of set points, accounting in multiple currencies
  - **Banking operations**
  - **Intrastat**
    - electronic output for IDES, printouts of receipts and dispatches
  - **Financial analysis**
  - **Planning and controlling**

- It is developed and tested with accountancy experts and regularly audited independently.

EXAMPLE

myGEM

- Billing the commitment with disintegration into controlling.

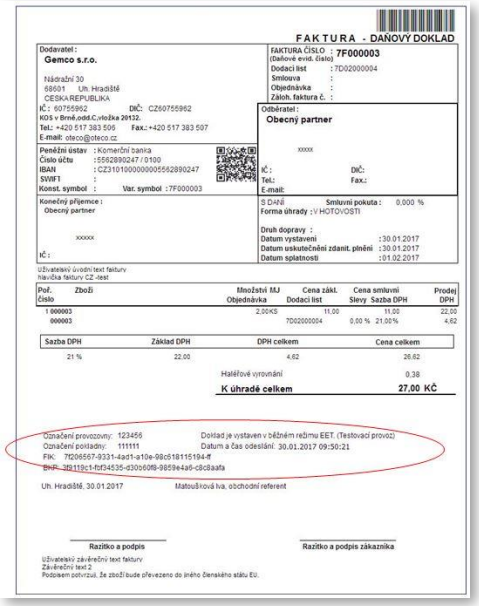


OTHERS

- **International accounting standards –** International Accounting Stadards IFRS methodology
- **Consolidation –** The pre-processed outputs for the consolidation of the group companies, applicable to a particular model of consolidation.

EET

- EET (Electronic Sales Records) is integrated for the cash register, store, and invoicing. Gradually, additional individual modes are added.
- There is no extra work for the user who sends the EET, everything is in the background. There is also a detailed overview of the sent payments.



FAKTURA - DAŇOVÝ DOKLAD

Dodavatel :
Gemco s.r.o.
Nádražní 30
68601 Uh. Hradiště
ČESKÁ REPUBLIKA
IČ : 60755962 DIČ: CZ60755962
KOS v Brně,oddíl C,vložka 20132.
Tel.: +420 517 383 506 Fax.: +420 517 383 507
E-mail: otoco@oteco.cz

FAKTURA ČÍSLO : 7F000003
(Daňové evid. číslo)
Dodací list : 7D02000004
Smlouva :
Objednávka :
Záloh. faktura č. :

Odběratel :
Obecný partner
xxxxx
IČ : DIČ:
Tel.: Fax.:
E-mail:

Peněžní ústav : Komerční banka
Číslo účtu : 5562890247 / 0100
IBAN : CZ3101000000005562890247
SWIFT :
Konst. symbol : Var. symbol : 7F000003

Konečný příjemce :
Obecný partner
xxxxx
IČ :

S DAŇÍ Smluvní pokuta : 0,000 %
Forma úhrady : V HOTOVOSTI
Druh dopravy :
Datum vystavení : 30.01.2017
Datum uskutečnění zdanit. plnění : 30.01.2017
Datum splatnosti : 01.02.2017

Uživatelský úvodní text faktury
hlavička faktury CZ -test

Poř. číslo	Zboží	Množství Objednávka	MJ	Cena zákl. Dodací list	Cena smluvní Slevy	Sazba DPH	Prodej DPH
1 000003		2,00	KS	11,00	11,00		22,00
000003				7D02000004	0,00 %	21,00 %	4,62

Sazba DPH	Základ DPH	DPH celkem	Cena celkem
21 %	22,00	4,62	26,62

Haléřové vyrovnání 0,38
K úhradě celkem 27,00 KČ

Označení provozovny: 123456
Označení pokladny: 111111
FIK: 7f206567-9331-4ad1-a10e-98c518115194-ff
BKP: 3f9119c1-bf34535-d30b60f8-9859e4a6-c8c8aafa
Doklad je vystaven v běžném režimu EET. (Testovací provoz)
Datum a čas odeslání: 30.01.2017 09:50:21

Uh. Hradiště, 30.01.2017 Matoušková Iva, obchodní referent

Razítko a podpis
Razítko a podpis zákazníka

Uživatelský závěrečný text faktury
Závěrečný text 2
Podpisem potvrzuji, že zboží bude převezeno do jiného členského státu EU.

EDI

myGEM

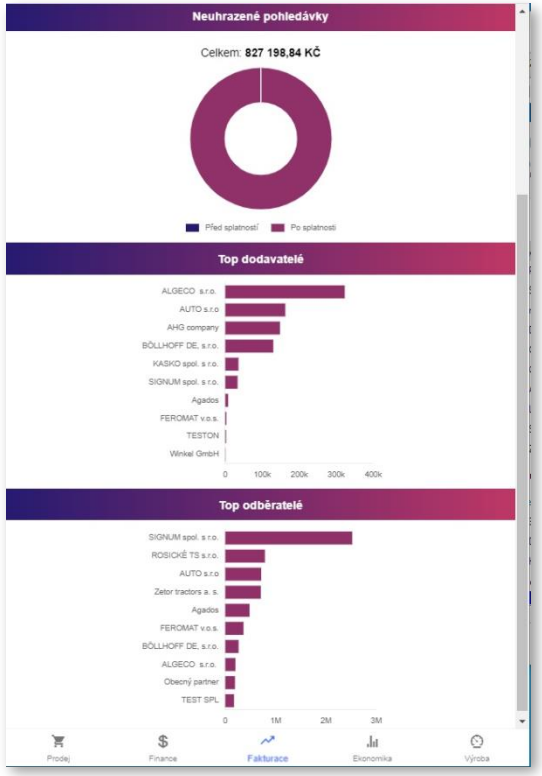
- **EDI = Electronic exchange** of structured standard messages between two applications of two independent entities, the messages have the same form and „speak“ the same „language“
  - **EDI application** creates a document, automatically processes, receives and sends (invoices, certificates, stocks, orders, ...)
  - The system supports the so-called “In-house” objects according to international standards
  - Fully **replaces paper documents**

PKM

- **PKM** = Programmable communication module used for **bidirectional communication with external programs,** for specialized integration can be used standard means such as XML, CbC, etc.

BUSINESS INTELLIGENCE

- Powerful analytical and reporting tools that allow you to **use the data** not only for the analysis of events that have already occurred, but also **predictions of the future development of the company.**
- **Provides monitoring** e.g.:
  - sales turnover
  - purchase turnover
  - stock value
  - production
  - economic centres
  - financial flows, …
- For executive managers.



EXAMPLE OF USING IS MYGEM IN PRACTICE

myGEM

It is a demonstration of **„our view“** on detail solution which we see in the processes, because

- **realisation process** (from sale to delivery) in each company is **somehow specific**.
- there are different ways to manage simple manufacture, manufacture of subassemblies (pre-assembled units), finished products or providing cooperation.
- in the following text we will show you some **basic modules**, to understand our view on the examples.

CRM

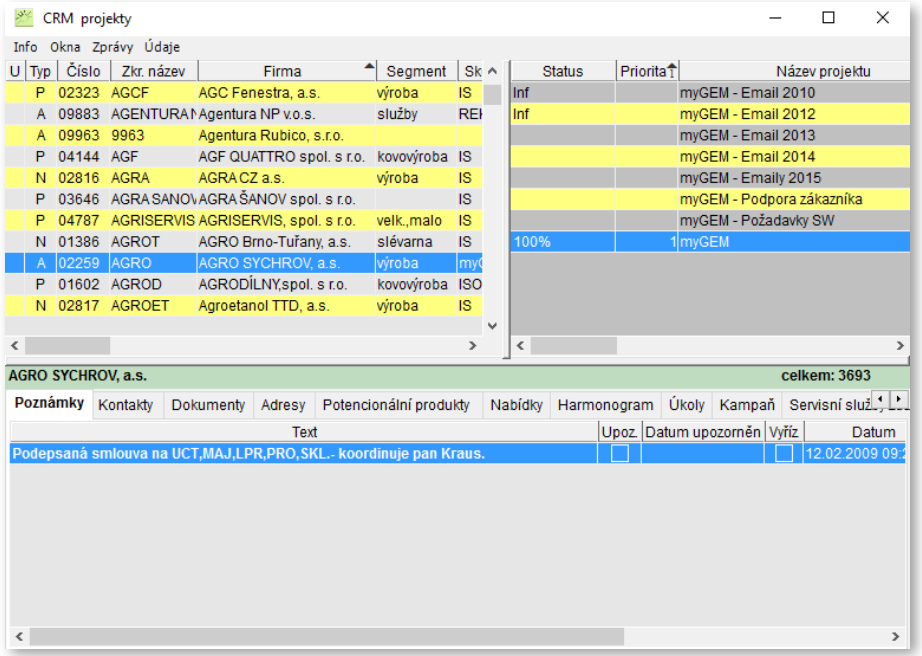
- Support of **marketing** activities, it is the basic tool for managing customer relationship.
- Monitoring of own and competing products.
  - Initial **evidence of potential partners**
  - **Interconnection** of systems, it follows that all data of a specific customer are monitored from project to task management, production technology, cost management, and evaluation
  - Tracking parner **status**
  - Success **evaluation**
  - Monitoring the development of market **segments**
  - Monitoring the development of individual client **projects**
  - C**ampaign** management
  - Fast **quote creation**
  - Diary – **reminders**
  - **A comprehensive overview in one application**

EXAMPLES

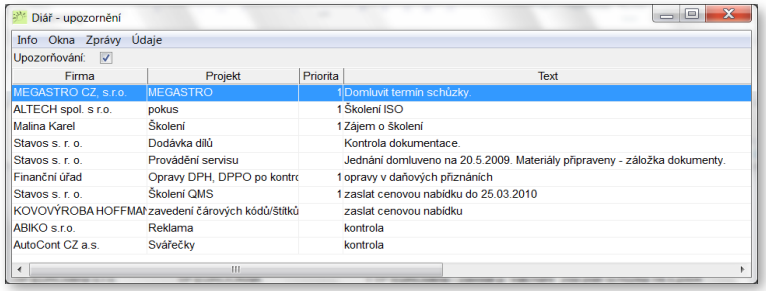
myGEM

We are dealing with a potential customer → **We are checking options** → **We have won, we start fulfillment** → **We order material** → **We produce** → **We deliver** → **We evaluate**

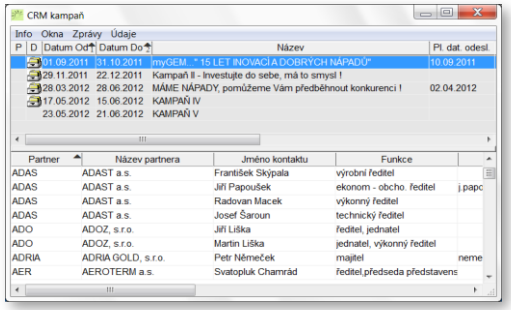
- Each customer has tracked specific project types that are continuously monitored including tracking of past and future activities.



- *Quick overview of individual customers – Main window of CRM projects (Who I deal with)*



- *Automatically popping Window Diary – Alert*

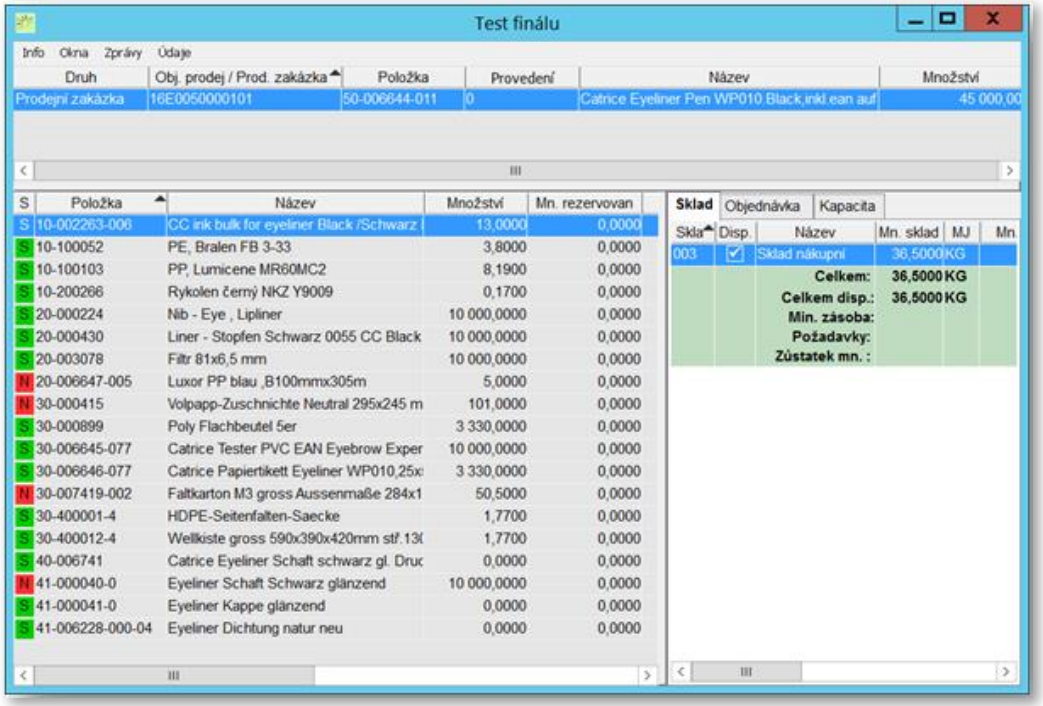


- *List of inserted CRM campaigns*

TEST OF FINAL

We are dealing with a potential customer → **We are checking options** → We have won, we start fulfillment → We order material → We produce → We deliver → We evaluate

- We quickly check the availability of the material (or semi-finished products) and the delivery date.

