

The world's first narrow AI based system to operate factories in line with Industry 4.0

Próbka CNC detali elkogabarytowych onowo [5]	Ostrowski Michał [678]	Centrum CNC-pionowe DL 3008 (inw.417/25) [2189]	111374	01-10-000-000-00-00-00		1	0
Próbka CNC detali elkogabarytowych onowo [5]	Kowalski Szczepan [373]	Centrum CNC-pionowe CBFK 1 (inw.417/25) [2188/1]					
Zestawienie zleceń z błędami (28)							
bierz typ szukanych błędów, a następnie odczytaj dane (F5 lub przyciskiem śwież). Zlecenia w trybie przyspieszonym lub ekspresowym oznaczone będą prem.							
				Rodzaj błędu		Klasa zleceń	
				Przekroczony termin		Handlowe	
				<input checked="" type="checkbox"/> tylko zlecenia główne i pojedyncze			
Nr zlecenia (F)	Kontrahent	Nazwa zlecenia	Błąd	Termin kontraktu	Zakończenie	Opóźnienie	
01-20-072-109-90-00-00	EATON	WYKONANIE CENTRUM PIONOWEGO R550 HARNAS NR FABR 1099 - ZLECENIE GŁÓWNE	PT	2014-06-16	2014-06-17	2	
01-20-074-209-70-00-00	GALKOM-TECH	CENTRUM PIONOWE R1000 BACA NR FABR 2097 - ZLECENIE GŁÓWNE	PT	2014-06-27	2014-07-01	5	
01-20-063-295-00-00-00	AFM S.A.	TUG-56MN NR FABR 295 L-1500 - ZLECENIE GŁÓWNE	PT	2014-07-04	2014-07-10	7	
01-20-063-293-00-00-00	MEXPOL-HANDEL	TOKARKA TUG-56MN L-1000 NR FABR 293 - ZLECENIE GŁÓWNE	PT	2014-06-04	2014-06-11	8	
01-20-017-031-00-00-00	CONTEMPORARY	WYKONANIE MASZYN WB-9, NR FABR. 31- ZLECENIE GŁÓWNE	PT	2014-08-30	2014-09-09	11	
			PT	2014-05-30	2014-06-09	11	

## Smart Factory

## AUTONOMOUS

IPOsystem™ independently and directly operates the production process without planners and supervisors (!) in the production halls.

It is decision system, which takes into account available resources, current situation in the workshops as well as new & pending orders and their deadlines in real time.

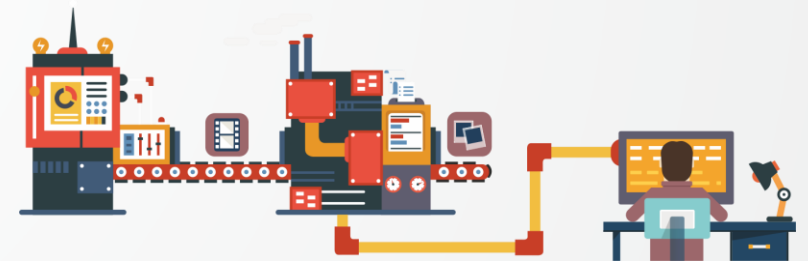
The system is not based on scheduling as it is in case of APS class systems.

**real-time data**



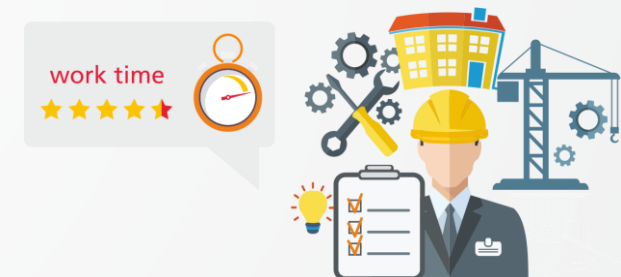
The system manages workers and machines, making immediate decisions regarding task execution sequence and resources allocation for each production activity.

Upon accessing the system each employee receives a precise instruction to perform an optimum activity for a given moment within a few seconds.



Production manager becomes the system supervisor and is released from planning, logistics and direct employee management.

Thanks to the system the factory is equipped with constant and full control of ongoing work and the managers receive full feedback on bottlenecks, completion times, machine status, resources availability, personel absence, workload etc in real time and 24/7.





IPOsystem™ provides:

- full integration with existing ERP or other IT systems,
- automatic registration of all operations carried out in the production halls,
- real image of the production area status,
- full set of analyzes for lean management and kaizen.



## IPOsystem™

- is implemented in more than 30 factories in Poland,
- controls almost 10,000 employees,
- generates around 35-45 thousand operational decisions daily.



The system generates **real** and always **up to date** deadlines for all orders,  
accurate to one minute.



The factory productivity is increased by minimum  
**15-30%**  
within a year after system implementation.



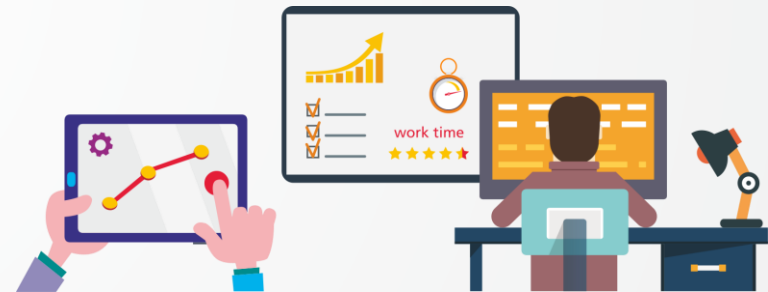


## ALL OUR CUSTOMERS ACHIEVED:

- increased profitability
- shorter lead times
- increased market share
- improved competitive position
- improved employee performance
- reduction of management costs
- significant reduction of wasted (lost) time
- increased overall quality



ALL OUR CUSTOMERS ACHIEVED  
the level of operational skill  
being beyond their reach before.



## Application:

Any technology-based business and industrial processes

- single-piece production
- small - lot production
- big- lot production
- mass production
- assembly
- overhauls

- maintenance
- designing
- construction works
- organization processes
- administration



## Selected references



“ I have no doubt that IPOsystem is innovative on a global scale. It is the first decision-making system to automate the production management process, and has everything needed make a significant contribution to improving the competitiveness of the Polish economy. It is a model example of how Polish people can create innovations of global significance ”

***Prof. Michał Kleiber***

is an acclaimed authority in mechanical engineering and information technology, Director of the Department of Computer Methods, Fellow of the Polish Academy of Sciences, Vice-President of the European Academy of Sciences and Arts, President of the European Materials Forum, and President of the Polish Academy of Sciences in 2007-2015.





Thank you for your attention