### Simtek





Our company specializes in the implementation of integrated engineering services in various fields of industry. We carry out turnkey projects, providing a full range of services, such as: development and implementation of projects, delivery of components and intellectual property, manufacturing of custom designed equipment and solutions, installation work and commissioning, further warranty service.

We also carry out the modification, modernization, repair, integration of robots and automation control systems in existing industrial equipment.

We have been working in this field since 1994. We are a partner of Coskunoz Holding in the field of modernization and industrial equipment repair, technological partner of Siemens, in the field of industrial automation, fail-safe and emergency control systems and industrial communication technologies, which is confirmed by Siemens Solution Partner certificates.

During our activity, the company has earned rich experience and has established itself as a reliable and high-quality partner. We commissioned many projects in various industrial sectors in Turkey and foreign countries.

#### **SIEMENS**

Ingenuity for life

#### **Solution Partner Certificate**

Solution Partner SIEMENS Automation Drives

Simtek Otomasyon Teknik Hiz. San.ve Tic. Ltd. Sti. Certified

The company is a certified Partner in Turkey and is authorized to use the name **Siemens Solution Partner Automation Drives**.
The certification has been proved in the following program module:

- Industrial Communications
- Advanced Factory Automation

This certificate is valid until September 2019

J- cocas

Jörn F. Sens Siemens Partner Program

#### SIEMENS

Ingenuity for life

#### Solution Partner Certificate

Solution Partner SIEMENS Automation Drives

Simtek Otomasyon Teknik Hiz. San.ve Tic. Ltd. Sti. Certified Specialist

The company is a certified Partner in Turkey and is authorized to use the name **Siemens Solution Partner Automation Drives**.
The certification has been proved in the following program module:

· Factory Automation Safety

This certificate is valid until September 2019

Jorn F. Sens

Siemens Partner Programm













A list of some of our current projects.
November 2019.









#### FORD OTOSAN Gölcük, Republic of Turkey

## Reconstruction and modernization projects of tandem press lines, commissioning of a new robotic press line at the FORD OTOTSAN plant.

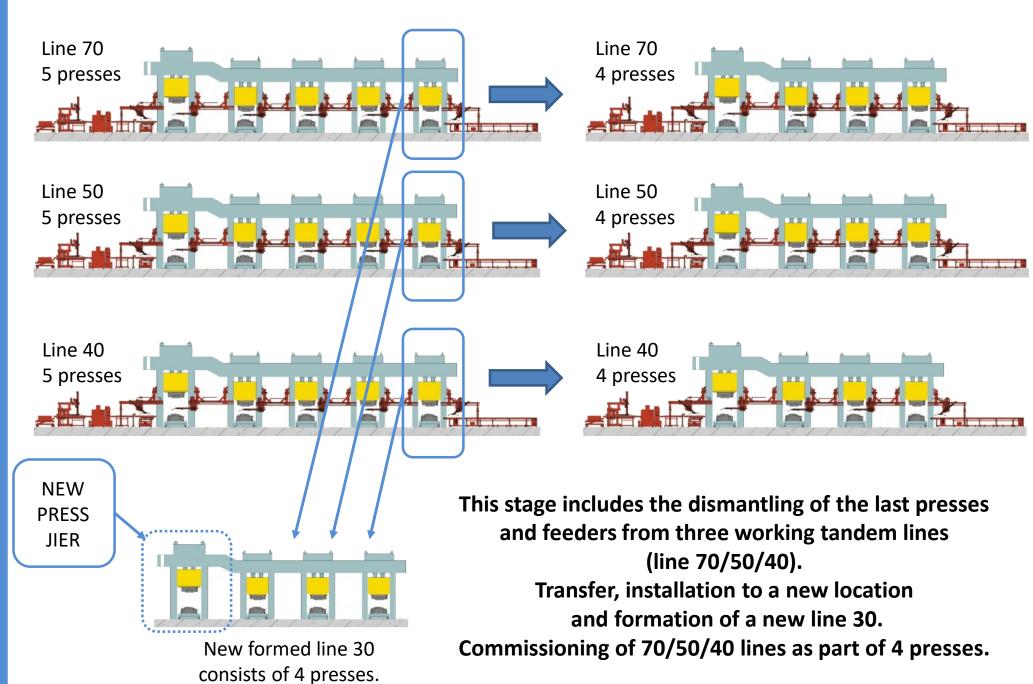
The project consists of 3 stages.

**Stage 1: reconstruction of 3 SCHULER press lines.** 

Stage 2: control system modernization of 2 SCHULER press lines.

Stage 3: commissioning of a new robotic line.

**Stage 1: reconstruction of 3 SCHULER press lines (finished).** 



#### Stage 2: control system modernization of 2 SCHULER press lines (finished).

#### Two working tandem lines 40 and 50.

This stage involves the complete replacement of old controllers and signal cards of the S5 family with a new S7 family based on S7-1500 controllers.

Replacement of slider position encoder, slide and cushion adjusting encoder replacement of old operator panels with new ones.

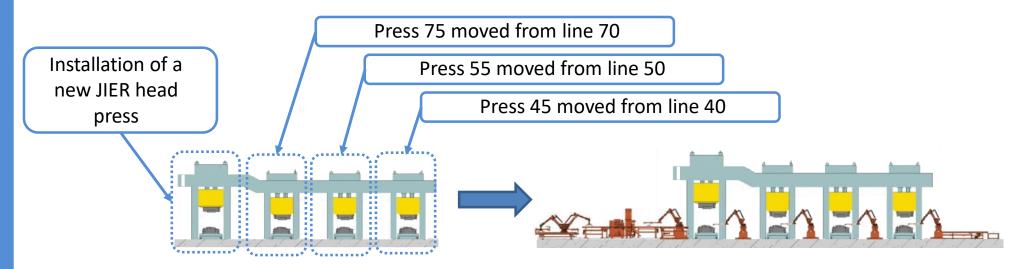




Tandem press line 50

Tandem press line 40

#### Stage 3: commissioning of a new robotic line (continue).



This stage consists of 3 parts.