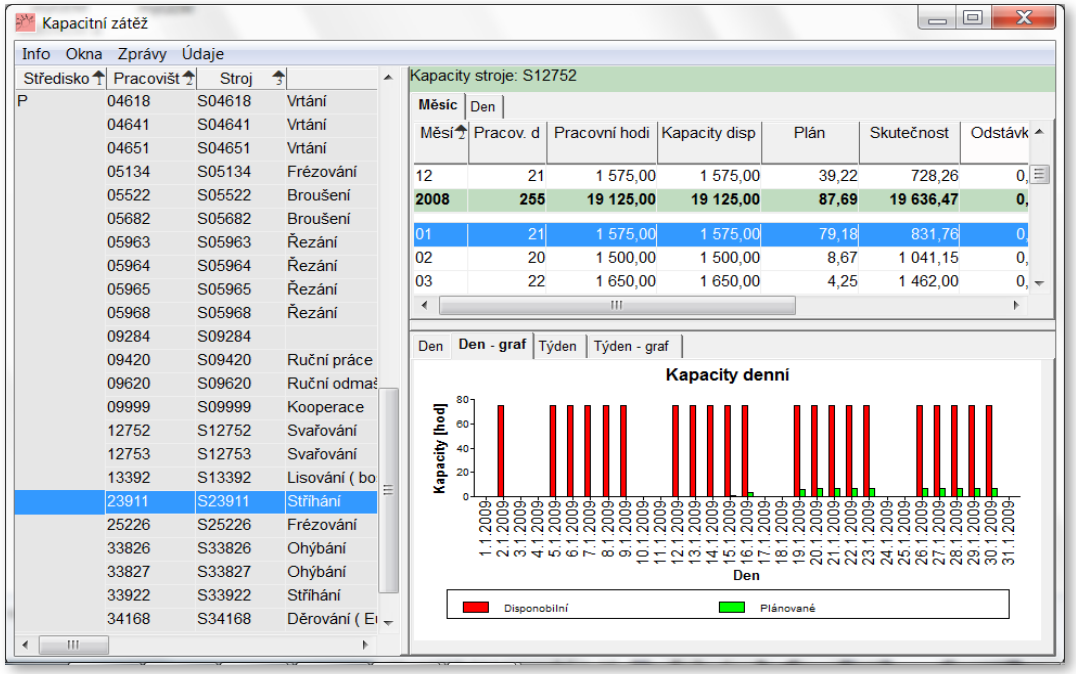


RVP CAPACITY BURDEN

myGEM

We are dealing with a potential customer → **We are checking options** → We have won, we start fulfillment → We order material → We produce → We deliver → We evaluate

- We check the capacity burdens of individual **workplaces and machines** for a specific **month, week** or **day.**



TECHNICAL PREPARATION OF PRODUCTION

We are dealing with a potential customer → **We are checking options** → We have won, we start fulfillment → We order material → We produce → We deliver → We evaluate

- We check **description of controlled conditions** for a product for the successful realisation of production and the **necessary changes**.
- **Creating and updating parts lists**, technology, control procedures and other documentation (instructions, drawings, measurement procedures ...) for each item.
- **Comprehensive revision service** with a close link to production (contracts).
- Monitoring **performance, change index, change number.**

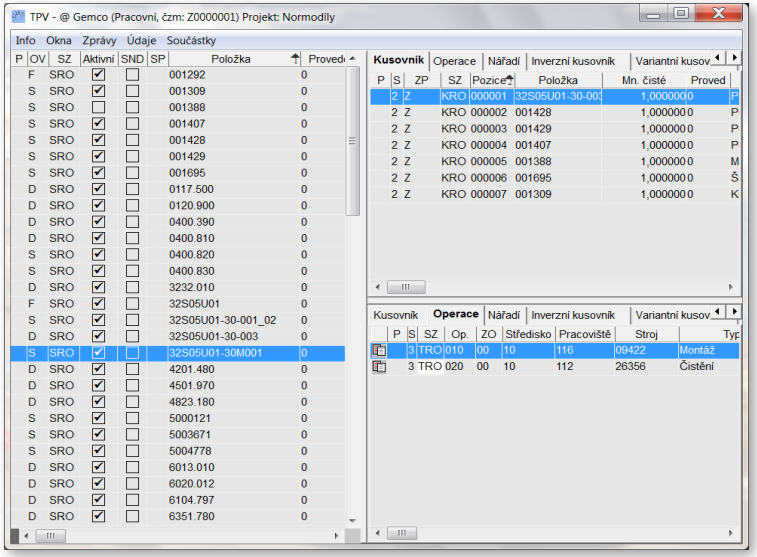
We are dealing with a potential customer → **We are checking options** → We have won, we start fulfillment → We order material → We produce → We deliver → We evaluate

- **Variant** parts lists, work instruction
- **Controls, measurement** instructions
- **Automatic creation of change archive** for all documentation
- Item **history**
- **Easily create** TPV using copy
- Means for **creating calculations**
- Price calculation using **calculation formulas**
- LNA links – **making materials requirements**
- Comprehensive **change management**
- Supports the **design and development** of your own product and process
- Encourage **teamwork and project management**

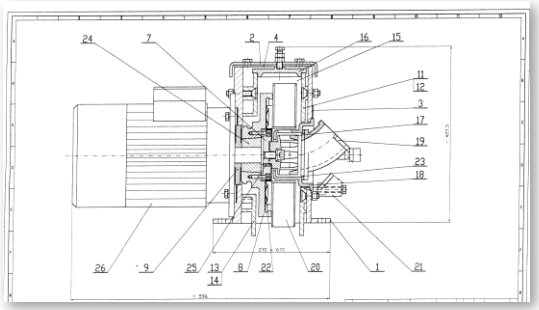
TECHNICAL PREPARATION OF PRODUCTION

We are dealing with a potential customer → **We are checking options** → We have won, we start fulfillment → We order material → We produce → We deliver → We evaluate

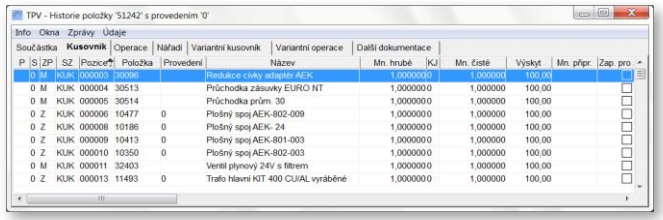
- TPV je těsně spojeno s řízením dokumentů a integruje dokumenty ze všech dílčích systémů. U položky vzniká „trezor“ platné dokumentace, která je použita pro výrobu. Výrobek tak sebou nese kompletní informace pro výrobní proces.



- *Bills of Materials items, operations*



- *Enclosed documentation*



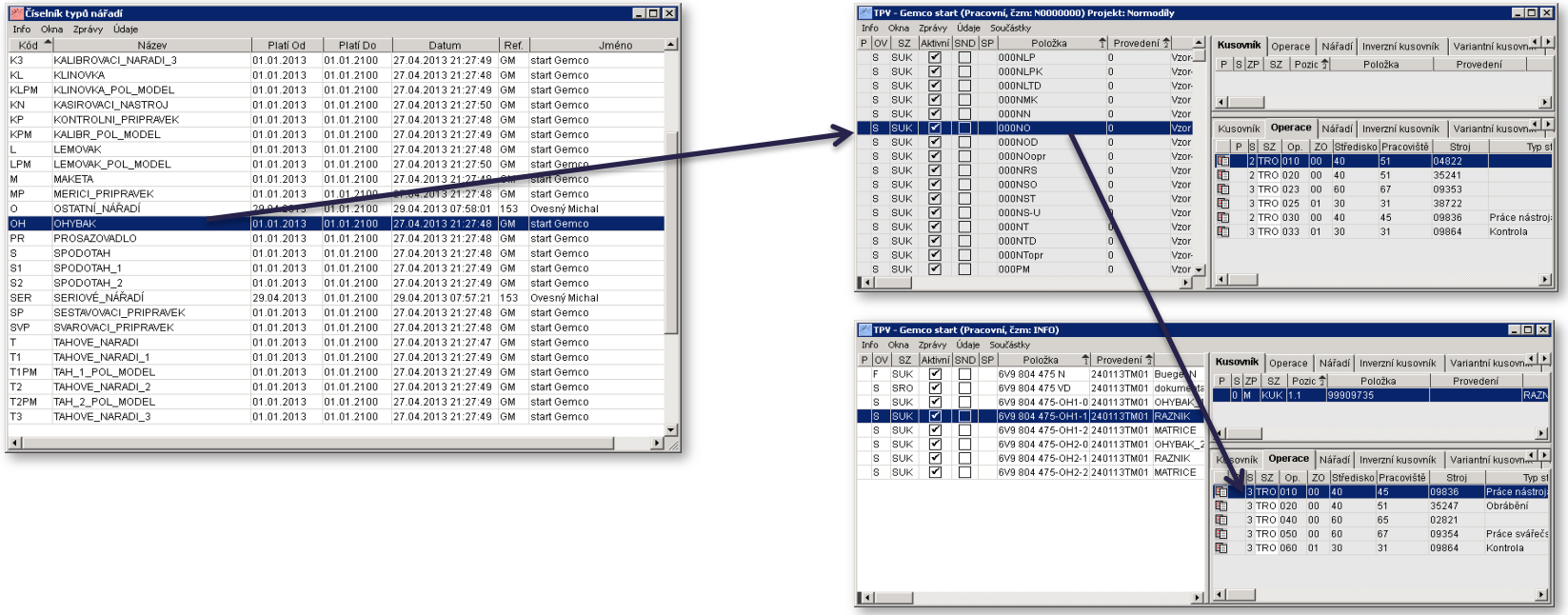
- *Item history*

TPV EXAMPLE

myGEM

We are dealing with a potential customer → **We are checking options** → We have won, we start fulfillment → We order material → We produce → We deliver → We evaluate

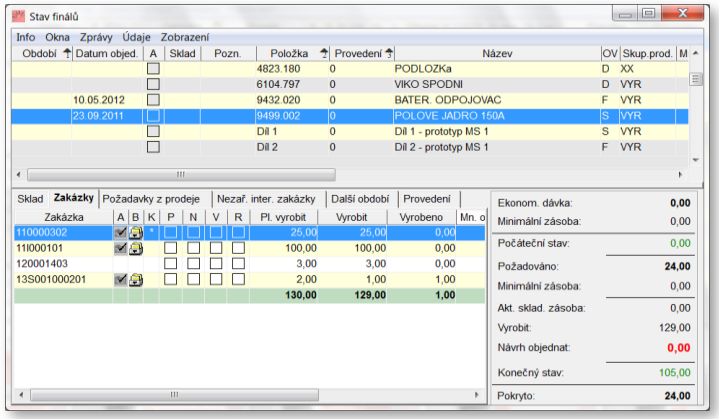
- Type-based technological processes modified to meet specific needs are developed to speed up the pre-production stages.
- In the following there is an example of a template for an automatic generation of the process that runs as a batch task at the "background".

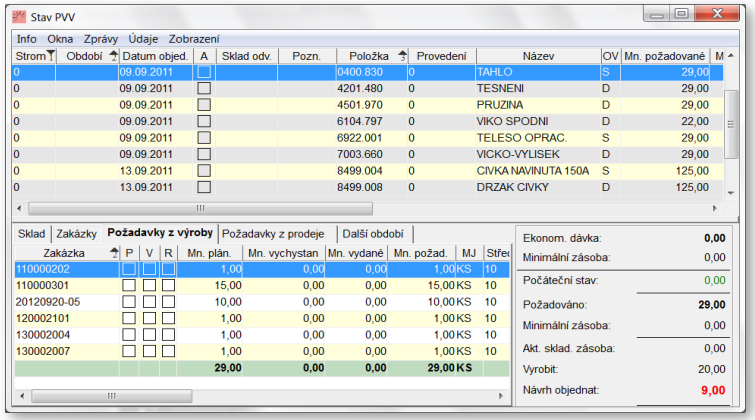


EXAMPLES OF FVV, PVV

We are dealing with a potential customer → **We are checking options** → We have won, we start fulfillment → We order material → We produce → We deliver → We evaluate

- If we produce a more complex product, it is appropriate to produce some parts ahead in order to be done the assembly without any problems.
- **Automatic creation of orders for finished (FVV) and semi-finished (PVV) production** based on requirements from sales (Sales orders), production requirements (Contracts) and warehouse state (minimum stock).





LOGISTICS SALE

myGEM

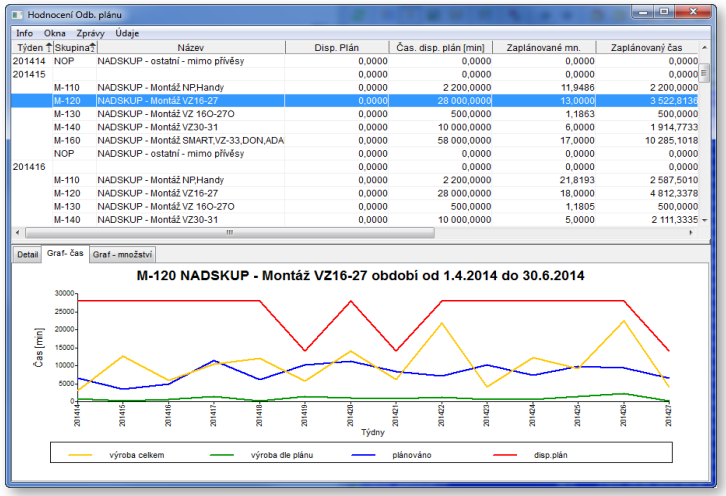
We are dealing with a potential customer → We are checking options → **We have won, we start fulfillment** → We order material → We produce → We deliver → We evaluate

- We have won, we issued the order from the customer.
- **Managing** and monitoring of **sales activities** (contracts, invoices, business case evaluation), including **business analysis.**
  - **Creation of quotes and orders**
  - Evidence of **cancellation** (including EDI)
  - Supplies **overview**
  - **Generate orders in one step**
  - **Solution overviews,** internal orders
  - **Reservation upon order**
  - **Price levels**
  - Evidence of **complaints and service contracts (R/S)**
    - Analysis of the **causes and culprits of defects**
    - **Real status** solution
    - **Claims eveluation**
    - **Traceability**

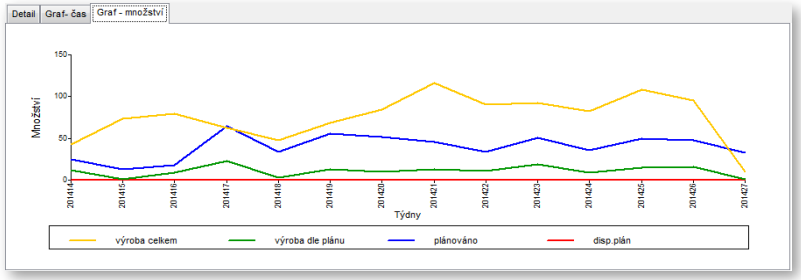
LOGISTICS SALE

We are dealing with a potential customer → We are checking options → **We have won, we start fulfillment** → We order material → We produce → We deliver → We evaluate

- Sometimes sales is **planning the assembly, sales planning – sales submodul** which, based on the entered estimated capacity, **automatically** generates **dates for assembly and delivery.**
- Planning method also takes account of time savings.



