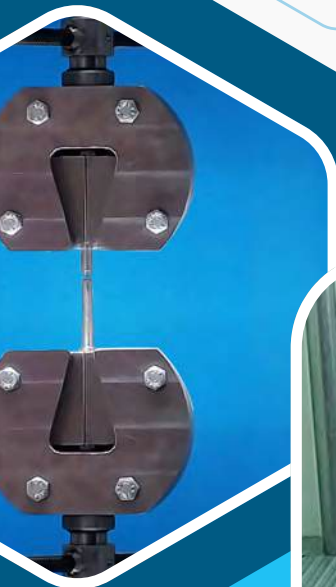
AKDI
MAKİNE



Product and Service Catalogue

Furnace Group

Test Machine Group

Countersinking Machine Group

Unique Machine Group

Material Analysis

Publicly Supported Machinery Projects

Automations

Machine Revisions

Akdı Makine San. Tic. Ltd. Şti.
KOS Innopark D1 Blok, No:6B, 42250 Selçuklu/Konya

+90 554 692 71 87

akdimuhendislik.com

AKDI MAKİNE

Our Business

Engineering Services

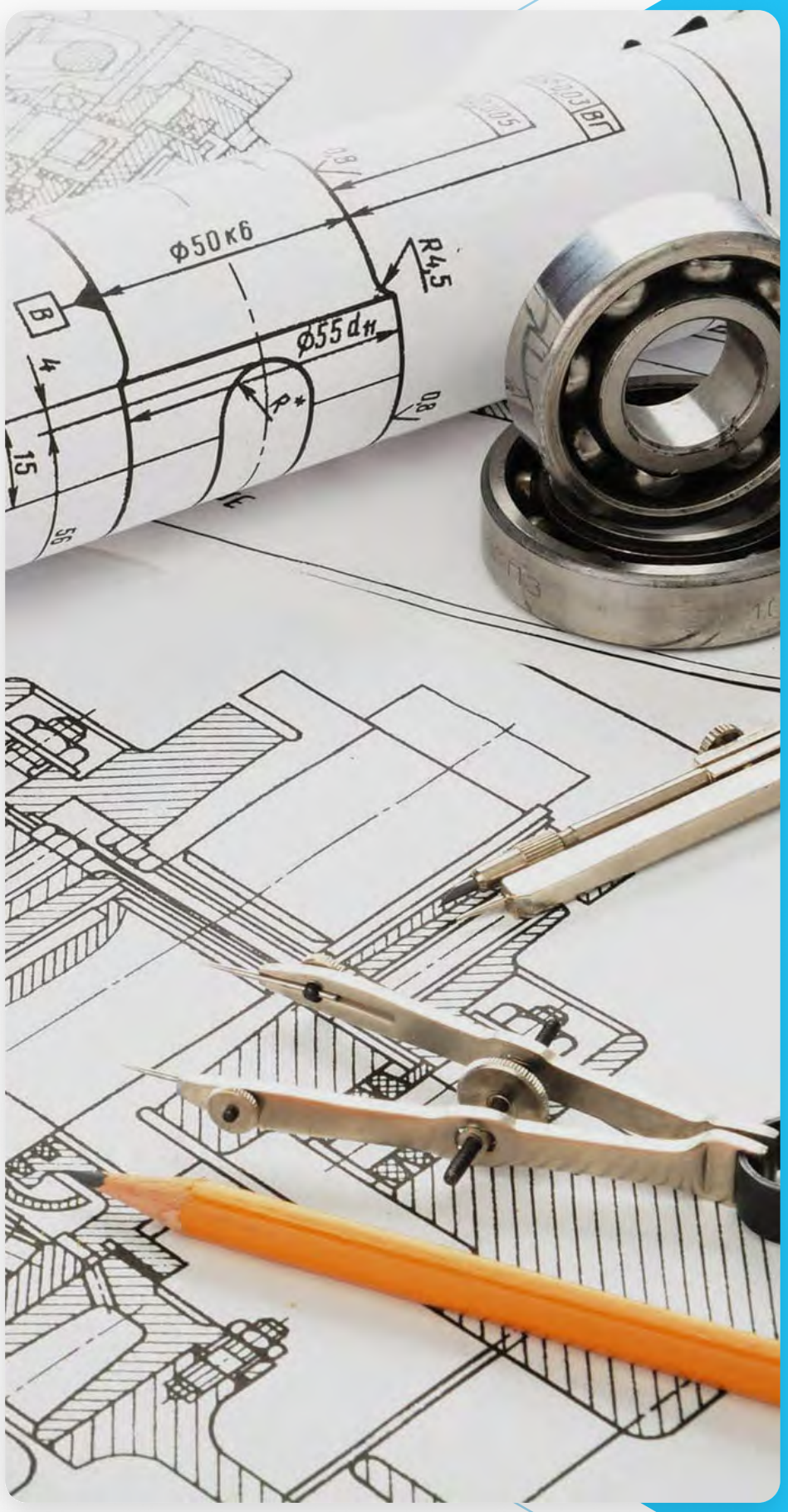
We are working on solving engineering problems met during production and developing new product & production processes. Many international publications (SCIs) have been prepared especially in the field of materials science and aluminum technologies. In the light of these studies, we are increasing our technical competence in the field of aluminum alloys and manufacturing technologies.

