

Global powerhouse local solution provider. baykal.com.tr





**Special Projects** More powerful – More flexible bending. -6)



Baykal Machinery, which is one of the leading manufacturers regarding metal sheet processing machines since its establishment in 1950, has delivered its quality all over the world with its manufactured machines, press, shears and laser system. Baykal Machinery with a production line of 70.000 m<sup>2</sup> total in three different factories has one of the largest machinery manufacturing facilities in Europe. Baykal Machinery with a total of 650 professional staff, including 80 engineers, perform all the manufacturing and assembly operations at its site by using advanced technology and modern production equipment for CNC machine in the computer-aided design environment.

# 65 years high experience.

Baykal Machinery, which has the largest manufacturing facilities of Europe with a total of 70.000 square meters manufacturing area in three different factories, has been providing service for sheet metal processing machinery for 65 years with production capacity exceeding 5000 units annually.



Baykal Machinery owns the German TÜV certified ISO 9001 Quality Certificate and performs Turkish TSE documented and European Union CE marking production. Baykal Machinery, which has a sales network in almost all regions of the world extending from America to Australia, is progressing by constant improvement in it's production guality and brand value in the last 40 years. Baykal Machinery, which is a brand aware of its power and responsibility, will strengthen the position of "the machinery manufacturer, who has a corner in the industry" with the understanding of making no compromises in its quality.



# Baykal Machinery in Special Projects.

With its R&D activities determining the needs of the market, Baykal Machinery will address your production needs. Expert engineers from Baykal Machinery asses the special application requests from its customers, accomplish the most suitable solution to conform with their production capacity, and then offer them a profitable solution. Baykal Machinery, with many worldwide customers doing business in various sectors, brings a new dimension to your work-flow processes with the automation solutions offered in special projects.



# Art of bending.

Our special projects produced for your most challenging bending operations assure you to be at all times one step ahead of your competitors. Make bending of your materials, which are more challenging and require more flexibility, with our engineered products and witness how bending is transformed into art.



Baykal Machinery has been an essential part in many important global projects. The Fully Automated Pole Cutting and Bending Line Project that includes the machinery to be used for the construction of 7 stadiums to be built for 2022 Qatar FIFA World Cup, which is the first championship ever organized in Middle East and to be organized by Qatar Football Federation was delivered in 2013. Special machinery was produced for a company that fabricated components for the Freedom Tower as a replacement for World Trade Center Towers in New York. One of the largest tandem machines in Europe used for the manufacturing of rail cars in Germany and world's largest press brake machine (6000 tons) used for the manufacturing of natural gas pipes in Florida/USA are still operating.





# Size does matter.

Please welcome, the world's largest press brake 6800 mm x 6000 tons used for tha manufacturing of natural gas pipes in Florida/USA. It is so simple for it to bend 50 mm (2") stainless steel. This press brakes, unique in the world for its own weight, is specially designed for full length pipe bending. The pre-bending of the material being done by automatically changing the vee opening is one of the key components to its success.



- Total weight: 320 tons.
- Total bending force: 2500 tons.
- XR heavy duty gauge with drop down feature to form heavy cone structures.
- Special tool design using tool tips to reduce tool set up.
- Special V laser to perform scribe line work quickly and effectively.
- Ability to advance material with special push/pull system.



# Powerful, reliable and productive.

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Freedom Tower of New York raises with Baykal Machinery. This gigantic press brakes inspires the large plate bending marketplace with its bending power and capacity of 12200 mm x 2500 tons. This press brakes with a total weight of 320 tons offers a perfect operational performance for full length metal sheet bending. It has a long serving life with its rigid body structure.

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- Ideal solution for full length and short metal sheet bendings.
- Low investment cost.
- Low energy consumption during single use.
- Highest amount of flexibility.



# Flawless compatibility of 4-tandem.

Get the flawless compatibility of 4-tandem press brakes that allows you to bend metal sheets either with full length or various lengths. 4-tandem press brakes that allow for the ability to have all flush floor saving in foundation cost and being able to operate them in single mode, 2x2, 3x1 or all together makes for hte optimium in flexibility.

Compact use with mobile control unit.

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- 6-axis backgauge option.
- Easy installation and training.
- CNC sheet following arms option.



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Baykal APHS 8100 mm x 1600 tons provides maximum bending accuracy on single piece press brake. Extended throat gap and daylight allows flexible product capacity. Fast and easier bending process on difficult bending applications, due to its powerful frame construction. Mobil controller unit gives compact working field.

APHS 8100 x 1600



Productive production with front and backgauge automation system.

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APHS 7100 x 700

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- Ideal for full length direct bending.
- Long life rigid body structure.
- Bending capability with high precision.





# Twice efficiency with automation solutions.

With its high-tech engineering, Baykal Machinery continues to offer flexible solutions for all your needs. Turn your direct bending operations into efficiency with 2-tandem 7100 mm x 700 tons press brakes automation system. Moreover, minimise loss of time and efficiency.

# APHS 7100 x 700





- Production efficiency is maximised.
- No time and efficiency losses.
- Compact use with mobile control unit.
- High precision stacking capability.