- *Entry Sales Plan = basis for the Production Plan*



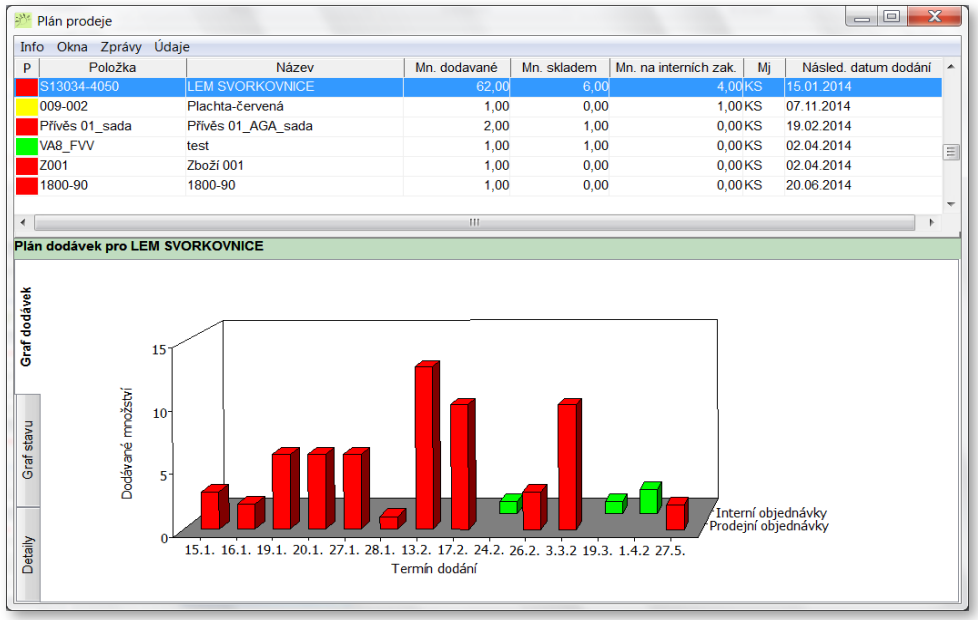
- *Graphical display of performance **Entry Sales Plan** (according to the time and amount)*

EXAMPLES OF ANALYSIS

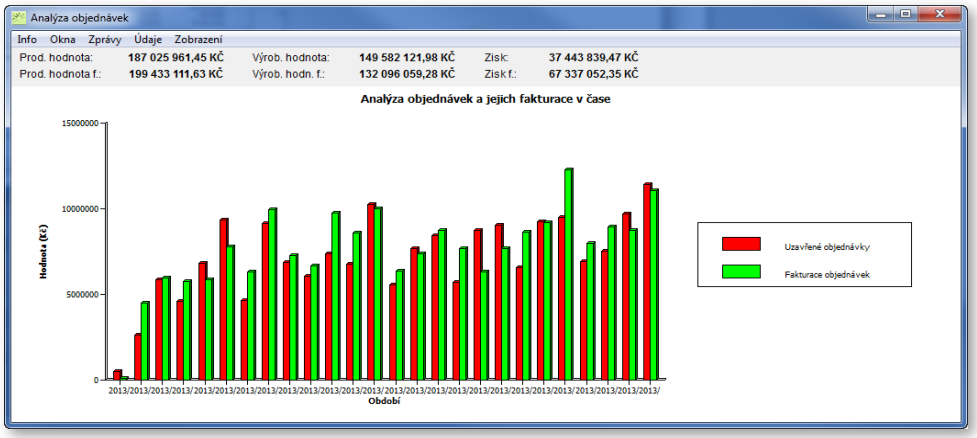
myGEM

We are dealing with a potential customer → We are checking options → **We have won, we start fulfillment** → We order material → We produce → We deliver → We evaluate

- There are important additional information for our decisions.



- *Supplies overview*



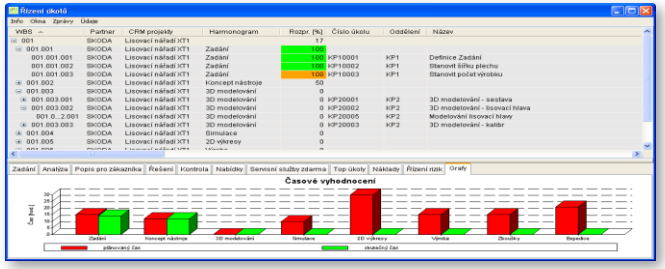
- *Analysis of orders*

PROJECTS AND TASKS MANAGEMENT

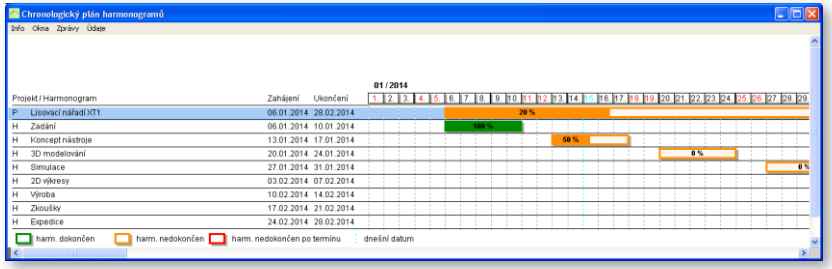
- **Project management and task** = records, **tracking performance** and the current status of assignments, including their assessment. Project management and tasks provides, among others, the following functions:
  - Interconnection projects, including CRM division into phases – **Schedules**
  - **Assignment of tasks** by the responsible solvers
  - **Watching „capacity“** in the planning calendar
  - **Methodology** for **tasks assessment** (term consumption of time, extra work ...)
  - **Colour-coded status** and performance of the whole stage schedule (selected by the user)
  - **The percentage fulfillment** of individual tasks and the whole stage schedule
  - **Action Plan** – in the form of „dynamic“ solutions to the given problem
  - Creating **a plan for a specific period and workers**

We are dealing with a potential customer → We are checking options → **We have won, we start fulfillment** → We order material → We produce → We deliver → We evaluate

- If we manage the order as a project, we can use the tools for „project and task management", which is integrated.

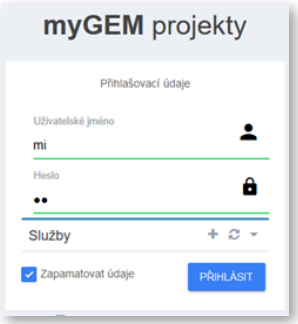


- *Viewing of time evaluation of the project and its phases.*

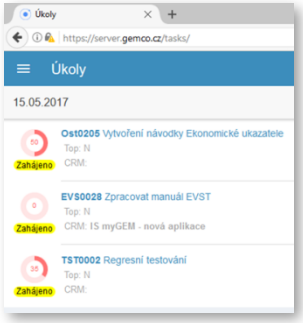


- *Chronological project view and its phases.*

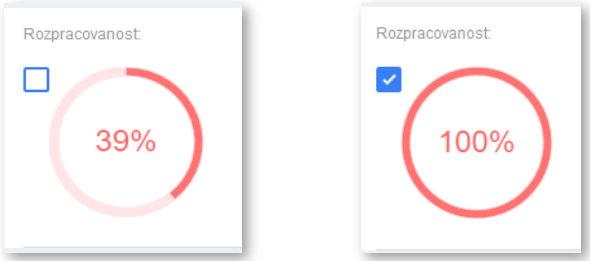
- Tasks are also used on the mobile phone.



- *Login*



- *Task management window*

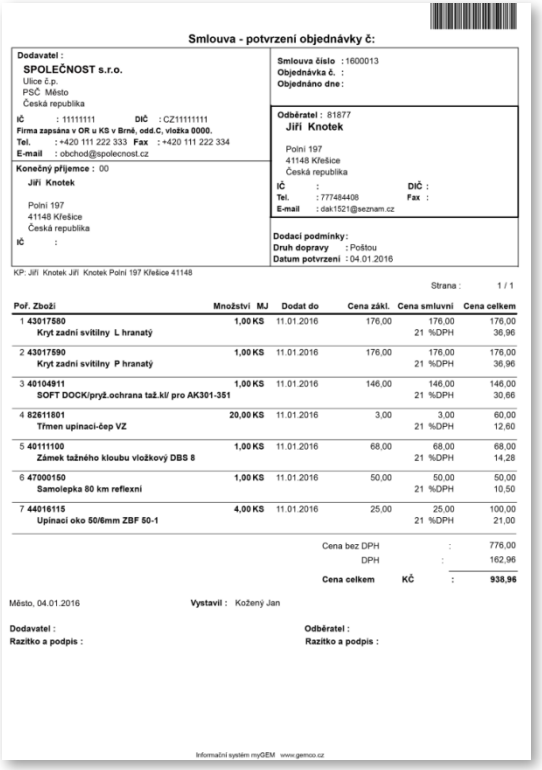


- *Editing of task processing*

ORDER ISSUING

We are dealing with a potential customer → We are checking options → **We have won, we start fulfillment** → We order material → We produce → We deliver → We evaluate

- **Everything for delivery is verified, we issue an order confirmation.**



Smlouva - potvrzení objednávky č:

Dodavatel :
SPOLEČNOST s.r.o.
Ulice č.p.
PSČ Město
Česká republika
IČ : 11111111 **DIČ** : CZ11111111
Firma zapsána v OR u KS v Brně, odd.C, vložka 0000.
Tel. : +420 111 222 333 **Fax** : +420 111 222 334
E-mail : obchod@spolecnost.cz

Konečný příjemce : 00
Jiří Knotek
Polní 197
41148 Křešice
Česká republika
IČ :

Smlouva číslo : 1600013
Objednávka č. :
Objednáno dne :

Odběratel : 81877
Jiří Knotek
Polní 197
41148 Křešice
Česká republika
IČ : **DIČ** :
Tel. : 777484408 **Fax** :
E-mail : dak1521@seznam.cz

Dodací podmínky:
Druh dopravy : Poštou
Datum potvrzení : 04.01.2016

KP: Jiří Knotek Jiří Knotek Polní 197 Křešice 41148

Strana : 1 / 1

Poř.	Zboží	Množství	MJ	Dodat do	Cena zákl.	Cena smluvní	Cena celkem
1	**43017580** Kryt zadní svítilny L hranatý	1,00	KS	11.01.2016	176,00	176,00 21 %DPH	176,00 36,96
2	**43017590** Kryt zadní svítilny P hranatý	1,00	KS	11.01.2016	176,00	176,00 21 %DPH	176,00 36,96
3	**40104911** SOFT DOCK/pryž.ochrana taž.kl/ pro AK301-351	1,00	KS	11.01.2016	146,00	146,00 21 %DPH	146,00 30,66
4	**82611801** Třmen upínací-čep VZ	20,00	KS	11.01.2016	3,00	3,00 21 %DPH	60,00 12,60
5	**40111100** Zámek tažného kloubu vložkový DBS 8	1,00	KS	11.01.2016	68,00	68,00 21 %DPH	68,00 14,28
6	**47000150** Samolepka 80 km reflexní	1,00	KS	11.01.2016	50,00	50,00 21 %DPH	50,00 10,50
7	**44016115** Upínací oko 50/6mm ZBF 50-1	4,00	KS	11.01.2016	25,00	25,00 21 %DPH	100,00 21,00

Cena bez DPH : 776,00
DPH : 162,96
Cena celkem KČ : 938,96

Město, 04.01.2016 **Vystavil :** Kožený Jan

Dodavatel : **Odběratel :**
Razítko a podpis : **Razítko a podpis :**

Informační systém myGEM www.gemco.cz

PURCHASE, WAREHOUSES

myGEM

We are dealing with a potential customer → We are checking options → We have won, we start fulfillment → **We order material** → We produce → We deliver → We evaluate

- The module **monitors the material** from the formation of the requirement to implement specific production orders = **important process** for every business.
- Using **barcodes** for receiving and dispensing the stock, including the **monitoring of storage places**.
- **Claims management of purchased** items with **relation to claims from customers.**
- **Automatic creation of orders** according to **current production requirements.**

PURCHASE, WAREHOUSES

We are dealing with a potential customer → We are checking options → We have won, we start fulfillment → **We order material** → We produce → We deliver → We evaluate

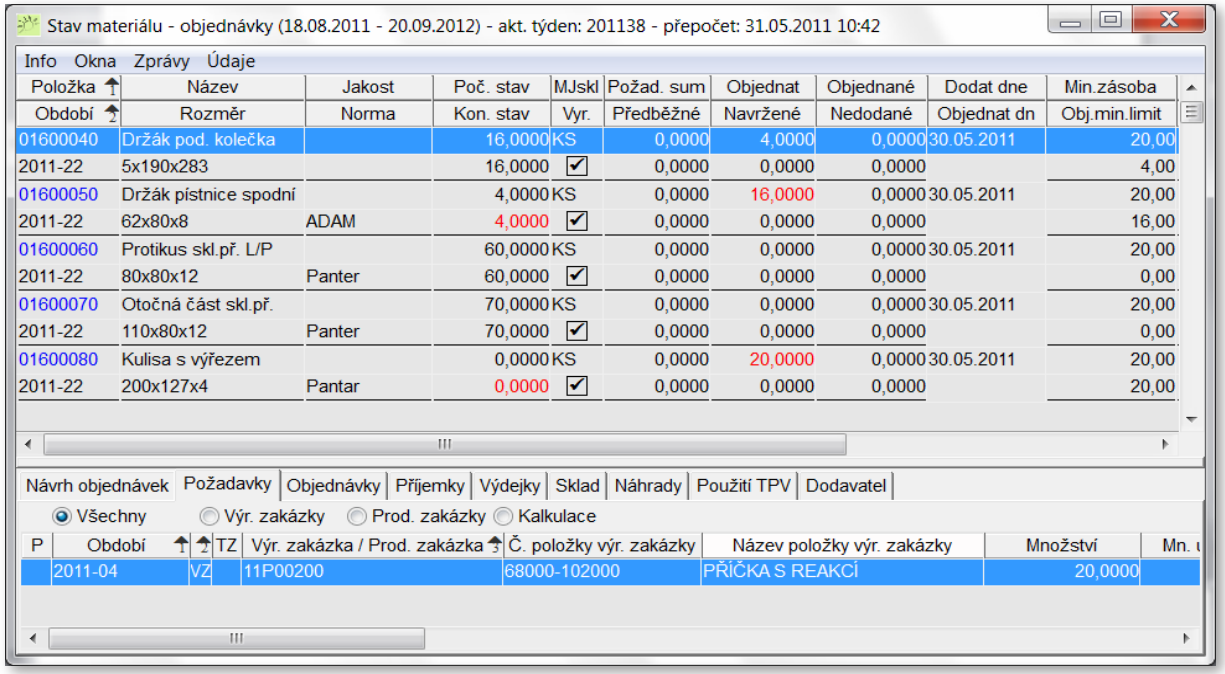
- Managing data on **purchased** items (batch, storage space, inspections, ...)
- Monitoring of material invoices and cost
- **Monitoring** and **evaluation of the quality** of supplies and suppliers
- **Monitoring** inventory and manufacturing requirements
- **Income and output** from the store using mobile terminals
- **Planned expeditures**
- **Analysis** of stock movements
- **Simulating the impact** of changes in the production plan to supply
- **Claims management** of purchased items
- **Integration of suppliers** – **WEB portal** for their management
- Possibilities of **stock consignment**