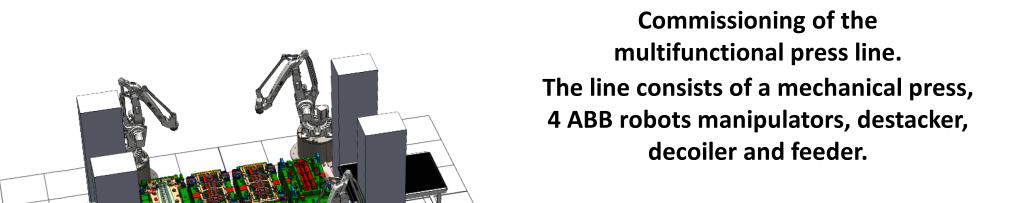
- Modernization of the control system of carried over presses.
- 2. Installation and commissioning of a new JIER head press
- 3. Installation of robots, conveyors and other auxiliary equipment, thus realizing the concept of a robotic line.



Line 30 at the time of September 2019



#### TKG AUTOMOTIVE Bursa, Republic of Turkey



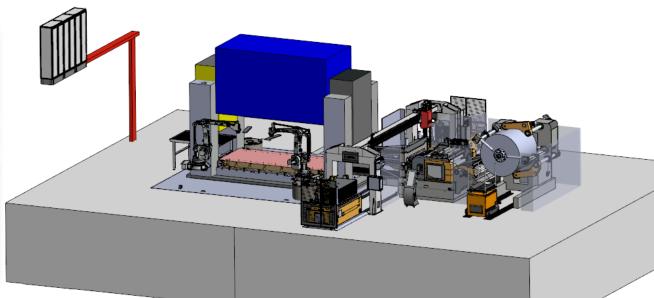
Robots manipulators are used as transfer systems.



The press, in combination with decoiler and feeder, functions as a <a href="PROGRESSIVE press">PROGRESSIVE press</a>.

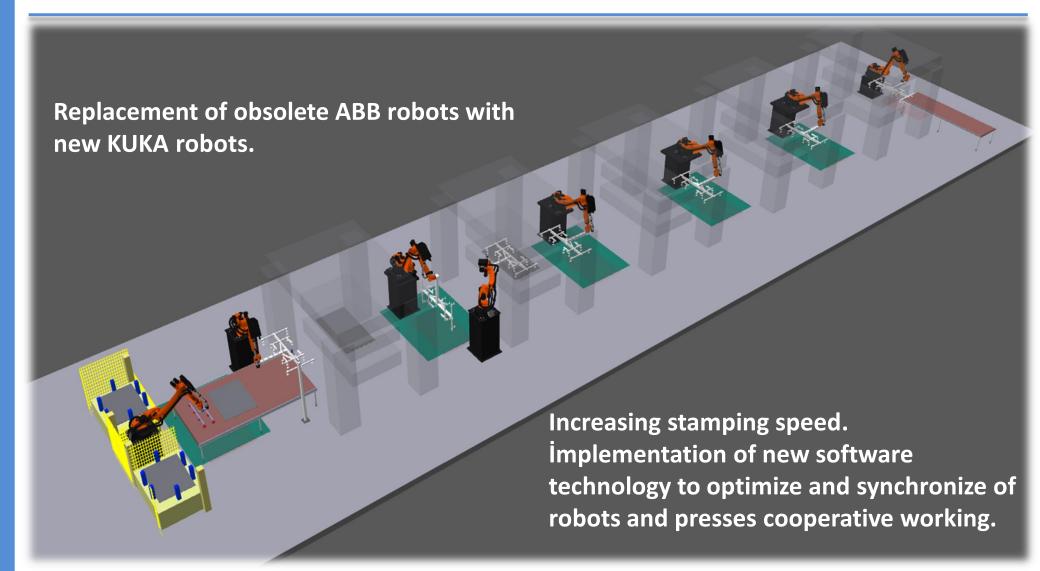
The press, in combination with destacker and robots, functions as a <a href="https://example.com/TRANSFER">TRANSFER press</a>.





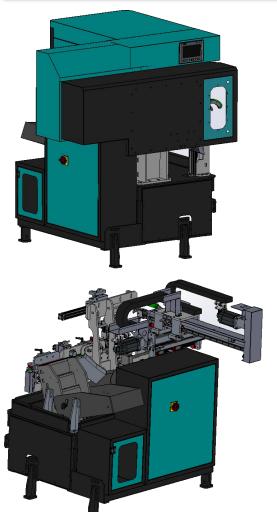


## COSKUNOZ Bursa, Republic of Turkey LINE Nº7





#### AYD Industry Konya, Republic of Turkey



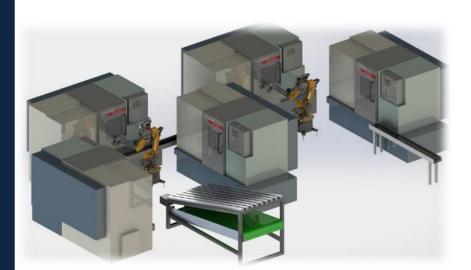
Development, design, manufacture and commissioning of 36 devices for loading/unloading pieces into a CNC milling machine.