Machine Design and Manufacturing

In the production of machinery for your special needs, all processes from CAD design, component assembly, panel preparation and PLC software integration to the design and start-up of a machine are managed from a single point. Many problems have been solved with special machines designed and commissioned. Using the same limited resources, our customers can achieve faster and better quality production in a shorter time independent of the operator.

Mass Production

Projects for the production of high value-added automotive parts that will provide import substitution and manufacturing of automotive testing machines are ongoing. Our mass production projects in the field of aluminum technologies and automotive contribute to the national economy.



Akdı Makine San. Tic. Ltd. Şti.
KOS Innopark D1 Blok, No:6B, 42250 Selçuklu/Konya

+90 554 692 71 87

akdimuhendislik.com

AKDI MAKİNE

References

sistem teknik INDUSTRIAL FURNACES

NETFORM

POLDAP Submersible Motors&Pumps

TYP TRACTOR SPARE PARTS

Erdağı Kauçuk

AYD

KurtsanFood WORLD WIDE SUPPLIER OF FRUIT & HERBAL TEAS

SELÇUK ÜNİVERSİTESİ

BİAS MÜHENDİSLİK

ALMETAL AL METAL ALÜMİNYUM

OKSAN RUBBER

BERDAN CİVATA B.C.

kentpar TORSIONAL VIBRATION DAMPERS

DORUKMAK

UYSAL HYDRAULIC

ROTSAN®

TruckExpert QUALITY TRUCK & TRAILER PARTS

FMC GLOBAL FORGING · MACHINING · COMPONENT

HİTİT ÜNİVERSİTESİ

INNOMACH INNOVATIVE SOLUTIONS FOR PROFESSIONALS

ETEL® RUBBER

ULUSOY RAILWAY SYSTEMS

Aytok Water Filter Systems

pan plast

ASİLCİVATA

TESTRAFO

ABANT SOĞUTMA & ISITMA

TuncerTuz®

metkarsan TARIM MAKİNALARI

OSMANLI OTOMOTİV

Akdı Makine San. Tic. Ltd. Şti.
KOS Innopark D1 Blok, No:6B, 42250 Selçuklu/Konya

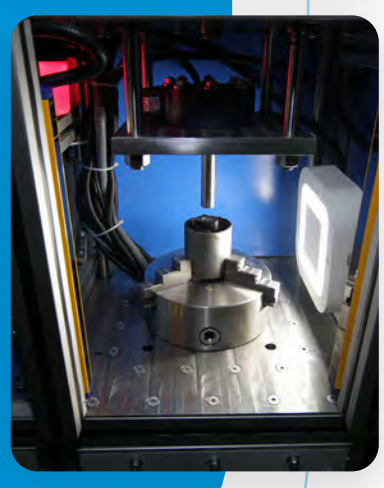
+90 554 692 71 87

akdimuhendislik.com

AKDI MAKİNE

Bush Testing Machine- Servo

AKDI 19-15



Technical Data

It is used to measure whether there is any deformation or adhesion in elastomer automotive suspension system bushings and to measure the deflection values at standard loads. This test device is designed to test products under mass production conditions. The device allows the parts to advance with 0.025 mm precision and their force to be measured with 1 kg precision, ensuring 100% control and verification of production according to material properties and visual suitability.