EXAMPLE OF DRAFT ORDERS

myGEM

We are dealing with a potential customer → We are checking options → We have won, we start fulfillment → **We order material** → We produce → We deliver → We evaluate

- Purchase features – **automatic draft order** (material, cooperation) is used to ensure "continuity" of production and **optimum stock availability.**



Stav materiálu - objednávky (18.08.2011 - 20.09.2012) - akt. týden: 201138 - přepočet: 31.05.2011 10:42

Info Okna Zprávy Údaje

Položka / Období	Název / Rozměr	Jakost / Norma	Poč. stav / Kon. stav	MJskl / Vyr.	Požad. sum / Předběžné	Objednat / Navržené	Objednané / Nedodané	Dodat dne / Objednat dn	Min.zásoba / Obj.min.limit
01600040	Držák pod. kolečka		16,0000	KS	0,0000	4,0000	0,0000	30.05.2011	20,00
2011-22	5x190x283		16,0000	☑	0,0000	0,0000	0,0000		4,00
01600050	Držák pístnice spodní		4,0000	KS	0,0000	16,0000	0,0000	30.05.2011	20,00
2011-22	62x80x8	ADAM	4,0000	☑	0,0000	0,0000	0,0000		16,00
01600060	Protikus skl.př. L/P		60,0000	KS	0,0000	0,0000	0,0000	30.05.2011	20,00
2011-22	80x80x12	Panter	60,0000	☑	0,0000	0,0000	0,0000		0,00
01600070	Otočná část skl.př.		70,0000	KS	0,0000	0,0000	0,0000	30.05.2011	20,00
2011-22	110x80x12	Panter	70,0000	☑	0,0000	0,0000	0,0000		0,00
01600080	Kulisa s výřezem		0,0000	KS	0,0000	20,0000	0,0000	30.05.2011	20,00
2011-22	200x127x4	Pantar	0,0000	☑	0,0000	0,0000	0,0000		20,00

Návrh objednávek | Požadavky | Objednávky | Příjemky | Výdejky | Sklad | Náhrady | Použití TPV | Dodavatel

Všechny | Výr. zakázky | Prod. zakázky | Kalkulace

P	Období		TZ	Výr. zakázka / Prod. zakázka	Č. položky výr. zakázky	Název položky výr. zakázky	Množství	Mn.
	2011-04	VZ		11P00200	68000-102000	PŘÍČKA S REAKCÍ	20,0000	

COOPERATION EXAMPLE ORDERS

We are dealing with a potential customer → We are checking options → We have won, we start fulfillment → **We order material** → We produce → We deliver → We evaluate

- **Automatic creation of cooperation orders** based on the requirements of production.

Objednávky - Kooperace

Info Okna Zprávy Údaje

P	D	K	Číslo objednávk	Číslo partnera	Partner	Dod.	Dodavatel název	Město	Zal
			1328000007	02954	UNIREG, spol. s r.o.	00	UNIREG, spol s r.o.	Brno	
			1328000008	02954	UNIREG, spol. s r.o.	00	UNIREG, spol s r.o.	Brno	
			1328000009	00038	KÜHTREIBER, s.r.o.	00	Kühtreiber, s.r.o.	Třebíč	12PVV09
			1328000010	02954	UNIREG, spol. s r.o.	00	UNIREG, spol s r.o.	Brno	
			1328000012	02954	UNIREG, spol. s r.o.	00	UNIREG, spol s r.o.	Brno	
			1328000013	00020	POTISK Palát.s.r.o.	00	POTISK Palát, s.r.o.	Třebíč	13PVV00
			1328000014	02954	UNIREG, spol. s r.o.	00	UNIREG, spol s r.o.	Brno	

Objednávka: 1328000008

P	D	K	Položka	Množství	Mn. dodané	MJ	Mn. na kooperaci	Cena	Pož. datum dod.	Datum dodání	Datum kooperac
			10154+020	3,0000	3,0000	KS	3,0000	80,0000	14.01.2013	16.01.2013	14.01.2013
			10870+040	5,0000	5,0000	KS	5,0000	120,0000	14.01.2013	16.01.2013	14.01.2013
			10892+040	50,0000	0,0000	KS	50,0000	30,0000	14.01.2013		14.01.2013
			10870+040	3,0000	3,0000	KS	3,0000	120,0000	14.01.2013	16.01.2013	14.01.2013
			10892+040	50,0000	0,0000	KS	50,0000	30,0000	14.01.2013		14.01.2013
			10897+040	5,0000	5,0000	KS	5,0000	150,0000	14.01.2013	16.01.2013	14.01.2013

MOBILE TERMINALS

myGEM

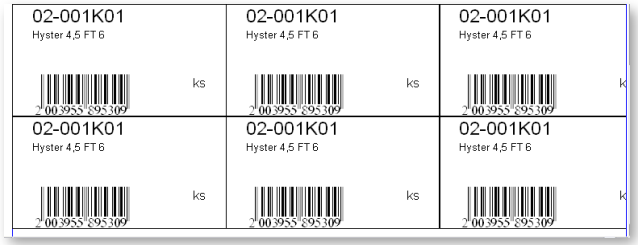
We are dealing with a potential customer → We are checking options → We have won, we start fulfillment → **We order material** → We produce → We deliver → We evaluate

- Module for managing mobile terminals is “**native**” applications **myGEM** and works in on-line mode module **Warehouses.**
  - **Income and outflow** of purchased items via **mobile terminals**
  - **Quick outflow** of items from the warehouse terminal using the so-called **outflow batch**
  - **Automatic transfer**, including generating the necessary documents, without manual user creation (transfers, requisitions, delivery notes, ...)
  - Carrying out **incoming** and **final inspections** on products
  - Outflow of items from the warehouse for each contract, for stacker, shipping/loading
  - Ability to perform an **inventory** of warehouses by mobile terminal
  - Change of storage location

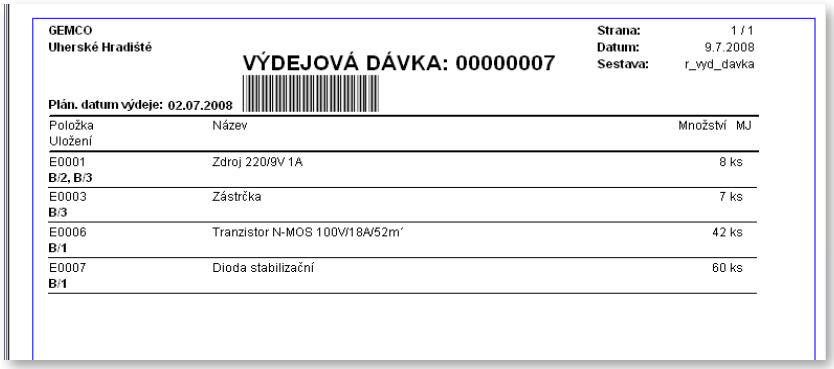
BARCODE USE EXAMPLES

We are dealing with a potential customer → We are checking options → We have won, we start fulfillment → **We order material** → We produce → We deliver → We evaluate

- Efficient mobile devices are used for receiving, storing, issuing material and stock-taking. For these devices we have prepared special software modules.



- *Printing labels from Microsoft for labelling products*



GEMCO
Uherské Hradiště

VÝDEJOVÁ DÁVKA: 00000007

Strana: 1 / 1
Datum: 9.7.2008
Sestava: r_vyd_davka

Plán. datum výdeje: 02.07.2008

Položka Uložení	Název	Množství MJ
E0001 B/2, B/3	Zdroj 220/9V 1A	8 ks
E0003 B/3	Zástrčka	7 ks
E0006 B/1	Tranzistor N-MOS 100V/18A/52m´	42 ks
E0007 B/1	Dioda stabilizační	60 ks

- *Example outflow batch for picking items from the warehouse using a mobile terminal*

MANAGEMENT AND PRODUCTION PLANNING

myGEM

We are dealing with a potential customer → We are checking options → We have won, we start fulfillment → We order material → **We produce** → We deliver → We evaluate

- The module is used **to time, quantitative, capacity planning** by type of production.
  - Taking over from the sale, including **automatic generation of documents and barcode labels in one step**
  - Assessment of the **capacitive loads** of individual workplaces and their solutions
  - Evaluation of **summary material requirements** in individual planning periods
  - **Making views, executive plan** (plant, center, workshop) and fault solution
  - **Identifying differences** between the requirements of trade and production (overruns solution ...)
  - Modification of the plan of orders according to the agreed loading (application of the **KANBAN** principle)

MANAGEMENT AND PRODUCTION PLANNING

- Production planning and control of **piece** (custom), **serial** and **mass**
- Use of **transport batches**

- Scheduling, both **progressive and regressive**
  - According to throughput times, processing times, ...
  - Depending on the type of capacity, machine, ...

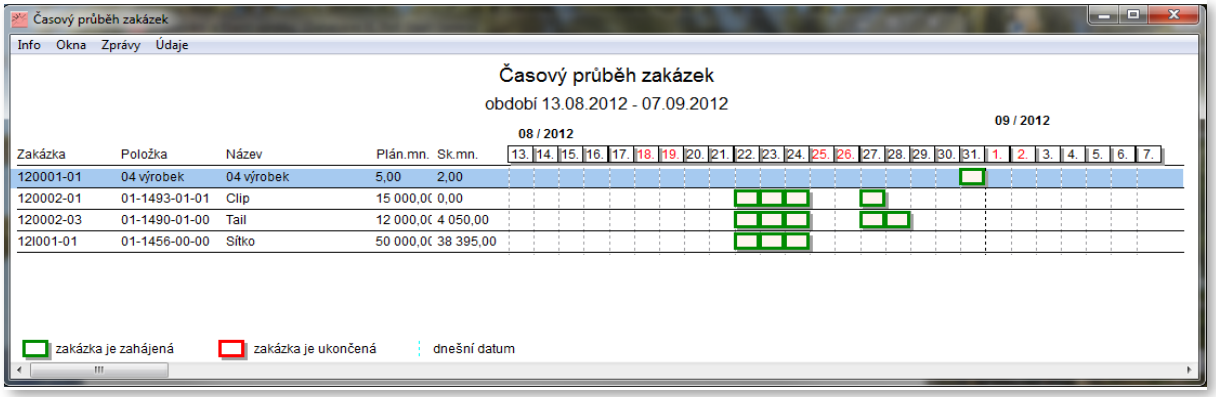
- **Production design / planning of finished** (FVV) and **semi-finished** (PVV) goods based on the requirements of production and sales and the current warehouse state
- Application of the **Synchro MRP** principle (production part planning, semi-finished, assembly according to orders)
- We provide **accommodative** planning for each process

PLANNING EXAMPLES

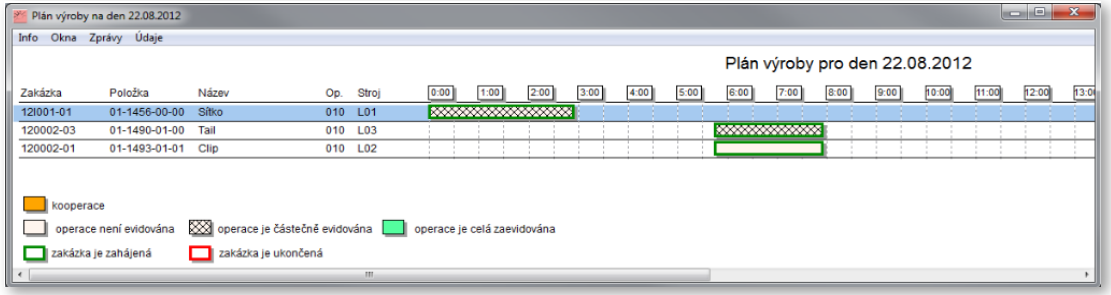
myGEM

We are dealing with a potential customer → We are checking options → We have won, we start fulfillment → We order material → **We produce** → We deliver → We evaluate

- Production can be planned in many ways but each production is specific.



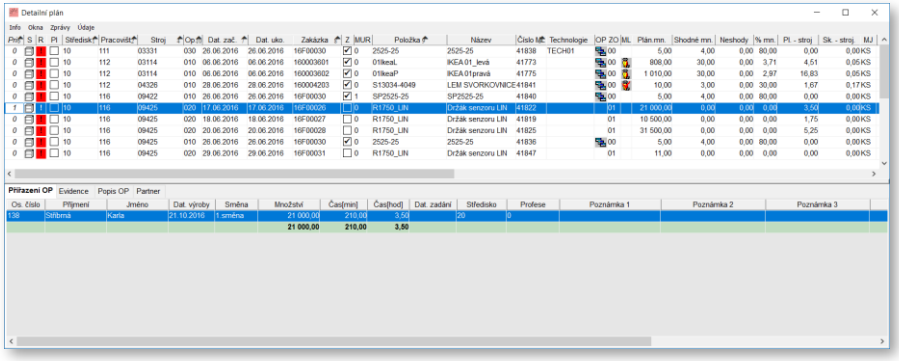
- *Used for the production of:*
  - *mass*
  - *piece*
  - *finished products*
  - *semi-finished products*
  - *spare parts*



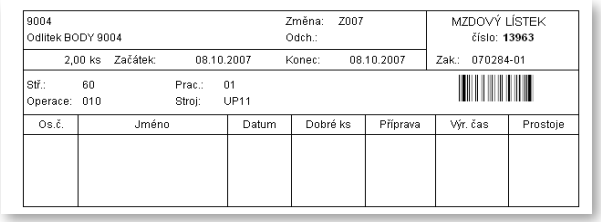
PLANNING EXAMPLES

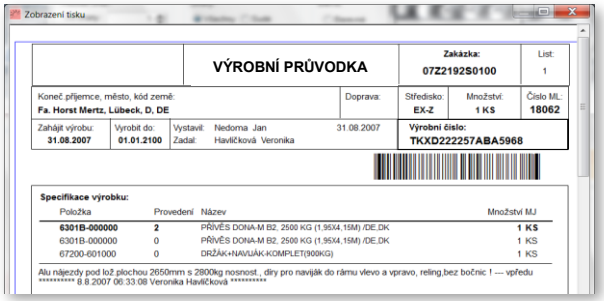
We are dealing with a potential customer → We are checking options → We have won, we start fulfillment → We order material → **We produce** → We deliver → We evaluate

- Specific outputs are customized to customers.