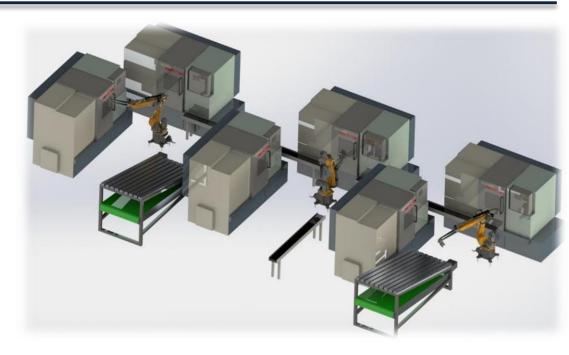




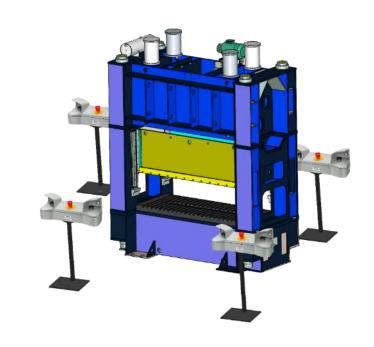
#### AYD Industry Konya, Republic of Turkey

Robots integration into process of CNC machines blanks loading/unloading project development.





# A list of some of our <u>FINISHED</u> projects of repair and modernization:



- Mechanical presses
- Hydraulic presses
- Robotic Press Lines
- Progressive presses
- Transfer presses



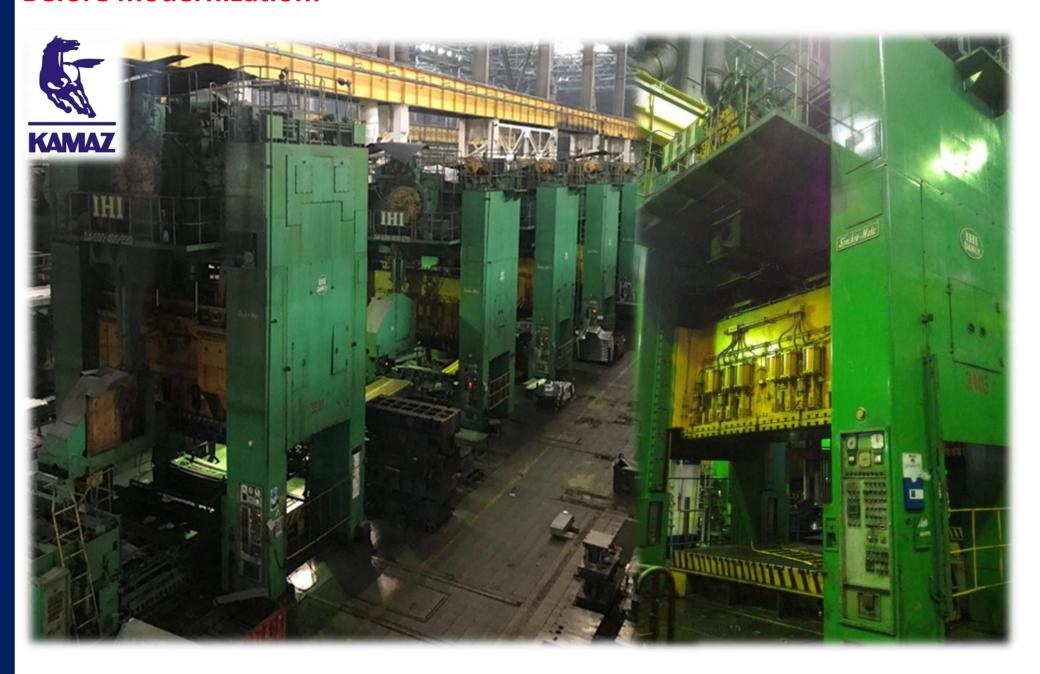




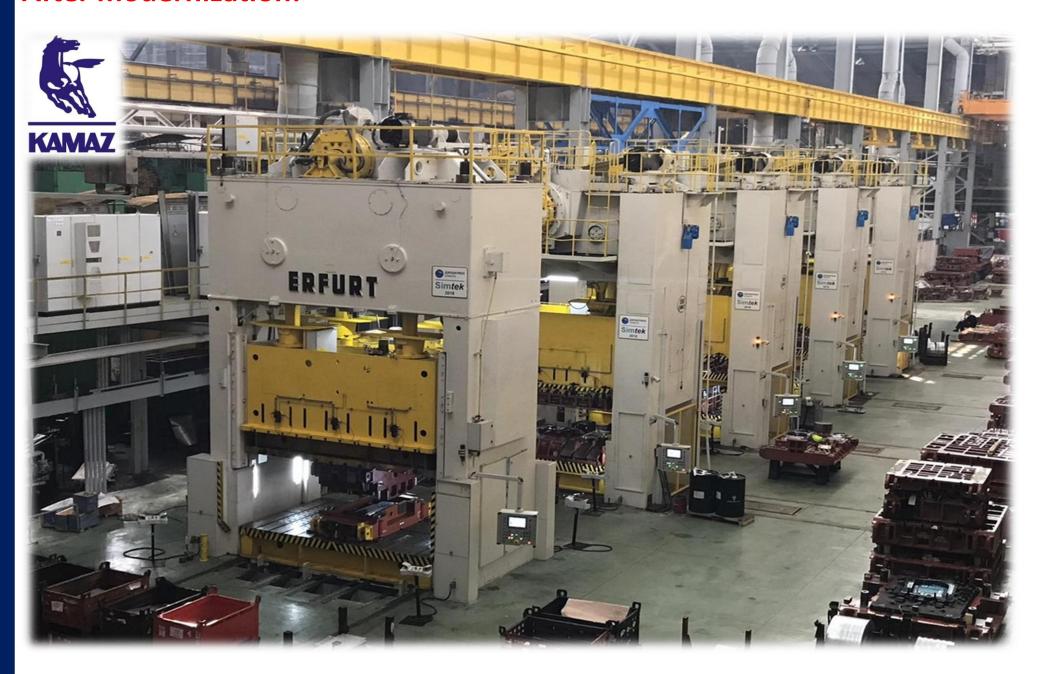
Modernization of the press line in the new K5 cabin stamping and welding department (The newest KAMAZ-54901 trucks)
PRESS and STAMPING PLANT
«KAMAZ»
Naberezhnye Chelny, Republic of Tatarstan,
Russian Federation

As part of the press line modernization project
4 IHI presses 600 tons
1 presses ERFURT 800 tons
mechanical, hydraulic, pneumatic, electrical and control sustem were repaired and modernized.