Area of Use
Automotive Industry (Rubber to Metal Bushes)

Dimensions
Width 150*Length 180*Depth 50 cm

Motor Power
2 kW servo system

Capacity
20 kN

Precision
0.025 mm distance measurement

Speed
35 mm/ second

Additional Info
Hand Protection available

Akdı Makine San. Tic. Ltd. Şti.
KOS Innopark D1 Blok, No:6B, 42250 Selçuklu/Konya

+90 554 692 71 87

akdimuhendislik.com

AKDI MAKİNE

Bush Testing Machine- Pneumatic

AKDI 22-02

Technical Data

It is used to measure whether there is any deformation or adhesion in elastomer automotive suspension system bushings and the flexibility values at standard loads. The outer body of the bushing is placed in the adjustable lathe chuck. A spindle is used to apply pressure to the center of the bushing. The pressure load is verified by an external pressure transmitter. In the device, which operates with a pneumatic system, the load to be applied to the bushing can be adjusted via the touch panel.

Area of Use

Automotive Industry (Rubber to Metal Bushes)

Dimensions

Width 50*Length 70*Height 180 cm

Motor Power

6 bar

Capacity

220 Volt 2 A

Precision

2-5 kg

Speed

40 mm/ second

Additional Info

Hand Protection available

Akdı Makine San. Tic. Ltd. Şti.
KOS Innopark D1 Blok, No:6B, 42250 Selçuklu/Konya

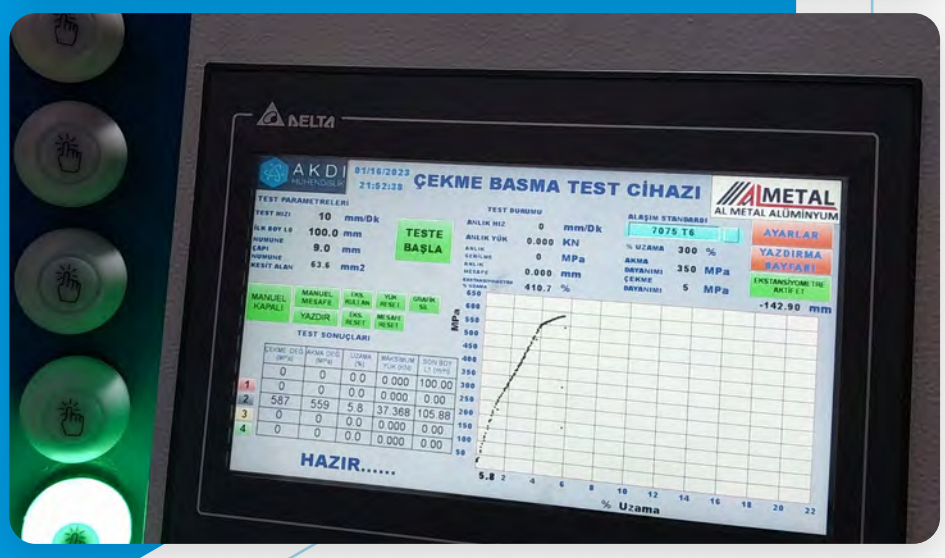
+90 554 692 71 87

akdimuhendislik.com

AKDI
MAKİNE

Universal Tensile- Compression Testing Machine

AKDI 20-34



Technical Data

The compliance of many products such as steel materials, cast iron materials, aluminum alloy materials, concrete materials, plastic materials with standards can be tested with the Universal Tensile Compression Testing Machine. Our devices are produced with 3 different methods: servo motor driven, AC motor driven and hydraulic power driven. The choice of method is determined according to the usage area of the device, the tests it will perform and the maximum load capacity. The capacity of our double column screw shaft structure test devices is up to 300 KN. Servo motor driven electromechanical devices are recommended in places where waiting under load is required, such as bolt tests, or for functional tests. AC motor driven ball screw systems are recommended for systems where only pulling will be done at low loads.