- *Detailed plan*





- *An example of using barcodes in production: time card, production card*

RVE PRODUCTION – RECORDS

myGEM

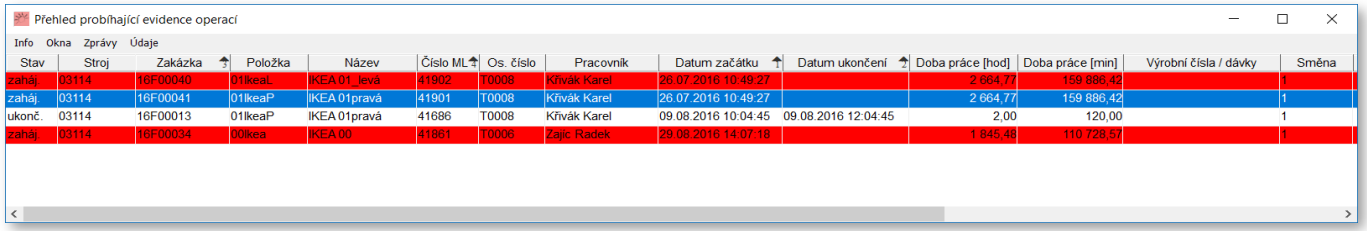
- The module is used primarily for **financial and quantitative evaluation** of the status of work in progress, the **evaluation of planned and actual costs**, fulfilment of performance standards, preparation of documents for wages and **quality monitoring.**
  - Material requisitions (limit sheets), including the dispensing of a bar code
  - Job tickets (work container)
  - Time card **clock-out** via barcode
  - Records during production
  - Conscription of semi-finished products, finished products from production
  - Records of **final inspection** via terminals
  - **Records of non-conformities,** returns, downtime and other work
  - Monthly **closing** in production
  - **Traceability** (batches, serial numbers, ...)

RVE PRODUCTION – RECORDS

We are dealing with a potential customer → We are checking options → We have won, we start fulfillment → We order material → **We produce** → We deliver → We evaluate

- Finished and released operations are monitored online during the implementation process.

- *Production records*



Stav	Stroj	Zakázka	Položka	Název	Číslo ML	Os. číslo	Pracovník	Datum začátku	Datum ukončení	Doba práce [hod]	Doba práce [min]	Výrobní čísla / dávky	Směna
zaháj.	03114	16F00040	01IkeaL	IKEA 01_levá	41902	T0008	Křivák Karel	26.07.2016 10:49:27		2 664,77	159 886,42		1
zaháj.	03114	16F00041	01IkeaP	IKEA 01pravá	41901	T0008	Křivák Karel	26.07.2016 10:49:27		2 664,77	159 886,42		1
ukonč.	03114	16F00013	01IkeaP	IKEA 01pravá	41686	T0008	Křivák Karel	09.08.2016 10:04:45	09.08.2016 12:04:45	2,00	120,00		1
zaháj.	03114	16F00034	00Ikea	IKEA 00	41861	T0006	Zajíc Radek	29.08.2016 14:07:18		1 845,48	110 728,57		1

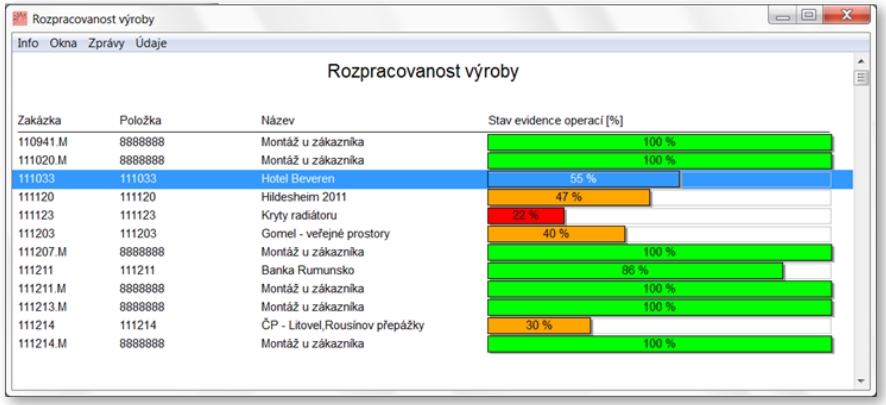
- *Overview of ongoing records of operations*

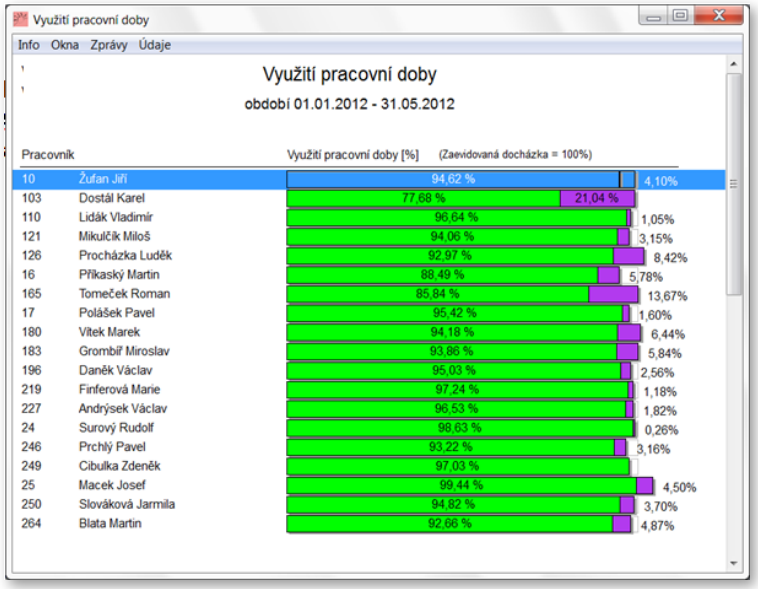
PRODUCTION VISUALISATION

myGEM

We are dealing with a potential customer → We are checking options → We have won, we start fulfillment → We order material → **We produce** → We deliver → We evaluate

- These reports provide a graphical view of the ongoing processes of production, fulfilment of contracts, use of machines and workers, including representation disputes and claims, using **Pareto analysis**.
- It is suitable for obtaining an overview for management, as well as for individuals at workstations, i.e. **display on screens** at workstations etc.

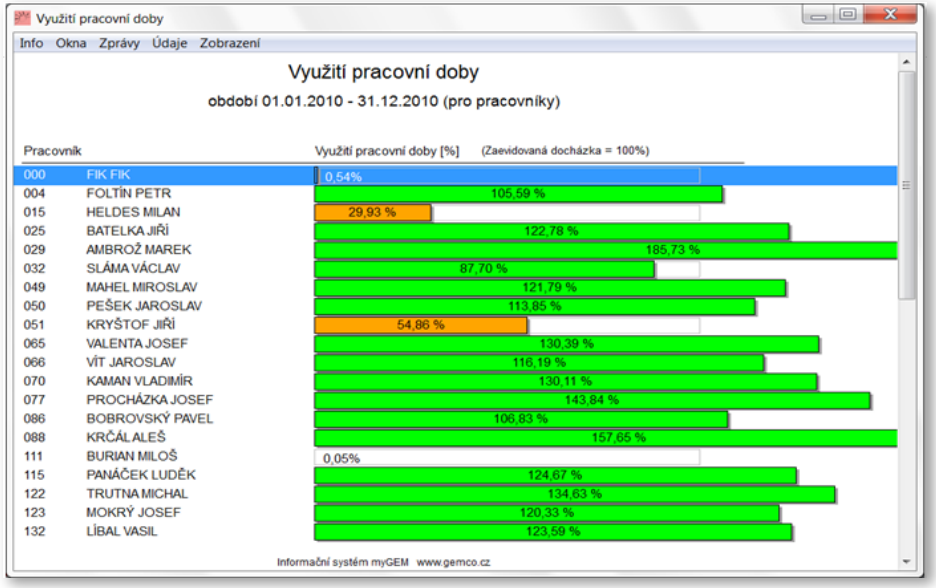




PRODUCTION VISUALISATION

We are dealing with a potential customer → We are checking options → We have won, we start fulfillment → We order material → **We produce** → We deliver → We evaluate

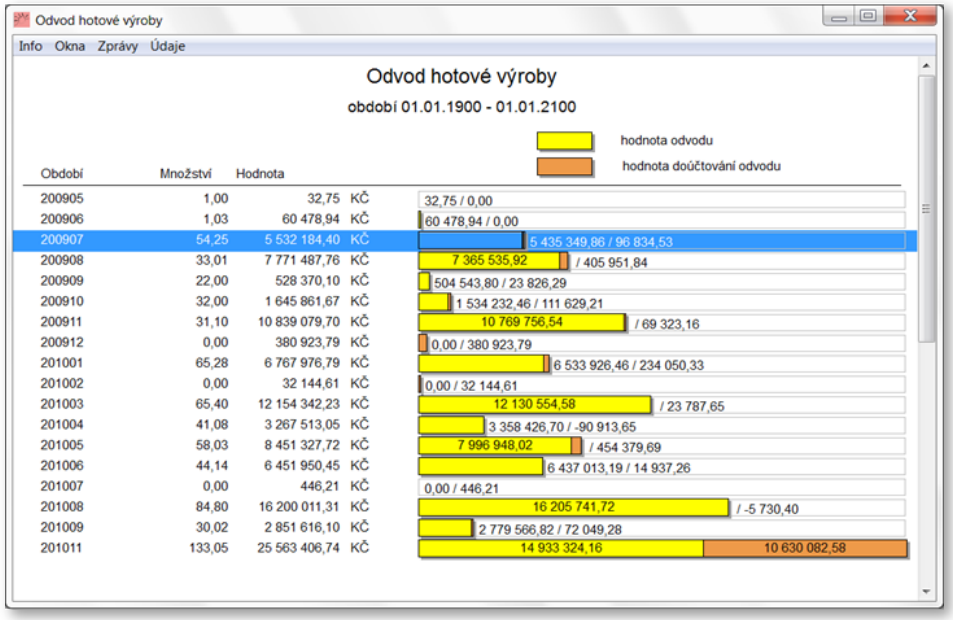
- In practice, it is important to monitor the use of working time. Data is evaluated online and presented in various forms.



- *Utilisation centre*

We are dealing with a potential customer → We are checking options → We have won, we start fulfillment → We order material → **We produce** → We deliver → We evaluate

- Finishing the production in real-time is important for creation of values.
- The overview below shows one of the options.



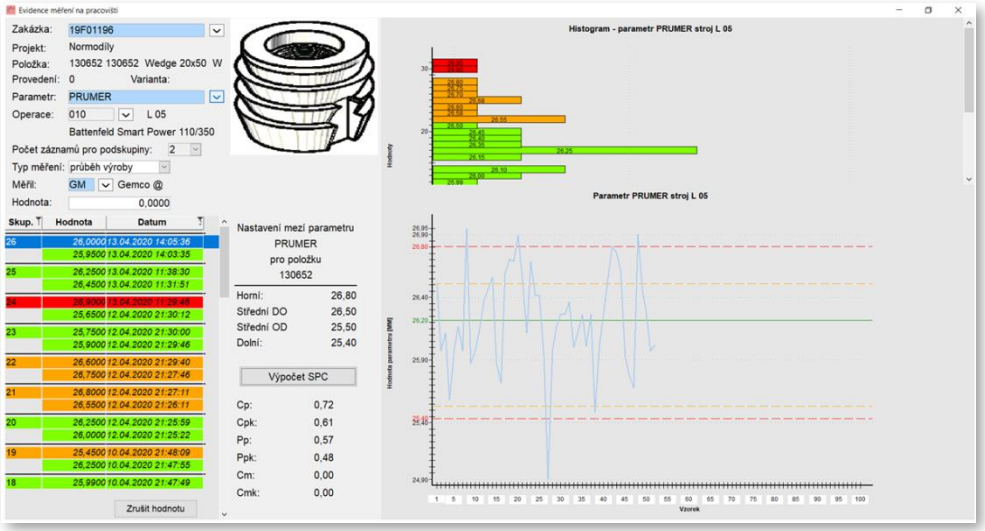
Období	Množství	Hodnota		
200905	1,00	32,75	KČ	32,75 / 0,00
200906	1,03	60 478,94	KČ	60 478,94 / 0,00
200907	54,25	5 532 184,40	KČ	5 435 349,86 / 96 834,53
200908	33,01	7 771 487,76	KČ	7 365 535,92 / 405 951,84
200909	22,00	528 370,10	KČ	504 543,80 / 23 826,29
200910	32,00	1 645 861,67	KČ	1 534 232,46 / 111 629,21
200911	31,10	10 839 079,70	KČ	10 769 756,54 / 69 323,16
200912	0,00	380 923,79	KČ	0,00 / 380 923,79
201001	65,28	6 767 976,79	KČ	6 533 926,46 / 234 050,33
201002	0,00	32 144,61	KČ	0,00 / 32 144,61
201003	65,40	12 154 342,23	KČ	12 130 554,58 / 23 787,65
201004	41,08	3 267 513,05	KČ	3 358 426,70 / -90 913,65
201005	58,03	8 451 327,72	KČ	7 996 948,02 / 454 379,69
201006	44,14	6 451 950,45	KČ	6 437 013,19 / 14 937,26
201007	0,00	446,21	KČ	0,00 / 446,21
201008	84,80	16 200 011,31	KČ	16 205 741,72 / -5 730,40
201009	30,02	2 851 616,10	KČ	2 779 566,82 / 72 049,28
201011	133,05	25 563 406,74	KČ	14 933 324,16 / 10 630 082,58

- *Output of finished production*

DISPLAYING OF TRACKED VALUES

We are dealing with a potential customer → We are checking options → We have won, we start fulfillment → We order material → **We produce** → We deliver → We evaluate

- Key values that predict the quality of the process and products are captured and displayed from machines.
- Values are also captured from special single-purpose machines that are part of the automation of the manufacturing process. Standards that use protocol ProfiNET are primarily used here.