#### **Before modernization:**



#### **After modernization:**





Modernization of the robotic press line at the COSKUNOZ ALABUGA factory sez «Alabuga», Republic of Tatarstan, Russian Federation

As part of the modernization project,
5 presses VERSON 900 tons
were repaired and modernized.
The presses were integrated together with 7 robot
manipulators, conveyors and other auxiliary equipment into
a single automated press line.
Automatic Die Change technology was implemented.

#### **Before modernization:**



#### **After modernization:**













## MMK - COSKUNOZ ALABUGA factory sez «Alabuga», Republic of Tatarstan, Russian Federation

Ввод в эксплуатацию линии раскройки и контурной вырубки SCHULER.





# Modernization of various press lines at the IZHEVSK AUTOMOBILE PLANT Izhevsk, Udmurt Republic, Russian Federation

As part of the modernization project,
10 presses ERFURT 500 tons
1 press CLEARING 1250 tons
4 presses CLEARING 1000 tons
1 press SPIERTZ 1200 tons
of presses were repaired and modernized.







#### Modernization of the transfer press at the COSKUNOZ factory Bursa, Republic of Turkey

As part of the modernization project,
Transfer mechanical press WEINGARTEN 2500 tons
with 3 sliders
was repaired and modernized.
Transfer system was realized on servo drivers.

#### **Before modernization:**





#### **After modernization:**





Modernization and robotization of the press line at the COSKUNOZ factory Bursa, Republic of Turkey LINE No5

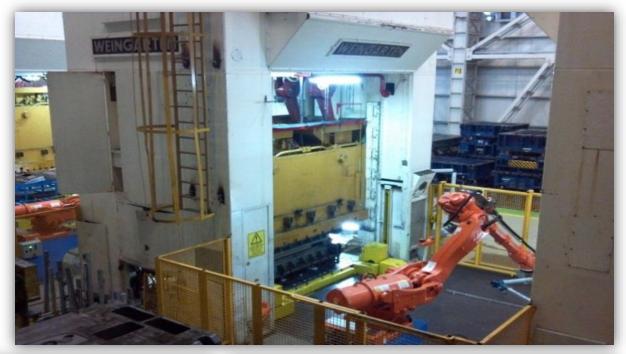
As part of the line № 5 modernization project,

1 hydraulic press MÜLLER 1200 tons
3 presses WEINGARTEN 800 tons
were repaired and modernized.

The presses were integrated together with 6 robot manipulators, conveyors and other auxiliary equipment into a single automated press line.

#### **After modernization:**











Modernization and robotization of the press line at the COSKUNOZ factory Bursa, Republic of Turkey LINE Nº6

As part of the line Nº 6 modernization project,

1 press SCHULER 1250 tons
3 presses SCHULER 800 tons
were repaired and modernized.

The presses were integrated together with 7 robot manipulators, conveyors and other auxiliary equipment into a single automated press line.

#### **After modernization:**









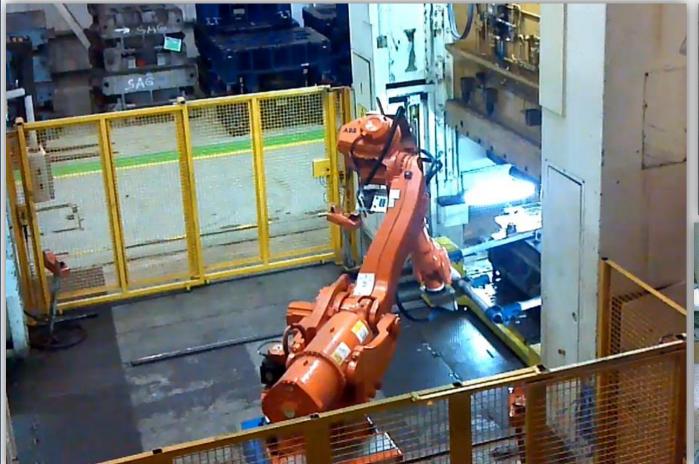
Modernization and robotization of the press line at the COSKUNOZ factory Bursa, Republic of Turkey LINE №8

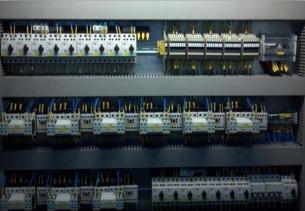
As part of the line № 8 modernization project,
4 presses WEINGARTEN 800 tons
were repaired and modernized.
The presses were integrated together with 7 robot
manipulators, conveyors and other auxiliary equipment into
a single automated press line.

#### **After modernization:**













# Modernization and robots integration of the press line at the TKG AUTOMOTIVE factory Bursa, Republic of Turkey

As part of the modernization project,
4 presses WEINGARTEN 800 tons
1 press WEINGARTEN 1400 tons
were repaired and modernized.
The presses were integrated together with 8 robot
manipulators, conveyors and other auxiliary equipment into
a single automated press line.