Area of Use
For different material types

Dimensions
Width 70*Length 150*Height 200 cm

Motor Power
1,5 kW- 3kW- 5kW- 10 kW

Capacity
Screw Shaft: 50-100-200-250 kN Hydraulic: 100-10000 kN

Precision
Load measurement: 24 bit Distance measurement: 0,025 mm

Speed
0-250 mm/ minute

Additional Info
TS EN ISO 6892-1 Test method at room temperature. Test Capability:Tensile-Compression-Bending-Load Holding-Axial Clearance-Stretch Test"

Akdı Makine San. Tic. Ltd. Şti.
KOS Innopark D1 Blok, No:6B, 42250 Selçuklu/Konya

+90 554 692 71 87

akdimuhendislik.com

AKDI MAKİNE

Thermal Schock Testing Machine

AKDI 20-53

Technical Data

Two different rooms are designed to be completely isolated from each other. Thermal shock is applied to the test sample by carrying a tray between rooms. Two rooms can be heated at different temperatures up to a maximum of 150℃. The screen can be controlled via remote access. Thanks to the temperature sensor on the tray, the instant temperature graph can be displayed on the screen. There is an automatic grease lubrication system.

Area of Use

For different material types

Dimensions

Width 70*Length 400*Height 170 cm

Motor Power

2 kW

Capacity

Tray inner volume is 0.12m³

Precision

Max 150 °C

Speed

Tray movement speed is 600 cm/second

Additional Info

Due to OHS measures, the doors can be opened by pressing the button on the screen.

Akdı Makine San. Tic. Ltd. Şti.
KOS Innopark D1 Blok, No:6B, 42250 Selçuklu/Konya

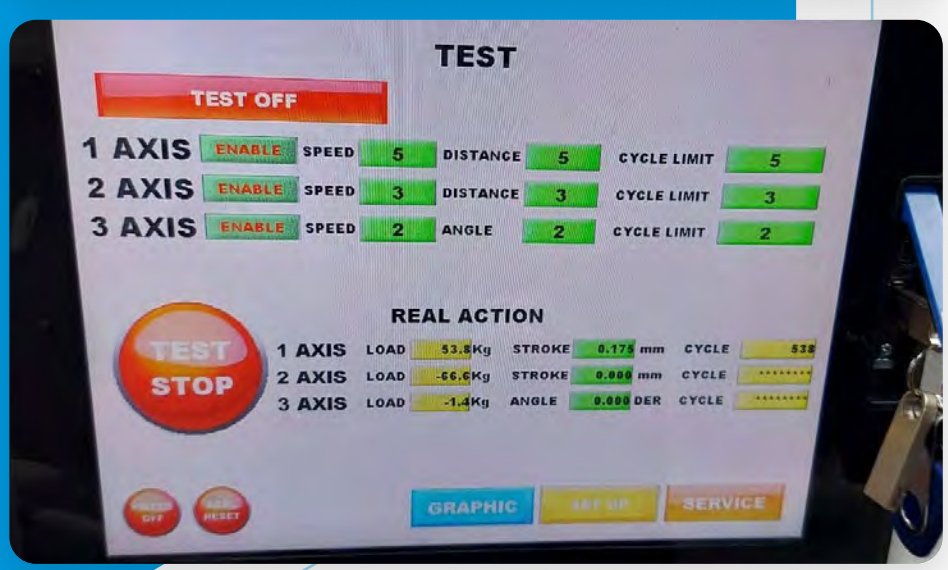
+90 554 692 71 87

akdimuhendislik.com

AKDI MAKİNE

Fatigue Testing Machine

AKDI 20-04



Technical Data

The device is used to determine the fatigue values of various products used in the automotive industry. The device provides forward and backward movements in the X and Y axes and rotation in the Z axis. Angle, torque, force and test limit information are recorded according to the test results of the part in the device, which is operated using a servo motor and a ball screw. In actuators that provide reciprocating movement, load measurement is made using a load cell and distance measurement is made using a square wave linear ruler.

Area of Use

Parts in the Automotive Industry

Dimensions

Width 300*Length 300*Height 200 cm

Motor Power

Total 10 kW in 3 Axes

Capacity

Ball screw motion distance 100 mm

Precision

Load measurement accuracy is 1 Kg and distance measurement accuracy is 0.01 mm

Speed

250 mm/second for linear actuators. 75mm/second on Rotation Axis

Additional Info

The device performs fatigue testing in 3 axes. With the interpolation feature on the X and Y axes, 2 axes can be synchronized.