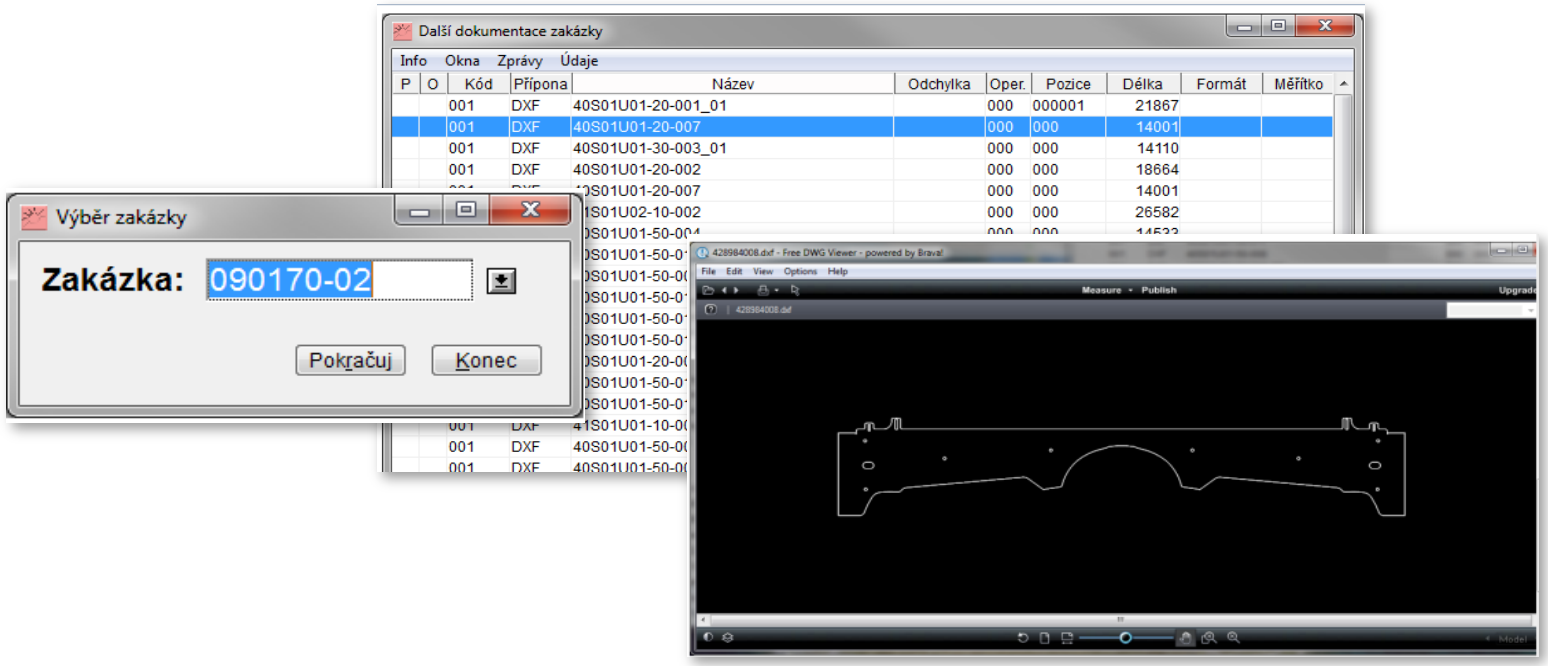
- *Online data acquisition from the machine*

LINE-SIDE DOCUMENTATION DISPLAY EXAMPLE

myGEM

We are dealing with a potential customer → We are checking options → We have won, we start fulfillment → We order material → **We produce** → We deliver → We evaluate

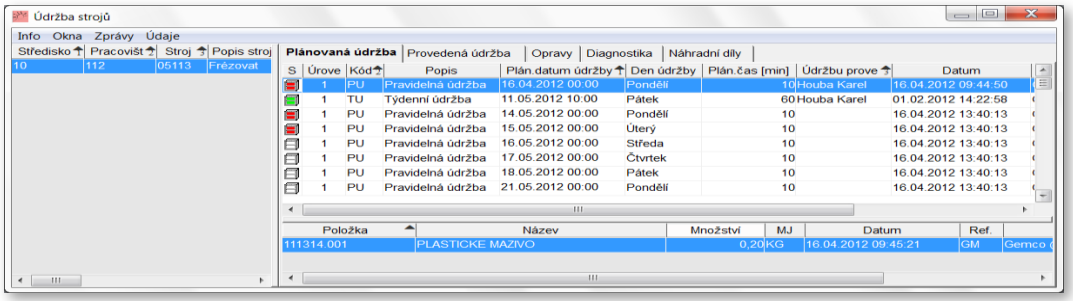
- To work flexibly and precisely, we provide product data directly to a specific machine.
- The data is subject to change service and eventual deviation management process.



MAINTENANCE AND DIAGNOSTICS OF MACHINES

We are dealing with a potential customer → We are checking options → We have won, we start fulfillment → We order material → **We produce** → We deliver → We evaluate

- **Machine maintenance** is a simple tool for monitoring the status of **production and maintenance** of machines. The aim is to ensure **maximum equipment life** with higher **safety** and **reduce costs.**
  It provides:
  - **Maintenance scheduling**
  - **Predictive maintenance plan**
  - Monitoring and registrations of completed **repairs** (internal/external)
  - Machine **diagnostics**
  - Data **imports**
  - **Control diagrams, ...**

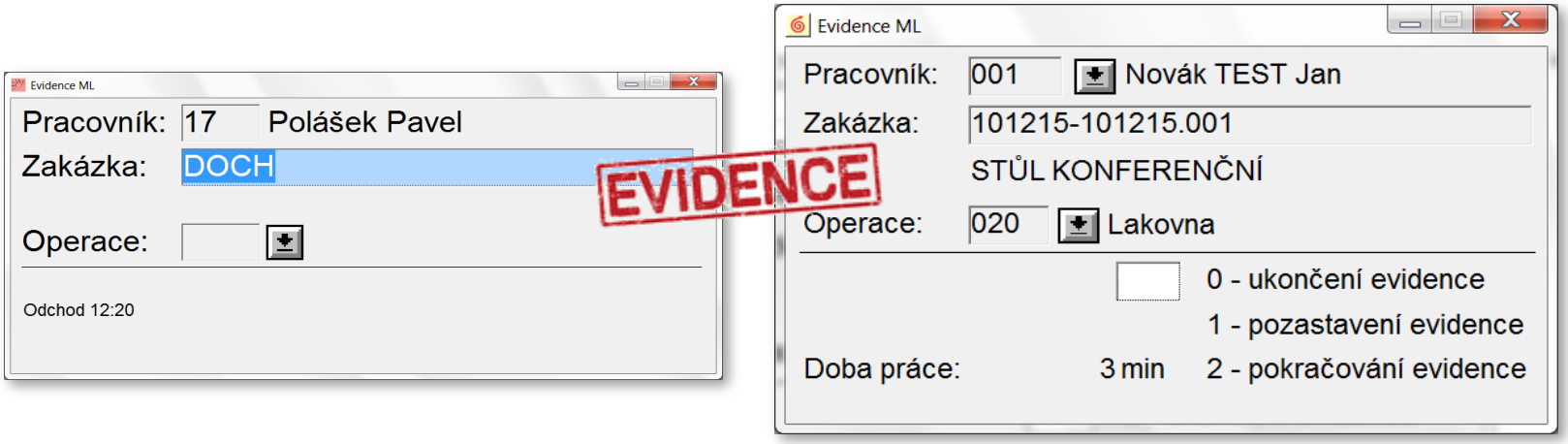


RVE ATTENDANCE RECORDS

myGEM

We are dealing with a potential customer → We are checking options → We have won, we start fulfillment → We order material → **We produce** → We deliver → We evaluate

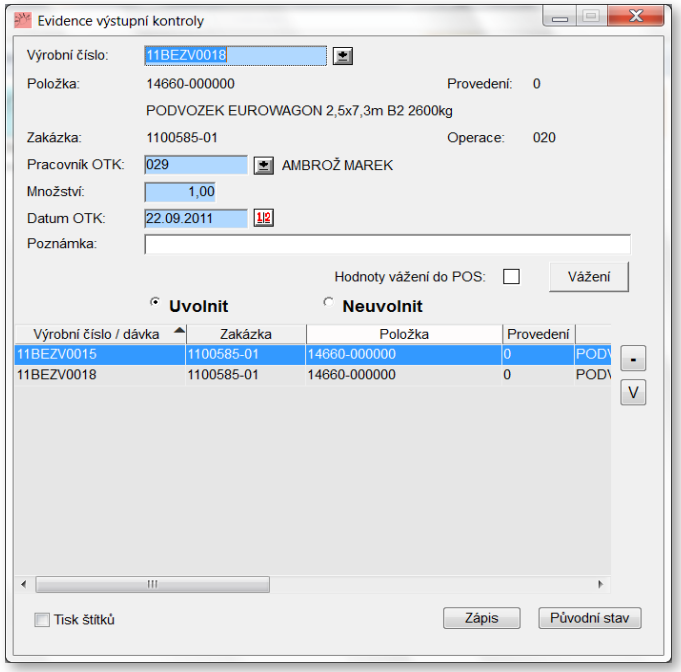
- **Attendance records** provides Login/logout workers using chips or barcodes in the system, and automatic calculation of hours worked (according to set criteria).
- Hours worked on specific orders (registration payroll cards / operations) are also tracked in a similar manner.



RVE BARCODES – OUTPUT CONTROL

We are dealing with a potential customer → We are checking options → We have won, we start fulfillment → We order material → **We produce** → We deliver → We evaluate

- Records of final inspection via barcode or QR code scanning of controlled products.



WE PLAN THE LOADING

myGEM

We are dealing with a potential customer → We are checking options → We have won, we start fulfillment → We order material → We produce → **We deliver** → We evaluate

- It is a planning of loading.
- Breakdown of individual orders for **distribution** according to size, cars term.
- **Waybill** – the accompanying document for the employee distributing products to individual customers and also **provides the basis for production planning** (when applying KANBAN).

GEMCO

PLÁNOVANÝ NÁKLADOVÝ LIST č. NL900004

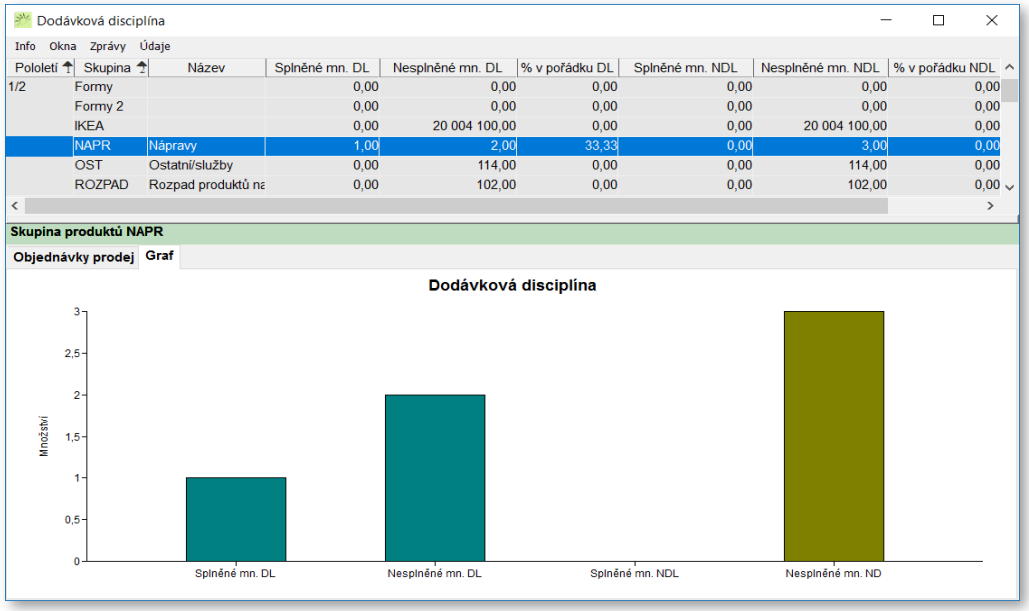
Datum nakládky:	11.03.2009	Týden:	200911
Předpokládaný čas nakládky:		Pořadí auta:	
SPZ vozidla:		Poznámky pro řidiče:	
Řidič:			
Přepravní společnost:			

Smlouva	Popis zboží	VIII	Objednané množství	Objednávka	KW obj dod	Lokace	Množství na dodání	MJ
Semaco progresivní obrabeni s.r.o. - 790 01 Jeseník								
090035	S-600001, Výrobek-finál		1,00		00 10		1,00	ks
Trans Tech Tooling,s.r.o. - 613 00 Brno								
080448	99000001, Plachta		1,00		00 46		1,00	ks
090034	00125M -VČ - F - Agados, Výrobek 0125M -VČ - F - Agados		1,00		00 11		1,00	ks
080445	001, Polštář		2,00		00 45		2,00	ks
	674 01							
AUTO DOBROVOLNÝ V.M. s.r.o. - 59401 Velké Meziříčí								
090041	0125M -VČ - F - Agados, Výrobek 0125M -VČ - F - Agados	0033	2,00		00 13		1,00	ks
090041	0125M -VČ - F - Agados, Výrobek 0125M -VČ - F - Agados	0034	2,00		00 13		1,00	ks
Electro Comp. - 68601 Uherske Hradiste								
080165	Adi-p02, produkt 02	0032	50,00		00 13		1,00	ks
080165	Adi-p02, produkt 02	0033	50,00		00 13		1,00	ks

SUPPLY DISCIPLINE

We are dealing with a potential customer → We are checking options → We have won, we start fulfillment → We order material → We produce → **We deliver** → We evaluate

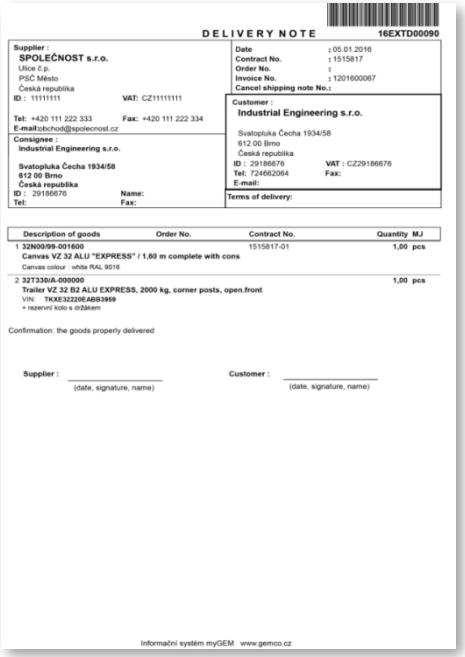
- **OTD = On Time Delivery** is a timely delivery to the customer, the parameter is an important supplier rating indicator.
- In the case of a problem with deadlines, it is necessary to present an action plan to improve deliveries.



