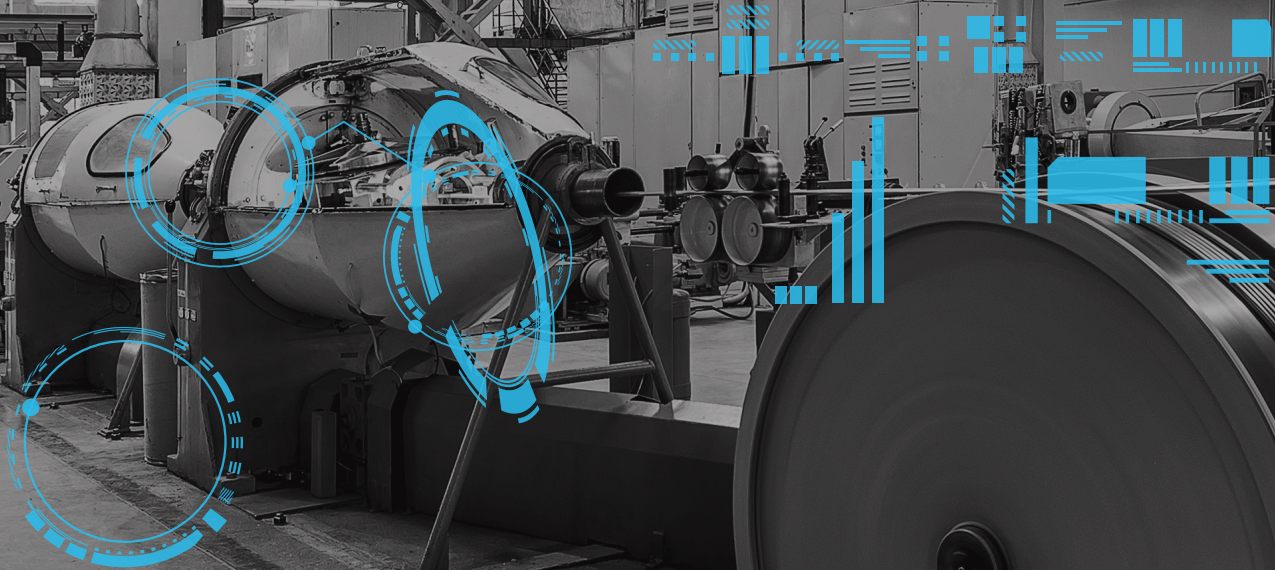


# Intelligent enterprise solution for cable&wire



# Clobbi Vision

- Digital transformation
- Improved effectiveness
- Business processes optimization instead of just automation
- Measurable economic benefits

## Clobbi solutions

We help large and medium-sized Cable&Wire enterprises to adjust processes and improve their management system based on Industry 4.0 ideology:

- **R&D (CableDesigner)**
- **People and equipment integration (Industrial IoT)**
- **Optimal production planning (AI, APS/MES)**
- **Equipment predictive maintenance systems (RCM)**

## Solutions for Cable&Wire:

**1**

**Clobbi. SmartFactory**  
(MRP, APS/MES, AI)

**2**

**Clobbi.CableDesigner**  
(R&D, Cost&Price&Quotation)

**3**

**Clobbi.DigitalTwins**  
(IIoT, VR/AR)

**4**

**Clobbi.CableEAM**  
(RCM, Predictive maintenance)

# Clobbi.CableDesigner

## 20 - 50%

Shorter Time-2-Market



### Product Design

- Design for all cable and wire rope types
- Virtualization
- Manufacturing BOMs



### Process Engineering

- Manufacturing parameters
- Setup & adjustment time
- Equipment usage norms
- Waste & drum usage norms



### Price & Quotation

- Cost calculations
- Direct & indirect costs
- Modelling & simulation
- Pricing and margins



## Use case

Leading Eastern Europe cable manufacturer with capacity of 100,000 Cu tons/year

5 → 5  
days hours

Customer enquires answered faster

8 700 for 1 60 000  
Methodologies Cable Designs

Less time for product design and process development

20  
Min

For mass cable design recalculations

10  
Min

for customer design customization

Clobbi.CableDesigner – manage the basis of the future production costs and optimal production planning