Akdı Makine San. Tic. Ltd. Şti.
KOS Innopark D1 Blok, No:6B, 42250 Selçuklu/Konya

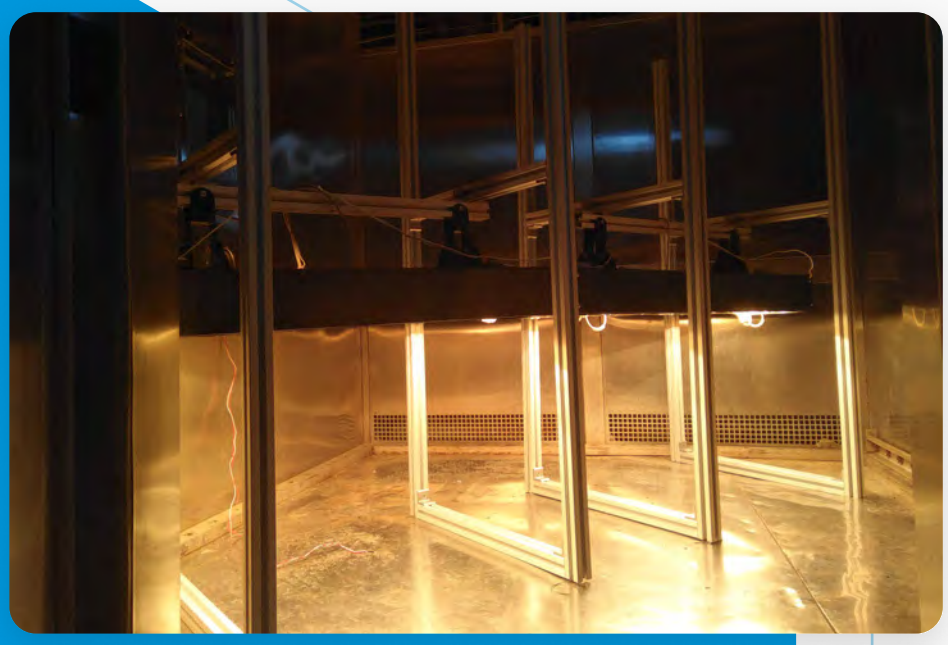
+90 554 692 71 87

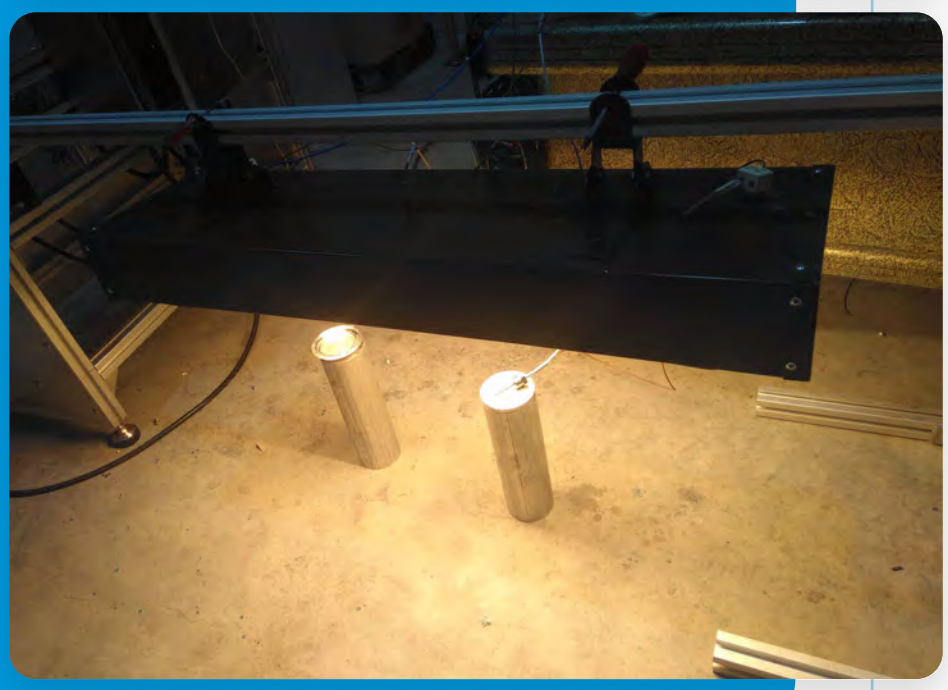
akdimuhendislik.com

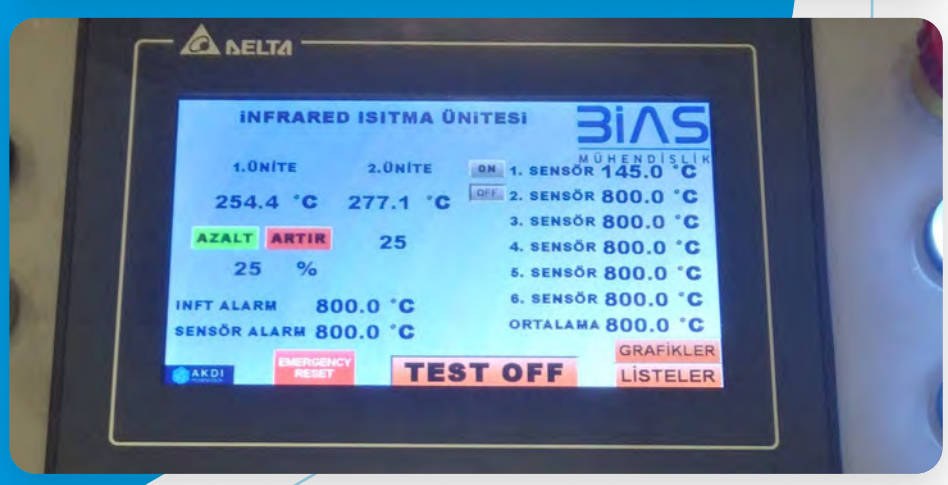
AKDI MAKİNE

Infrared Testing Machine

AKDI 20-04







Technical Data

It is an infrared heating test system that can simulate external factors such as sunlight or heat on automotive parts. It is operated with a maximum of 12 kW energy with 4 different lamps. With a total of 6 temperature sensors in the system, real-time measurements can be made and graphs can be created. Data can be stored on USB and later retrieved and reviewed in Excel in CSV format. The lamps are short wave infrared and can be adjusted at the desired angle and distance.

Area of Use

Parts in the Automotive Industry

Dimensions

Width 30*Length 200*Height 50 cm

Energy

12 kW

Thermocouple

6 pieces

Precision

3°C

Heating Area

2m2

Additional Info

As an OHS precaution, it should be viewed with special glasses and the test should be performed in an isolated room.

Akdı Makine San. Tic. Ltd. Şti.
KOS Innopark D1 Blok, No:6B, 42250 Selçuklu/Konya

+90 554 692 71 87

akdimuhendislik.com

AKDI MAKİNE

Mold Heating Furnace

AKDI 20-03

Technical Data