#### **Before modernization:**



### **After modernization:**



### **After modernization:**

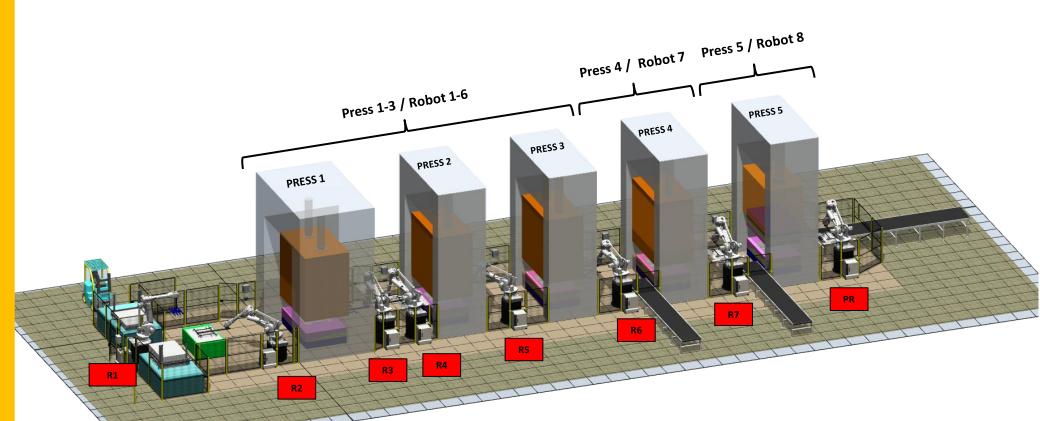


This robotic press line operates in 3 different modes.

#### Mode 1:

The press line consisting of presses 1-3 and robots 1-6 function as a separate tandem press line for 3 operational stampings. Press 4 and press 5 are separated from the main line by fences and able to work separately, loading and unloading of blanks may be carried out manually or by robots.

Thus, the press 4 in cooperation with the robot 7, and the press 5 in cooperation with the robot 8 may function as a multi-position press, where robots are used as transfer unit.

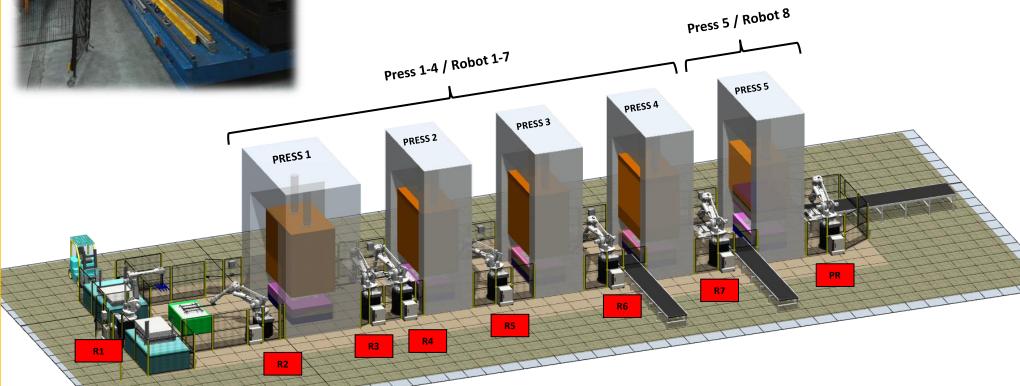




#### Mode 2:

The line consisting of presses 1-4 and robots 1-5, function as a separate tandem press line for 4 operational stamping. Press 5 is separated from the main line by fences and can work separately, loading and unloading of blanks may be carried out manually or by robots.

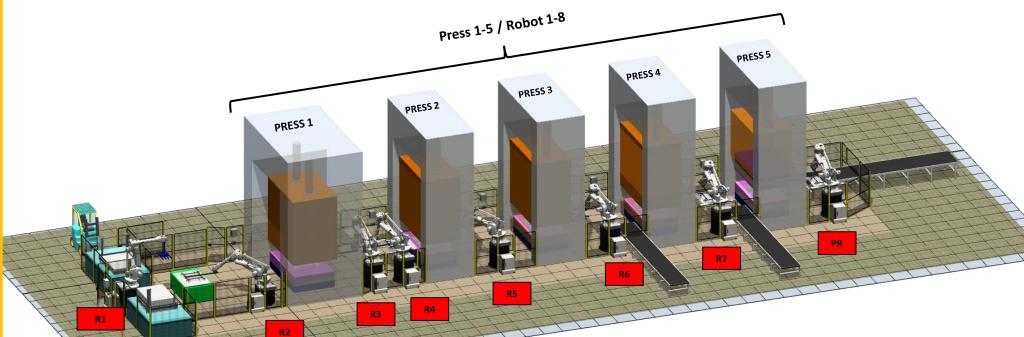
Thus, the press 5, in cooperation with the robot 8, may function as a multi-position press, where a robot is used as a transfer unit.





#### <u>Mode 3:</u>

The line consisting of presses 1-5 and robots 1-8, functions as a tandem press line for 5 operational stamping.





# Modernization of various presses at the TEKNOROT factory Duzce, Republic of Turkey

As part of the modernization project,

1 press Voronej ZTMP 2500 tons

1 press Voronej ZTMP 1600 tons

1 press IWK 250 tons

1 press IWK 160 tons

1 press ERFURT 500 tons were repaired and modernized.

### **After modernization:**





# A list of some of our <a href="#">FINISHED</a> projects:



New robotic welding lines







# CPS Pressform Istanbul, Republic of Turkey

# Commissioning of a new gas arc welding robotic line.

ABB robot was used in this project. For faster and more accurate positioning of the blanks, rotary table technology on ABB servo drives was applied. The use of two tables allows to unload / load blanks on one of the tables while welding on the other.