# Profitable and efficient production with automation options.

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You will be able to maximise your production efficiency with the automation options offered by Baykal Machinery. With the special automation solutions customized according to the needs of the customers, you will be able to recover the time lost and increase your bottom line profit. Full automated front and back sheet feeding system is a great option that can facilitate your most challenging bending operations.

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- Total weight: 460 tons.
- Total bending force: 3000 tons.
- Full automated front and back metal sheet feeding system.

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• Long life rigid body structure.



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# Everything for automation.

Caterpillar from USA, the leader of construction equipment manufacturing uses 9100 mm x 3000 tons press brakes of Baykal Machinery for the production of excavator construction equipment. Your production speed will be doubled with this gigantic press with full automated front and back metal sheet feeding system. Components can be rear loaded, squared, and advanced to the bending area providing the user the ability to que pieces and have the flexibility needed for low volume large pieces.

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- Production efficiency is maximised.
- No time and efficiency losses.
- Compact use with mobile control unit.

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High precision stacking capability.

# Profitable and efficient production with automation options.

You will be able to maximise your production efficiency with the automation options offered by Baykal Machinery. With the special automation solutions customized according to the needs of the customers, you will be able to recover the time lost and increase your bottom line profit. Full automated front and back sheet feeding system is a great option that can facilitate your most challenging bending operations.



- High precision bending capability.
- Ideal for full length post bending.
- 9 axis independent tower type backgauge.
- Profitable production with front and backgauge automation system.

9 axis independent tower type backgauge.

# Consistently good results.

Our projects that we are specialized on strive to provide the best solutions at all times. APHS 10100 mm x 2000 tons press brake provides reliability for its user and gives you advantage of precise and flexible operations. Turn your bending operations into profit by choosing Baykal options.

2000 ton

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APHS 10100 mm x





- Ideal solution for full length and short metal sheet bendings.
- Low investment cost.
- Low energy consumption during single use.
- Flush floor.
- No foundation pit required up to 600 ton by 4 meter machines.
- Highest amount of flexibility.

# Flawless compatibility of 4-tandem.

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Get the flawless compatibility of 4-tandem press brakes that allows you to bend metal sheets either with full length or various lengths. 4-tandem press brakes that allow for the ability to have all flush floor saving in foundation cost and being able to operate them in single mode, 2x2, 3x1 or all together makes for hte optimium in flexibility.

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- Flexible processing sizes with 2-tandem operation.
- Ideal for full length post bending.
- Long-life rigid body structure.
- High precision bending capability.

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- Diverse colour options.
- Ability to process different metal sheet sizes with asymmetrical tandem.
- Long-life rigid body structure.
- High precision bending capability.



# The advantage of diversity.

Baykal Machinery produces its machine with various colors depending on customer request. We offer you more suitable products that conform to your corporate identity with our color choices as an option. Furthermore, you are able to process shorter and longer applications with our asymmetrical tandem options.

APHS 7100 x 1200



- Compact use with mobile control unit.
- 6-axis back gauge option.
- Easy installation and training.
- CNC sheet following arms option.





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# The right press brake for you.

With its compact design and rigid structure, Baykal APHS 8100 mm x 1000 ton press brakes is an indispensable choice for plants. You can choose customized heavy tonnage 6 axis (X1-X2-R1-R2-Z1-Z2) backgauge as an option. More precise bending is accomplished with its rigid body structure and CNC sheet following arms.

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APHS 8100 x 1000

- Compact use with mobile control unit.
- 6-axis backgauge option.
- Reverse bending possibility with parking system.
- Easy installation and training.

# APHS 4100 x 500







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Baykal APHS 8100 mm x 800 ton press brakes is the most preferred model of the operations with its compact design and rigid structure. You can choose customized heavy tonnage 6 axis (X1-X2-R1-R2-Z1-Z2) backgauge as an option. Process your reverse bending works with ease and speed with the parking system offered for your full length reverse bending operations.

APHS 8100×800

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- Low investment and operating costs.
- Quick and easy installation.



# The productive all-purpose bending cell.

Do you want to bring designs including diversity into the production serially? Provide raw material and receive finished product. Complete the entire process with electric servo press and robotic automation without requiring any human being. The fast, economical and quiet operation superiority of electric servo press is combined with occupational accident of zero risk due to unmanned work.

## We are Baykal.

Baykal Machinery continues to improve production process with modern production facilities, the latest technology in machinery, computer supported production control systems and qualified workforce.

Our management is implementing experience and innovative of for more than 65 years. Baykal Machinery has maintained being a leader as the first company, which completes computer supported production-management system integration.



This brochure includes photos and descriptions of machines with options that may not form part of the standard equipment supplied, but may be purchased at additional cost. Only our official quotation may be used for a full description of what forms our offer to you. Machine safety guarding may have been removed or partially opened for demonstration purposes in this document. Baykal Machinery reserves the right to make changes without notice to the products and or specifications shown in the brochure.

TS EN ISO 9001:2008 certificated.





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