Our oven, which ensures that the molds/products used in production are heated before the operation begins and reaches the temperature ready for production, reaches a maximum temperature of 250°C. It has a temperature control accuracy of 1°C in routine operation at a set temperature of 200°C. 1/2/3/4-chamber options are available depending on the number of mold changes.

Area of Use
Heating of Glass-Rubber-Injection-Steel Molds and Products

Dimensions of Chambers
Width 70-100*Length 70-100*Depth 70-100 cm

Motor Power
1,5 kW (4 Chambers)

Capacity
Max. 4 Molds simultaneously/different times

Heating Power
36 kW- 72 kW

Fan Feature
Radial Fan

Additional Info
Automatic with Pneumatics / Manual with Clamp

Akdı Makine San. Tic. Ltd. Şti.
KOS Innopark D1 Blok, No:6B, 42250 Selçuklu/Konya

+90 554 692 71 87

akdimuhendislik.com

AKDI MAKİNE

Double Rise- Heating Furnace

AKDI 23-40

Technical Data

In the Double Rise Furnace, which is designed with two floors and four chambers to save space, the molds/products are heated at a homogeneous temperature. The doors are opened and closed manually, and full closing is provided with Kukamet. Our oven max. It reaches a temperature of 250°C and has a temperature control accuracy of 1°C in routine operation at the set temperature of 200°C.