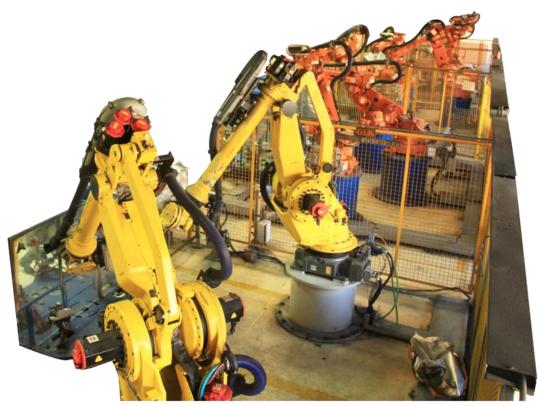
# CPS Pressform Istanbul, Republic of Turkey

# Commissioning of a new spot welding robotic line.

In this Project was used 2 FANUC robots.

To increase the production efficiency, a rotary table with clamps was used.

This technology allows unloading / loading of blanks on one half of the table while welding on the other half.





# CPS Pressform Istanbul, Republic of Turkey

# Modernization and modification of 3 robotic spot welding lines. ABB robots.

As a result of the modification and modernization, welding of new types of blanks became possible, the operation of the lines was optimized and the overall welding speed was increased.

Additional tables have been added.

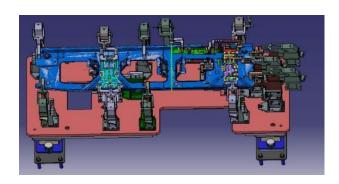




# YILDIZ KALIP Istanbul, Republic of Turkey

# Commissioning of a new spot welding robotic line.

In the project was used 2 KUKA robots, 4 stationary tables with clamps, 2 for each robot.





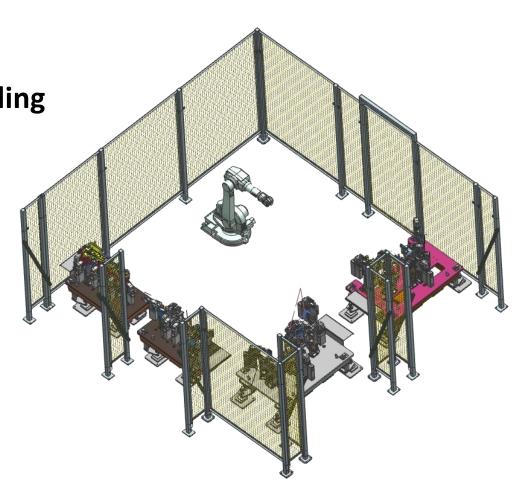


### BEYÇELİK GESTAMP Bursa, Republic of Turkey

Commissioning of a new spot welding

robotic line.

In the project was used HYUNDAI robot and 4 stationary tables with clamps.



# A list of some of our FINISHED projects:



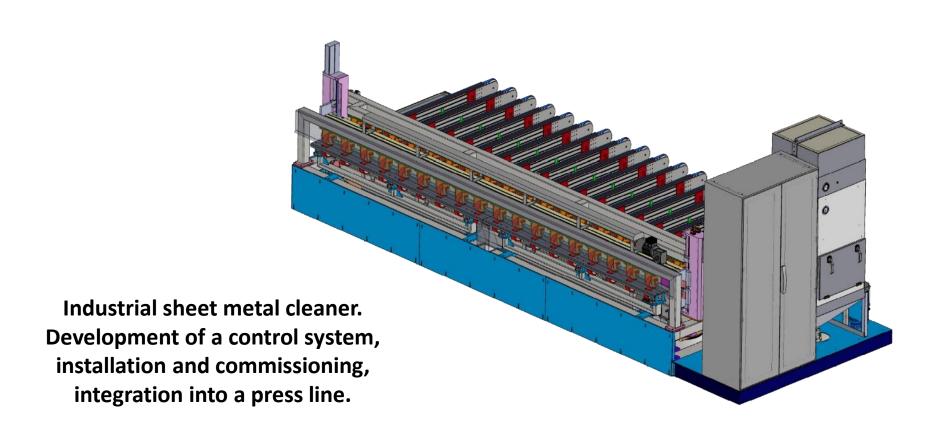
Various industrial machines







# KIA Motors Monterrey, Mexico

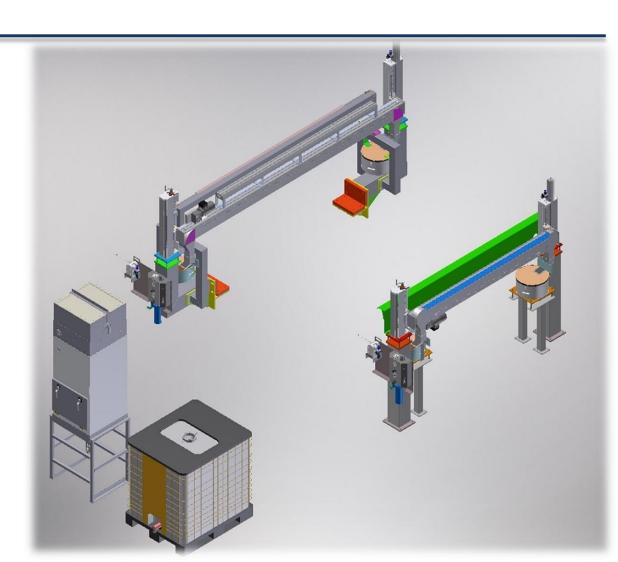




### Hyundai Motor Monterrey, Mexico

Industrial sheet metal cleaner and blank lubrication machine.