Pololetí	Skupina	Název	Splněné mn. DL	Nesplněné mn. DL	% v pořádku DL	Splněné mn. NDL	Nesplněné mn. NDL	% v pořádku NDL
1/2	Formy		0,00	0,00	0,00	0,00	0,00	0,00
	Formy 2		0,00	0,00	0,00	0,00	0,00	0,00
	IKEA		0,00	20 004 100,00	0,00	0,00	20 004 100,00	0,00
	NAPR	Nápravy	1,00	2,00	33,33	0,00	3,00	0,00
	OST	Ostatní/služby	0,00	114,00	0,00	0,00	114,00	0,00
	ROZPAD	Rozpad produktů na	0,00	102,00	0,00	0,00	102,00	0,00

We are dealing with a potential customer → We are checking options → We have won, we start fulfillment → We order material → We produce → **We deliver** → We evaluate

- Documents are delivered as standard in printed or electronic form (EDI) to the delivery.



DELIVERY NOTE 16EXTD00090

Supplier : SPOLEČNOST s.r.o.
Ulice č.p.
PSČ Město
Česká republika
ID : 11111111 VAT: CZ11111111
Tel: +420 111 222 333 Fax: +420 111 222 334
E-mail:obchod@spolecnost.cz

Consignee : Industrial Engineering s.r.o.
Svatopluka Čecha 1934/58
612 00 Brno
Česká republika
ID : 29186676 Name:
Tel: Fax:

Date : 05.01.2016
Contract No. : 1515817
Order No. :
Invoice No. : 1201600067
Cancel shipping note No.:

Customer : Industrial Engineering s.r.o.
Svatopluka Čecha 1934/58
612 00 Brno
Česká republika
ID : 29186676 VAT : CZ29186676
Tel: 724662064 Fax:
E-mail:

Terms of delivery:

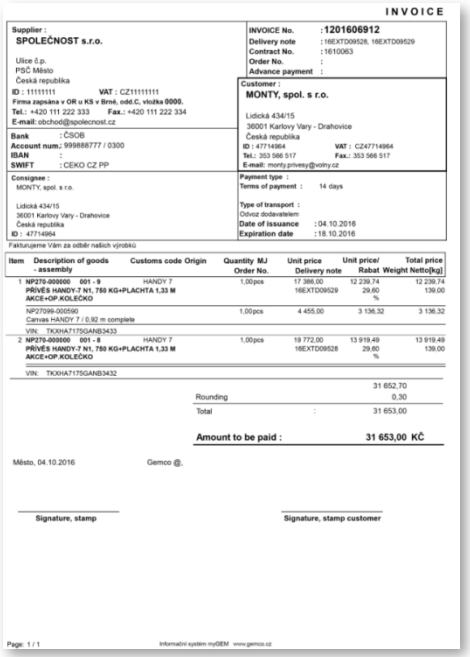
Description of goods	Order No.	Contract No.	Quantity MJ
1 32N00/99-001600		1515817-01	1,00 pcs
Canvas VZ 32 ALU "EXPRESS" / 1,60 m complete with cons			
Canvas colour : white RAL 9016			
2 32T330/A-000000			1,00 pcs
Trailer VZ 32 B2 ALU EXPRESS, 2000 kg, corner posts, open.front			
VIN: TKXE32220EABB3969			
+ rezervní kolo s držákem			

Confirmation: the goods properly delivered

Supplier : (date, signature, name)
Customer : (date, signature, name)

Informační systém myGEM www.gemco.cz

- *Delivery note*



INVOICE

Supplier : SPOLEČNOST s.r.o.
Ulice č.p.
PSČ Město
Česká republika
ID : 11111111 VAT : CZ11111111
Firma zapsána v OR u KS v Brně, odd.C, vložka 0000.
Tel.: +420 111 222 333 Fax.: +420 111 222 334
E-mail: obchod@spolecnost.cz

Bank : ČSOB
Account num.: 999888777 / 0300
IBAN :
SWIFT : CEKO CZ PP

Consignee : MONTY, spol. s r.o.
Lidická 434/15
36001 Karlovy Vary - Drahovice
Česká republika
ID : 47714964

INVOICE No. : 1201606912
Delivery note : 16EXTD09528, 16EXTD09529
Contract No. : 1610063
Order No. :
Advance payment :

Customer : MONTY, spol. s r.o.
Lidická 434/15
36001 Karlovy Vary - Drahovice
Česká republika
ID : 47714964 VAT : CZ47714964
Tel.: 353 566 517 Fax.: 353 566 517
E-mail: monty.privesy@volny.cz

Payment type :
Terms of payment : 14 days
Type of transport : Odvoz dodavatelem
Date of issuance : 04.10.2016
Expiration date : 18.10.2016

Fakturujeme Vám za odběr našich výrobků

Item	Description of goods - assembly	Customs code	Origin	Quantity MJ Order No.	Unit price Delivery note	Unit price/ Rabat	Total price Weight Netto[kg]
1	NP270-000000 001 - 9 PŘÍVĚS HANDY-7 N1, 750 KG+PLACHTA 1,33 M AKCE+OP.KOLEČKO		HANDY 7	1,00pcs	17 386,00 16EXTD09529	12 238,74 29,60 %	12 238,74 139,00
	NP270-000000 Canvas HANDY 7 / 0,92 m complete			1,00pcs	4 455,00	3 136,32	3 136,32
	VIN: TKXHA7175GANB3433						
2	NP270-000000 001 - 8 PŘÍVĚS HANDY-7 N1, 750 KG+PLACHTA 1,33 M AKCE+OP.KOLEČKO		HANDY 7	1,00pcs	19 772,00 16EXTD09528	13 919,49 29,60 %	13 919,49 139,00
	VIN: TKXHA7175GANB3432						

	31 652,70
Rounding	0,30
Total :	31 653,00
Amount to be paid :	**31 653,00 KČ**

Město, 04.10.2016 Gemco @.

Signature, stamp
Signature, stamp customer

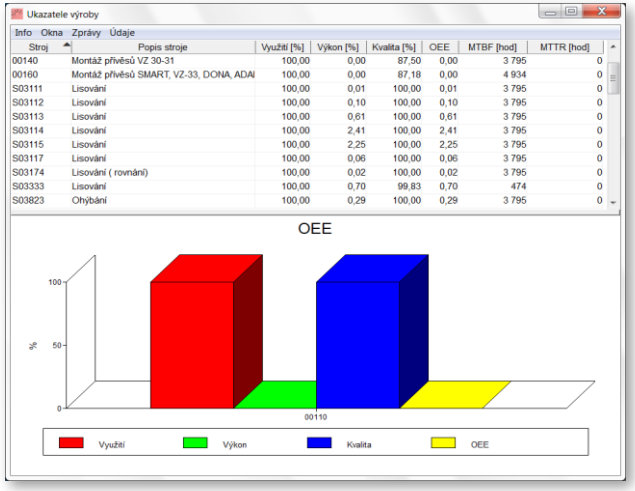
Page: 1 / 1 Informační systém myGEM www.gemco.cz

- *Invoice*

MES PRODUCTION PARAMETERS

We are dealing with a potential customer → We are checking options → We have won, we start fulfillment → We order material → We produce → **We deliver** → We evaluate

- We monitor a number of parameters, among standards belong:
  - **OEE – Overall Equipment Efficiency**
  - **MTBF – Mean Time Between Failure**
  - **MTTR – Mean Time To Repair**
  - **Utilisation** of machinery and equipment in %
  - **Performance** of machinery and equipment in %
  - Production **quality** in %



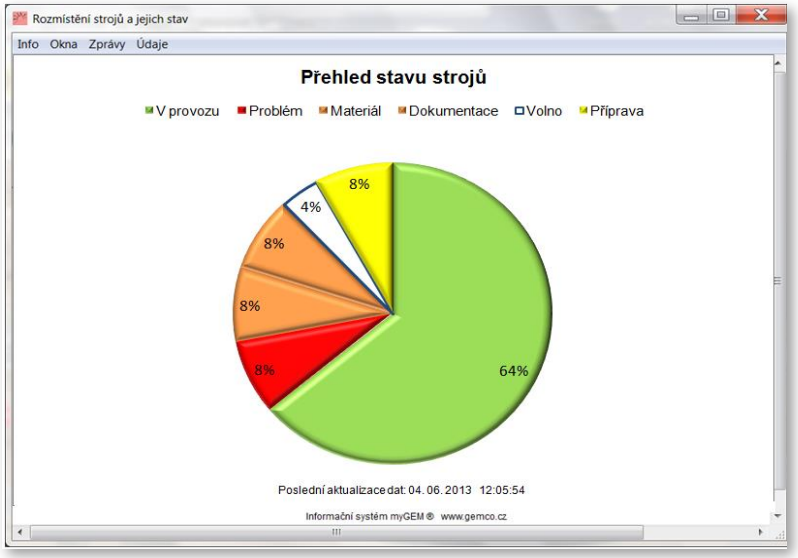
Stroj	Popis stroje	Využití [%]	Výkon [%]	Kvalita [%]	OEE	MTBF [hod]	MTTR [hod]
00140	Montáž přívěsů VZ 30-31	100,00	0,00	87,50	0,00	3 795	0
00160	Montáž přívěsů SMART, VZ-33, DONA, ADAI	100,00	0,00	87,18	0,00	4 934	0
S03111	Lisování	100,00	0,01	100,00	0,01	3 795	0
S03112	Lisování	100,00	0,10	100,00	0,10	3 795	0
S03113	Lisování	100,00	0,61	100,00	0,61	3 795	0
S03114	Lisování	100,00	2,41	100,00	2,41	3 795	0
S03115	Lisování	100,00	2,25	100,00	2,25	3 795	0
S03117	Lisování	100,00	0,06	100,00	0,06	3 795	0
S03174	Lisování (rovnání)	100,00	0,02	100,00	0,02	3 795	0
S03333	Lisování	100,00	0,70	99,83	0,70	474	0
S03823	Ohýbání	100,00	0,29	100,00	0,29	3 795	0

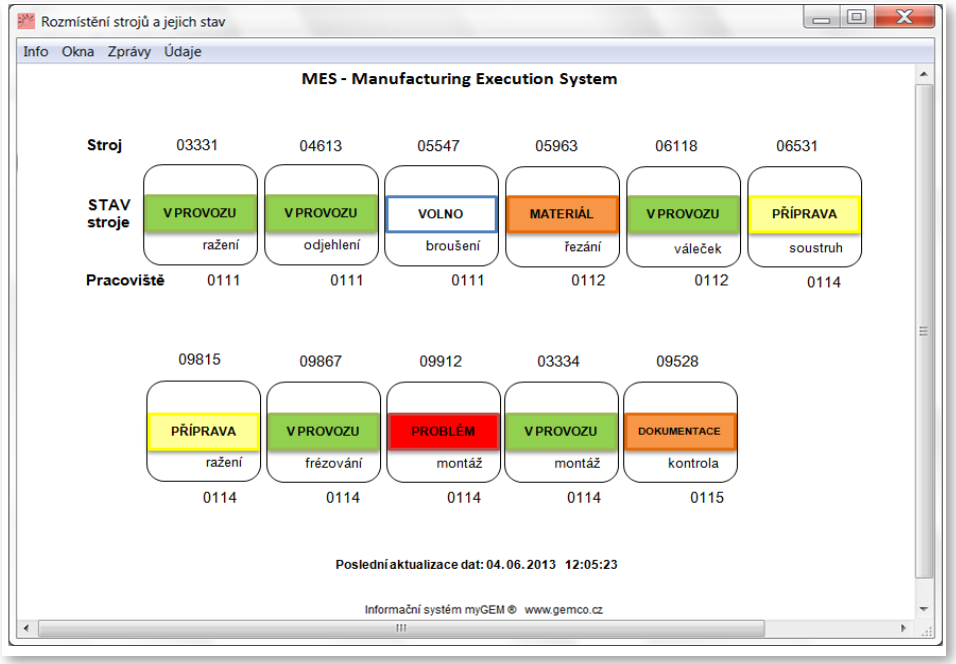
MES OVERVIEW OF PRODUCTION MACHINES STATUS

myGEM

We are dealing with a potential customer → We are checking options → We have won, we start fulfillment → We order material → We produce → We deliver → **We evaluate**

- For production planning and the security of deliveries in time, it is necessary to ensure reliable operation of all equipment.
- Visualisation and overviews about machines are the basis of predictive maintenance.

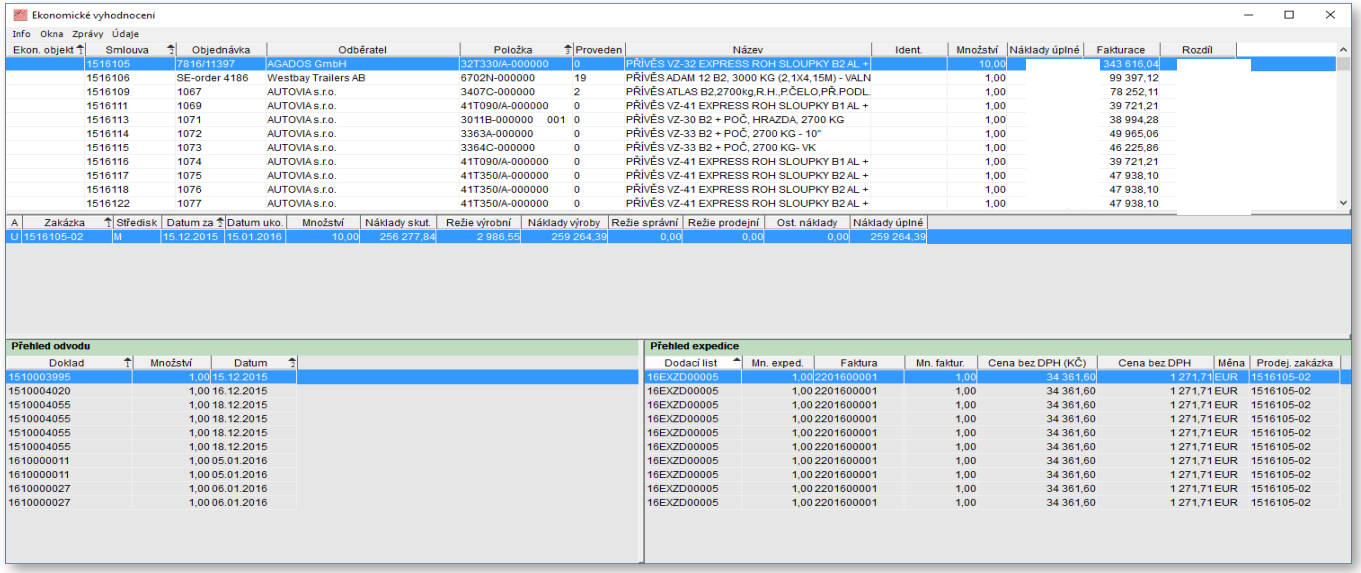




ECONOMIC EVALUATION OF THE CONTRACT

We are dealing with a potential customer → We are checking options → We have won, we start fulfillment → We order material → We produce → We deliver → **We evaluate**

- The order is evaluated after realization, more detailed evaluation is solved in the Planning and Controlling module.
- Evaluation can be done from many perspectives and dimensions. These tasks are always tailored to specific requirements.