Area of Use
Heating of Glass-Rubber-Injection-Steel Molds and Products

Dimensions
Width 100*Length 200*Depth 120 cm

Motor Power
2 kW

Capacity
Max. 4 Molds simultaneously/different times

Heating Power
48 kW

Fan Feature
Radial Fan

Additional Info
Clamp/ Manuel with Lock

Akdı Makine San. Tic. Ltd. Şti.
KOS Innopark D1 Blok, No:6B, 42250 Selçuklu/Konya

+90 554 692 71 87

akdimuhendislik.com

AKDI MAKİNE

Core Heating Furnace

AKDI 22-13

Technical Data

Our furnace, which ensures that the cores/special small products used in production are heated before the operation starts and reaches the temperature ready for production, reaches a maximum temperature of 250°C and has a temperature control accuracy of 1°C in routine operation at the set temperature of 200°C.

Area of Use
Heating of Glass-Rubber-Injection-Steel Molds and Products

Dimensions
Width 50*Length 100*Depth 70 cm

Motor Power
0,18 kW

Capacity
Number of circles in the tray: 30 pieces

Heating Power
6 kW

Fan Feature
Radial Fan

Additional Info
Clamp/ Manuel with Lock

Akdı Makine San. Tic. Ltd. Şti.
KOS Innopark D1 Blok, No:6B, 42250 Selçuklu/Konya

+90 554 692 71 87

akdimuhendislik.com

AKDI MAKİNE

Subcomponent Heating Furnace

AKDI 22-51

Technical Data

It is a fully automatic furnace that works with trays fixed on moving conveyors. The products placed in the tray reach the desired temperature in a short time. Thanks to its movable tray system, is preferred in continuous production. Our furnace reaches a maximum temperature of 250°C, and has a temperature control accuracy of 1°C in routine operation at the set temperature of 200°C.

Area of Use

Heating of Glass-Rubber-Injection-Steel Molds and Products

Dimensions

Width 150*Length 600*Depth 130 cm

Motor Power

3 kW

Capacity

60 pcs

Heating Power

20 kW

Speed

20 sec/ pcs

Additional Info

Ergonomic Usage, Loading-Unloading By Operator

Akdı Makine San. Tic. Ltd. Şti.
KOS Innopark D1 Blok, No:6B, 42250 Selçuklu/Konya

+90 554 692 71 87

akdimuhendislik.com

AKDI MAKİNE

Tunnel- Heating Furnace

AKDI 21-17

Technical Data

The feature of tunnel furnaces is that the materials are heated or dried by passing them through a tunnel-shaped heating chamber on a conveyor belt. Tunnel heating furnaces enable continuous or semi-continuous processing of materials. This increases efficiency and improves quality in large-scale production processes. Our furnace reaches a maximum temperature of 250°C, and has a temperature control accuracy of 1°C in routine operation at the set temperature of 200°C. Drying-baking-sintering-heating processes are carried out in the furnace.

Area of Use

Heating of Glass-Rubber-Injection-Steel Molds and Products

Dimensions

Width 200*Length 800*Depth 150 cm

Motor Power

8 kW

Capacity

5-belt conveyors 7 meters = Total 35 meters

Heating Power

60 kW

Speed

45 min/ pcs

Additional Info

Ergonomic Usage, Furnace Feeding Under Operator Control

Akdı Makine San. Tic. Ltd. Şti.
KOS Innopark D1 Blok, No:6B, 42250 Selçuklu/Konya

+90 554 692 71 87

akdimuhendislik.com

AKDI MAKİNE

Annealing Furnace with Trolley

AKDI 23-41

Technical Data

Our furnace, which heats the products, reaches a maximum temperature of 200°C, and has a temperature control accuracy of 1°C in routine operation at the set temperature of 200°C. To the furnace chambers, the ingredients are placed on trays with 4 trolleys each, and they are driven into the furnace via a ramp system. The system eliminates the problem of burning hands when the trolley leaves the furnace with the door lock feature that opens when the furnace cools down.