Development of a control system, installation and commissioning, integration into a press line.



















































































































#### **FORD Otosan**

Kocaeli Gölcük Plant Gölcük / Kocaeli / Turkey



Tel: +90 (262) 315 50 00 https://www.fordotosan.com.tr/en

#### **Project Description:**

- 1. SMG 32 press modernization
- 2. Reconstruction of SCHULER press lines. Transfer of one press. Modernization of control system. Line № 40.
- 3. Reconstruction of SCHULER press lines. Transfer of one press. Modernization of control system. Line № 50.
- 4. Reconstruction of SCHULER press lines. Transfer of one press. Line № 70.
- 5. Commissioning of a new robotic line (continue).

#### COSKUNOZ METAL FORM (COSKUNOZ HOLDING) Bursa / Turkey



Tel: +90 (224) 280 01 00 Fax: +90 (224) 243 11 46 http://www.coskunozholding.com/tr

#### **Project Description:**

- 1. Modernization of the mechanical press WEINGARTEN 2500 tons with 3 sliders.
- 2. Modernization and robotization of the press line №5 (4 press/ 6 robots)
- 3. Modernization and robotization of the press line №6 (4 press/ 7 robots)
- 4. Modernization and robotization of the press line №8 (4 press/ 7 robots)
- 5. Replacement of obsolete ABB robots with new KUKA robots (continue).

# COSKUNOZ KALIP MAKİNA (COSKUNOZ HOLDING)

Bursa / Turkey

#### **Project Description:**

1. 2000 ton SMG press modernization



Tel: +90 (224) 280 0600 http://www.coskunozkalip.com

## COSKUNOZ ALABUGA (COSKUNOZ HOLDING)

Elabuga / Republic of Tatarstan / Russian Federation



Tel: +7 (85557) 5-34-34 <u>alabuga@coskunoz.ru</u> <u>http://coskunoz.ru/</u>

#### **Project Description:**

1. Modernization and robotization of the press line №2 (5 press/ 7 robots)

## PRESS and STANPING PLANT«KAMAZ»

Naberezhnye Chelny / Republic of Tatarstan / Russian Federation



https://kamaz.ru/

#### **Project Description:**

1. ERFURT and 4 IHI press modernization

#### **COSKUNOZ ALABUGA – MMK**

Elabuga / Republic of Tatarstan / Russian Federation





Tel: +7 (85557) 5-34-34 alabuga@coskunoz.ru http://coskunoz.ru/

#### **Project Description:**

1. Opening and cut-to length SCHULER line commissioning.

# OOO «LADA Izhevsk" Izhevsk / Udmurt Republic / Russian Federation

# LADA / XEBCK ИЖЕВСКИЙ АВТОМОБИЛЬНЫЙ ЗАВОД

Tel: +7 (341) 264-80-09 http://ladaizhevsk.ru/

#### **Project Description:**

Modernization of 10 adet ERFURT 500 ton presses Modernization of 1 adet CLEARING 1250 ton press Modernization of 4 adet CLEARING 1000 ton presses Modernization of 1 adet SPIERTZ 1200 ton press

## **TKG Automotive**Bursa / Turkey



Tel: +90 (224) 280 79 00 http://www.tkg.com.tr/

#### **Project Description:**

- 1. Modernization and robotization of the multifunctional press line №30 (5 press/ 8 robots)
- 2. Commissioning of the multifunctional press line №42.

#### **TEFAŞ AŞ** Çayirova / Kocaeli / Turkey

# TEFAS

Tel: +90 (262) 658 02 20 info@tefasoto.com.tr http://www.tefas.com/

#### **Project Description:**

1. Modernization and robotization of the press line №1 (5 press/ 7 robots)

#### **BEMAS METAL**

Dilovası / Kocaeli / Turkey

#### **Project Description:**

1. MUF transfer press modernization (2 press)



Tel: +90 (262) 723 23 23 info@bemasmetal.com

#### ROLLMECH Automotive

Nilüfer / Bursa / Turkey

#### **Project Description:**

1. 350 ton mechanical press modernization



Tel: +90 (380) 553 73 33 <u>info@rollmech.com</u> http://www.rollmech.com

### PARSAN

Pendik / İstanbul / Turkey



Tel: +90 (216) 493 12 66 parsan@parsan.com http://www.parsan.com

#### **Project Description:**

1. 1000 ton special press modernization

#### **FAURECIA**

Orhangazi / Bursa / Turkey

#### **Project Description:**

1. 300 ton special hydraulic press modernization



Tel: +90 (224) 573 60 60 Fax: +90 (224) 573 60 65 www.faurecia.com

#### TAİ ANKARA (Türk Havacılık ve Uzay Sanayii) Kahramankazan / Ankara / Turkey



Tel: +90 (312) 811 18 00 Fax: +90 (312) 811 14 25 https://www.tai.com.tr/

#### **Project Description:**

1. Special heating press for composite pressing modernization

#### **HIDROMODE**

Arnavutköy / İstanbul / Turkey



1. Automation and electrification of new presses of various tonnage



Tel: +90 (212) 771 29 01 Fax: +90 (212) 771 29 28 hidromode@hidromode.com www.hidromode.com.tr

#### TEKNO KAUÇUK

Gebze/ Kocaeli / Turkey

#### **Project Description:**

1. Various tonnage special rubber presses modernization (11 presses)



Tel: +90 (262) 999 21 00 Fax: +90 (262) 751 05 66 http://www.teknokaucuk.com.tr

#### **TEKNOROT**

Beyköy / Düzce / Turkey



Tel: +90 (380) 553 73 33 <u>info@teknorot.com</u> <u>https://www.teknorot.com/en/</u>

#### **Project Description:**

- Repair and modernization of the Voronezh ZTPM press 2500 tons. Repair and modernization of the Voronezh ZMPP press 1600 tons Repair and modernization of the IWK 250 ton press. Repair and modernization of the press of IWK 160 tons. Repair and modernization of the ERFURT 500 ton press
- 2. Repair of mechanical components and modernization of the Borwerk milling machine control system.
- 3. Repair of mechanical components and modernization of the control system of the machine for cutting metal blanks.