Ekonomické vyhodnocení

Info Okna Zprávy Údaje

Ekon. objekt	Smlouva	Objednávka	Odběratel	Položka	Proveden	Název	Ident.	Množství	Náklady úplné	Fakturace	Rozdíl
	1516105	7816/11397	AGADOS GmbH	32T330/A-000000	0	PŘÍVĚS VZ-32 EXPRESS ROH SLOUPKY B2 AL +		10,00		343 616,04	
	1516106	SE-order 4186	Westbay Trailers AB	6702N-000000	19	PŘÍVĚS ADAM 12 B2, 3000 KG (2,1X4,15M) - VALN		1,00		99 397,12	
	1516109	1067	AUTOVIA s.r.o.	3407C-000000	2	PŘÍVĚS ATLAS B2,2700kg,R.H.,PČELO,PŘ.PODL.		1,00		78 252,11	
	1516111	1069	AUTOVIA s.r.o.	41T090/A-000000	0	PŘÍVĚS VZ-41 EXPRESS ROH SLOUPKY B1 AL +		1,00		39 721,21	
	1516113	1071	AUTOVIA s.r.o.	3011B-000000 001	0	PŘÍVĚS VZ-30 B2 + POČ, HRAZDA, 2700 KG		1,00		38 994,28	
	1516114	1072	AUTOVIA s.r.o.	3363A-000000	0	PŘÍVĚS VZ-33 B2 + POČ, 2700 KG - 10"		1,00		49 965,06	
	1516115	1073	AUTOVIA s.r.o.	3364C-000000	0	PŘÍVĚS VZ-33 B2 + POČ, 2700 KG- VK		1,00		46 225,86	
	1516116	1074	AUTOVIA s.r.o.	41T090/A-000000	0	PŘÍVĚS VZ-41 EXPRESS ROH SLOUPKY B1 AL +		1,00		39 721,21	
	1516117	1075	AUTOVIA s.r.o.	41T350/A-000000	0	PŘÍVĚS VZ-41 EXPRESS ROH SLOUPKY B2 AL +		1,00		47 938,10	
	1516118	1076	AUTOVIA s.r.o.	41T350/A-000000	0	PŘÍVĚS VZ-41 EXPRESS ROH SLOUPKY B2 AL +		1,00		47 938,10	
	1516122	1077	AUTOVIA s.r.o.	41T350/A-000000	0	PŘÍVĚS VZ-41 EXPRESS ROH SLOUPKY B2 AL +		1,00		47 938,10	

A	Zakázka	Středisk	Datum za	Datum uko.	Množství	Náklady skut.	Režie výrobní	Náklady výroby	Režie správní	Režie prodejní	Ost. náklady	Náklady úplné
U	1516105-02	M	15.12.2015	15.01.2016	10,00	256 277,84	2 986,55	259 264,39	0,00	0,00	0,00	259 264,39

Přehled odvodu

Doklad	Množství	Datum
1510003995	1,00	15.12.2015
1510004020	1,00	16.12.2015
1510004055	1,00	18.12.2015
1510004055	1,00	18.12.2015
1510004055	1,00	18.12.2015
1510004055	1,00	18.12.2015
1610000011	1,00	05.01.2016
1610000011	1,00	05.01.2016
1610000027	1,00	06.01.2016
1610000027	1,00	06.01.2016

Přehled expedice

Dodací list	Mn. exped.	Faktura	Mn. faktur.	Cena bez DPH (KČ)	Cena bez DPH	Měna	Prodej. zakázka
16EXZD00005	1,00	2201600001	1,00	34 361,60	1 271,71	EUR	1516105-02
16EXZD00005	1,00	2201600001	1,00	34 361,60	1 271,71	EUR	1516105-02
16EXZD00005	1,00	2201600001	1,00	34 361,60	1 271,71	EUR	1516105-02
16EXZD00005	1,00	2201600001	1,00	34 361,60	1 271,71	EUR	1516105-02
16EXZD00005	1,00	2201600001	1,00	34 361,60	1 271,71	EUR	1516105-02
16EXZD00005	1,00	2201600001	1,00	34 361,60	1 271,71	EUR	1516105-02
16EXZD00005	1,00	2201600001	1,00	34 361,60	1 271,71	EUR	1516105-02
16EXZD00005	1,00	2201600001	1,00	34 361,60	1 271,71	EUR	1516105-02
16EXZD00005	1,00	2201600001	1,00	34 361,60	1 271,71	EUR	1516105-02
16EXZD00005	1,00	2201600001	1,00	34 361,60	1 271,71	EUR	1516105-02

FINANCIAL ANALYSIS

myGEM

We are dealing with a potential customer → We are checking options → We have won, we start fulfillment → We order material → We produce → We deliver → **We evaluate**

- Most companies have a credit at the banks, which usually require reports of key indicators.
- We provide the following indicators as a standard:

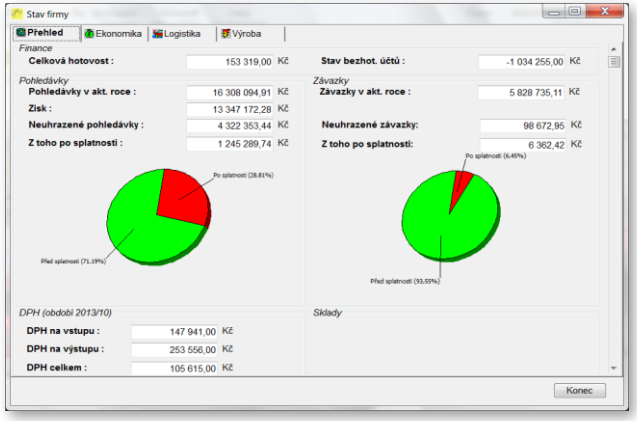
  - **Current liquidity**
  - **Return on sales**
  - **Short-term liquidity**
  - **Long-term debt**
  - **Total debt**
  - **Inventory turnover from sales**
  - **Maturity of payables/receivables**
  - **Expenses**
  - **Average daily sales**

  - Option for reporting on other indicators according to **user definition.**

STAV FIRMY

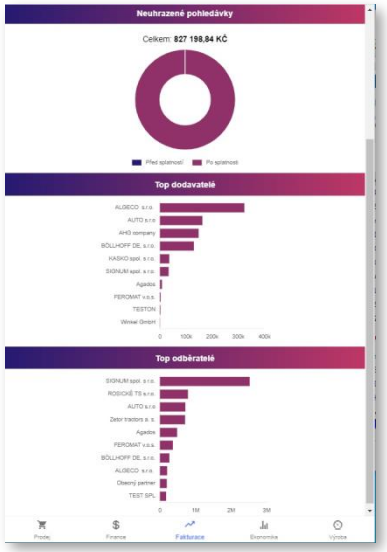
We are dealing with a potential customer → We are checking options → We have won, we start fulfillment → We order material → We produce → We deliver → **We evaluate**

- **Quick overview of the current status of the company**, designed especially for leadership. The option of viewing on devices such as tablets, mobile phones, etc.
- It offers:
  - **General overview** – status:
    - cash
    - cashless accounts
    - assets and liabilities, including maturity
    - profit
    - VAT
    - inventory
  - **Economics** – status:
    - selected accounts
    - financial flows
    - costs and revenues
    - economic results



We are dealing with a potential customer → We are checking options → We have won, we start fulfillment → We order material → We produce → We deliver → **We evaluate**

- **Logistics** displays a detailed overview of:
  - the status of individual stocks,
  - top 10 (customers/suppliers),
  - real-time expedition.
- **Production** provides an overview of **current contracts** and their **state of development in %.**



SOME BENEFITS

Current overview
of processes and business parameters that are important for management (sales analysis, supply discipline, workplace efficiency ...)

Fast mastering of software solution = security of investment

The tool for managing all realisation processes
from offer /demand, contract, TPV, purchase, detailed planning, production records to expedition

Quality data, the starting point for improvement!
process data provide valuable information for their further development; e.g. workplace efficiency and analysis
of waste resources (downtime, manipulation ...)

Extensive use of barcodes and mobile technologies
online receipt, dispatch, moving materials, products, transaction logs, expeditions …

Integration of web applications and partners
(EDI, web portal solutions for communication with suppliers, customers …)

Cost savings and higher performance!
Optimizing the staff in selected areas, integrating suppliers, improving warehouse management, expeditions ... and significantly boosting company performance with a suitable software application!

… and many other solutions!

myGEM

AGADOS, spol. s r.o.

- **The entire realisation process** from trade, development to delivery is **fully covered** by the information system.
- **Fulfillment of individual requirements** with **product configurator.**
- **Increase of production by 100%** with minimal increase in technical and workers' personnel.
- Fast communication with the client – **interconnection myGEM to the web** – for new products and spare parts.
- **Saving workers** when processing COC sheets, technical cards and communication on central records.
- Gradual **shortening of deliveries.**
- And many others …

REFERENCES

- **AGADOS, spol. s r.o.**
- **EBZ Hoffmann s.r.o.**
- **DFK Cab, s.r.o.**
- **EUROWAGON, s.r.o.**
- **4 COILS TECH s.r.o.**

and many other companies …

SECURITY ALWAYS AT A HIGH LEVEL

myGEM

- Examples of **myGEM product security** solutions:
  - compatibility with the latest valid version of operating systems (MS Windows, Windows Server, Oracle Linux) and new versions of databases
  - implementation of TLS 1.3 security protocol for safer communication and higher performance with web services for communication with external entities
  - implementation of OAuth 2.0 authentication, multi-factor login
  - direct SOAP and REST API support for communication with modern web services
  - support for generating 64-bit applications
  - new tools for CI/CD (acceleration of software delivery time)
  - use of new, more secure encryption algorithms
  - support for the security of multi-layer applications using the latest valid versions of .NET CORE
  - increasing the security of one's own database against attacks by attackers – e.g. monitoring possible attacks
  - and many other tools and rules...

MYGEM LEARN

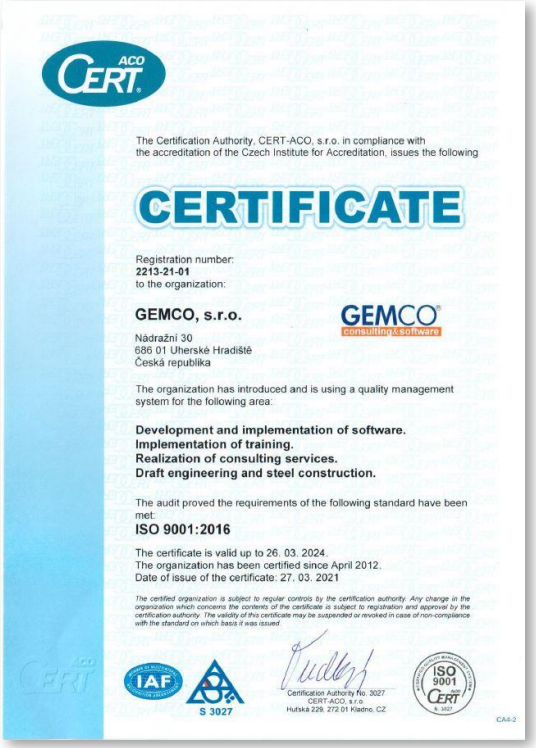
- **The supplier provides training throughout the use of myGEM.**
- Training takes place according to regularly posted dates or at the user's request.
- The training is designed to develop the knowledge of existing and new myGEM users.
- The trainings are divided into several levels:
  - **beginner**
  - **self-employed clerk**
  - **specialist**
  - **treiner**

- The effectiveness of the training is supported by the fact that the training takes place on specific model data, which allows to present and understand exactly the meanings, contexts and importance for the smooth running of the whole process.
- The trainee will receive suitable materials in the form of presentations, instructions for specific functions (if needed) and a certificate of competence achieved.
- The supplier also keeps track of **the list of trained workers** and **their achieved competencies for a specific client**.
- The mentioned procedure helps a lot in the **development and sustainability of the myGEM system**.

CERTIFICATES

myGEM

- The quality of our work is regularly audited by independent certification companies.



CERT ACO

The Certification Authority, CERT-ACO, s.r.o. in compliance with the accreditation of the Czech Institute for Accreditation, issues the following

CERTIFICATE

Registration number:
2213-21-01
to the organization:

GEMCO, s.r.o.

GEMCO consulting&software

Nádražní 30
686 01 Uherské Hradiště
Česká republika

The organization has introduced and is using a quality management system for the following area:

Development and implementation of software.
Implementation of training.
Realization of consulting services.
Draft engineering and steel construction.

The audit proved the requirements of the following standard have been met:
ISO 9001:2016

The certificate is valid up to 26. 03. 2024.
The organization has been certified since April 2012.
Date of issue of the certificate: 27. 03. 2021

The certified organization is subject to regular controls by the certification authority. Any change in the organization which concerns the contents of the certificate is subject to registration and approval by the certification authority. The validity of this certificate may be suspended or revoked in case of non-compliance with the standard on which basis it was issued.

IAF
S 3027
Certification Authority No. 3027
CERT-ACO, s.r.o.
Hutská 226, 272 01 Kladno, CZ
ISO 9001 CERT
CA4-2

CERT ACO

Certifikační orgán CERT-ACO, s.r.o., č. P 3028, akreditovaný Českým institutem pro akreditaci, o.p.s. dle ČSN EN ISO/IEC 17024:2013 uděluje

CERTIFIKÁT

Registrační číslo:
2586 - 21

Tento certifikát prokazuje, že pan

Ing. Vladimír Stašek
Datum narození: 25. 07. 1960

splnil požadavky na udělení certifikátu

Lead Auditor kvality

ve shodě s Certifikačním schématem **Systémy managementu organizací**, verze 3.0 část 1.21, b) Auditor systému managementu - **1.21, 2019.**

Platnost certifikátu do 30. 10. 2024.
Jako Lead Auditor kvality je certifikován od března 2000.
Datum vydání certifikátu: 01. 11. 2021

P 3028
Certifikační orgán č. 3028
CERT-ACO, s.r.o.
Kladno, CZ
QA Auditor kvality CERT
CA4-2

WE ARE LOOKING FORWARD TO COLLABORATE WITH YOU!

- We are an experienced team and we work for you!

GEMCO

www.gemco.cz