# Clobbi.SmartFactory

**5 - 20%**

Increase in output volume

**>95%**

Customer service level



**1**

**Optimal production planning (APS, AI)**

- Tailor-made optimization methods
- Leadtime for each batch

**2**

**Simulation**

- Multiple objectives and constraints
- Production Plan alternatives

**3**

**Execution (MES, IIoT, Mobility)**

- Workorders for equipment & personnel
- On-line production accounting
- Labeling with QR codes
- Actual production status

**4**

**Event response (II4.0, APS-online)**

- Events monitoring and control
- Automatic plan rescheduling
- New workorders for execution

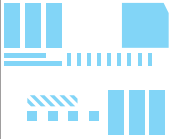
**5**

**Business discovery (BI, KPI)**

- planned vs actual KPIs
- Intelligent decision-making

## Use case

Cable manufacturer with 1000 employees,  
260 machineries and 600 Customer orders per month



LOADING...

>590  
Orders

Ontime and Customer  
requirements met

Up to 5 for 24 000  
Minutes Workorders

Optimal production  
plan generation

30%

Higher overall equipment  
effectiveness (OEE)

17%

Reduction in production  
costs (fixed-wastes,  
aggregated orders)

Clobbi.SmartFactory - new approaches and technologies  
to produce more

# Clobbi.DigitalTwins

**20 - 30%**  
Higher OEE

1

## Digital ecosystem (II4.0, IIOT)

- Clobbi, equipment and people integration

2

## Virtualization (AR\VR)

- 3D shop-floor models
- Simulation and modelling

3

## Intelligent production

- Live production process
- Combine real-time actual and planned data

4

## Monitor, alert and report

- Equipment operation
- Manufacturing parameters
- Technological process quality
- Real-time performance rate
- Customer order execution

5

## BigData processing and analysis (AI,BI)

- Ways to improve production process and technology
- Actual vs planned KPIs
- Intelligent decision-making



## Use case

Cable manufacturer with 2500 employees,  
870 production lines

### Pilot project superior results:

10

IIoT connected bottleneck  
machines

↓ 12%

Less production rejects

↓ 0.3%

Decreased material  
consumption

17%

Downtime reduction

↑ 5%

higher extrusion line speed

Clobbi.DigitalTwins - Improve quality, increase transparency and  
make virtualization of production

# Clobbi.CableEAM



CAUTION



LOADING...

**30 - 50%**

Less machine downtime

**10 - 40%**

Maintenance cost reduction

1

## Industrial Internet of Things (IIoT)

- Equipment Connection
- Visualization
- Virtualization
- Predictive Maintenance (PdM)

2

## Field Service Management (FSM)

- Self-Service Management
- Warranty & Claims Management
- Supply Management
- Service Engineers Management
- Request Management Center

3

## Key add-ons

- Real-time equipment monitoring
- DWH and BI
- BigData processing and analysis
- Multifunctional dashboard

4

## RCM Enterprise Asset Management

- Reliability Centered Maintenance standard
- Equipment Data Management
- Inspection Scheduling
- Maintenance Scheduling
- Predictive maintenance

## Use case

Cable manufacturer with 250 equipment lines  
(during first 4 months)

40 000

Digitalized units and  
assemblies

200

Methodologies

For equipment  
diagnostics and preventive  
maintenance

2000

Staff complaints processed

1000

probable failures prevented

Clobbi.CableEAM contains out-of-the-box predictive maintenance methodologies for the most popular Cable&Wire equipment Vendors

30 to 50%



Less Total Machine  
DownTime

20 to 30%



Higher overall equipment  
efficiency (OEE)

5 to 20%



Output Volume  
Increase

20 to 50%



Shorter time-to-market

10 to 40%



Reduction of  
maintenance costs

95%



Customer Service Level  
Increase

ISO 9001:2015  
BUREAU VERITAS  
Certification



 **Clobbi**



cable@clobbi.com  
www.clobbi.com/cable/  
/company/clobbi/  
+ 44 203 807 06 40