#### **ALTEKA**

Beyköy / Düzce / Turkey



Tel: +90 (380) 553 73 33 <u>info@teknorot.com</u> https://www.teknorot.com/en/

#### **Project Description:**

 Repair and modernization of 1 press of the Voronezh ZMPP 2500 tons. Repair and modernization of 1 press of the Voronezh ZMPP 1,600 tons. Repair and modernization of 1 press of the Voronezh ZMPP 1000 tons Repair and modernization of 1 ERFURT press 500 tons. Repair and modernization of 1 ERFURT press 315 tons. Repair and modernization of 3 presses IWK 160 tons

#### Arçelik A.Ş. ISTANBUL Tuzla / İstanbul / Turkey

#### **Project Description:**

Modernization of the mechanical progressive press ROWETTA 315 ton.



Tel: +90 (212) 314 34 34 kurumsal@arcelik.com https://www.arcelik.com.tr

#### **Arçelik A.Ş. ANKARA** Sincan / Ankara / Turkey

#### **Project Description:**

Modernization of the transfer press COLOMBO 800 ton. Transfer system was realized on servo drivers.



Tel: +90 (212) 314 34 34 kurumsal@arcelik.com https://www.arcelik.com.tr

#### **CPS PRESSFORM**

Chaiyrova / Kocaeli / Turkey



Tel: +90 (262) 674 44 44 <u>info@cpsform.com</u> http://www.cpsform.com

#### **Project Description:**

- 1. Commissioning of a new robotic spot welding line. FANUC robots, turntable with fixtures.
- 2. Commissioning of a new robotic arc welding line. ABB robots, servo positioning tables with fixtures.
- 3. Modernization of the multi-position (transfer) mechanical press, Weingarten 1200 tons. Transfer system was realized on servo drivers.
- 4. Modernization and modification of 3 robotic spot welding lines. ABB robots.

#### YILDIZ KALIP A.Ş

Arnautkoy / Istanbul / Turkey



Tel: +90 (212) 771 15 15 yildizkalip@yildizkalip.com http://www.yildizkalip.com

#### **Project Description:**

1. Commissioning of a new robotic spot welding line. KUKA robots.

#### **BEYÇELİK GESTAMP** Nilufer / Bursa / Turkey



Tel: +90 (224) 241 52 00 beycelik@beycelikgestamp.com.tr https://beycelikgestamp.com.tr

#### **Project Description:**

1. Commissioning of a new robotic spot welding line for automobile parts. HYUNDAI robots used in the project.

#### AYD Aydınlar Yedek Parça Selcuklu / Konya / Turkey



Tel: +90 444 4 293 info@aydtr.com http://aydtr.com

#### **Project Description:**

- 1. Modernization of hydraulic equipment, control systems and mechanical restoration of 4 hydraulic presses.
- 2. Development, design, manufacture and commissioning of 36 devices for blanks loading / unloading into a CNC milling machine (work is underway).
- 3. Project of robot integration into the process of CNC machines blanks unloading / loading into (work is underway).

#### **KANCA**

Chaiyrova / Kocaeli / Turkey



Tel: +90 (262) 678 86 00 info@kanca.com.tr https://kanca.com.tr

#### **Project Description:**

1. Repair of mechanical components and modernization of the control system of milling machines. "ZFS" manufactured in Gorky. - 2 pcs.

## **KUTES METAL**Corlu / Tekirda / Turkey



Tel: +90 444 0 166 info@kutes.com.tr http://kutes.com.tr

#### **Project Description:**

1. Modernization of the control system for the steel casting and sand molding line. Migration from SIMATIC S5 to S7. SCADA development.

#### **Hyundai Motor** Monterrey / Mexico

#### **Project Description:**

1. Commissioning of a new device for cleaning and washing sheet metal.



www.hyundai.com

## KIA MOTORS Monterrey / Mexico

## <u>Project Description:</u>

1. Commissioning of a new device for cleaning and washing sheet metal, including the feed conveyor.



https://www.kia.com/mx/main.html

# **SIEMENS A.Ş.**Kartal / İstanbul / Turkey

#### **Project Description:**

1. Bakelite presses modernization (6 presses)

# **SIEMENS**

Tel: +90 (216) 459 20 00 Fax: +90 (216) 459 20 11 http://www.siemens.com.tr The list of some brands of presses that we have modernized over the past few years:





- SMG
- KOMATSU
- WEINGARTEN
- MÜLLER
- SPIERTZ
- SCHULLER
- ERFURT
- IHI
- CLEARING
- VERSON
- ROWETTA
- COLOMBO
- IWK
- Воронежский ЗТМП



## Distributor in Russia



### **Metal Forming**

**Mechanical Presses** 

**Tandem Press Line** 

**Transfer Presses** 

**Progressive Die Presses** 

**Servo Presses** 

**Blanking Presses** 





**Decoiling and Cutting Line** 

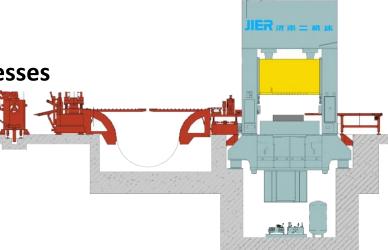
**Blanking Line** 

**Feeding Line** 

**Blank Washing Unit** 

**Blank Oiling Unit** 

**Bundle Turnover** 









# Distributor in Russia



Press Feeding Systems

#### **Press Feeding Systems**

Cut To Length Lines

**Decoilers and Feeders** 

**Transfer System** 

**Destacker System** 

**Stacking Systems** 