Area of Use

Heating of Glass-Rubber-Injection-Steel Molds and Products

Dimensions

Width 280*Length 300*Depth 200 cm

Motor Power

1 kW

Capacity

2 trolleys at the same time/different times

Heating Power

36 kW

Fan Feature

Radial Fan

Additional Info

Ergonomic Usage, Furnace Feeding Manually with Trolley

Akdı Makine San. Tic. Ltd. Şti.
KOS Innopark D1 Blok, No:6B, 42250 Selçuklu/Konya

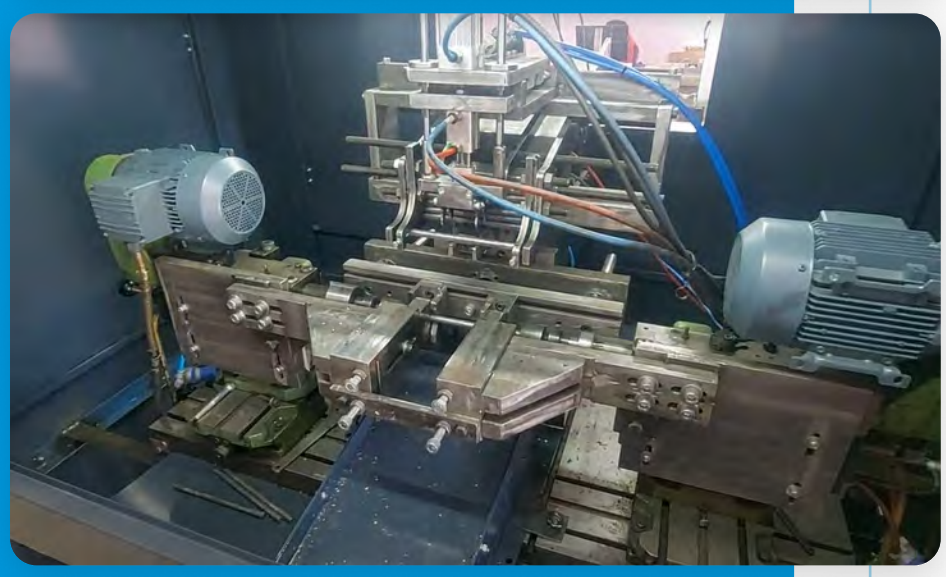
+90 554 692 71 87

akdimuhendislik.com

AKDI MAKİNE

Double Sided Chamfering Machine

AKDI 22-41



Technical Data

The device is used to deburr and chamfer edges of materials such as metal or wood. The workpiece diameter measures 6-14 mm and the sample length varies between 60-300 mm. The products are placed in the feeding section manually by the operator. The incoming material is taken with the jaws and positioned for chamfering. The bits coming with the motors moving from both sides perform the chamfering process on the part, then the part passes from the ramp to the pan and the process is completed.

Area of Use

Steel, copper, plastic, aluminum materials

Dimensions

Width 100*Length 200*Height 150 cm

Motor Power

1,5 kW

Capacity

16 pcs/ minute

Precision

0.1 mm measurement accuracy

Speed

Max. 1500 rpm

Additional Info

There is mica protection on the doors against burr splashing, and as an OHS precaution, the machine does not operate until the doors are closed.

Akdı Makine San. Tic. Ltd. Şti.
KOS Innopark D1 Blok, No:6B, 42250 Selçuklu/Konya

+90 554 692 71 87

akdimuhendislik.com

AKDI MAKİNE

Single Side Countersink Machine

AKDI 21-20

Technical Data

The device countersinks all metallic materials such as steel, aluminum and copper. The process is carried out to a standard extent with a support on the machine. There are places in the jaw according to diameters to process materials of different diameters. The process is carried out by placing the material in a place suitable for the diameter of the material with the help of pins.

Area of Use

Steel, copper, plastic, aluminum materials

Dimensions

Width 50*Length 100*Height 150 cm

Motor Power

1,5 kW

Capacity

Adjustable jaw, 5 different diameters

Precision

0,2 mm

Speed

12 pcs/ minute

Additional Info

As an OHS precaution, the area where the flaring process was performed was covered with wire to provide hand protection.

Akdı Makine San. Tic. Ltd. Şti.
KOS Innopark D1 Blok, No:6B, 42250 Selçuklu/Konya

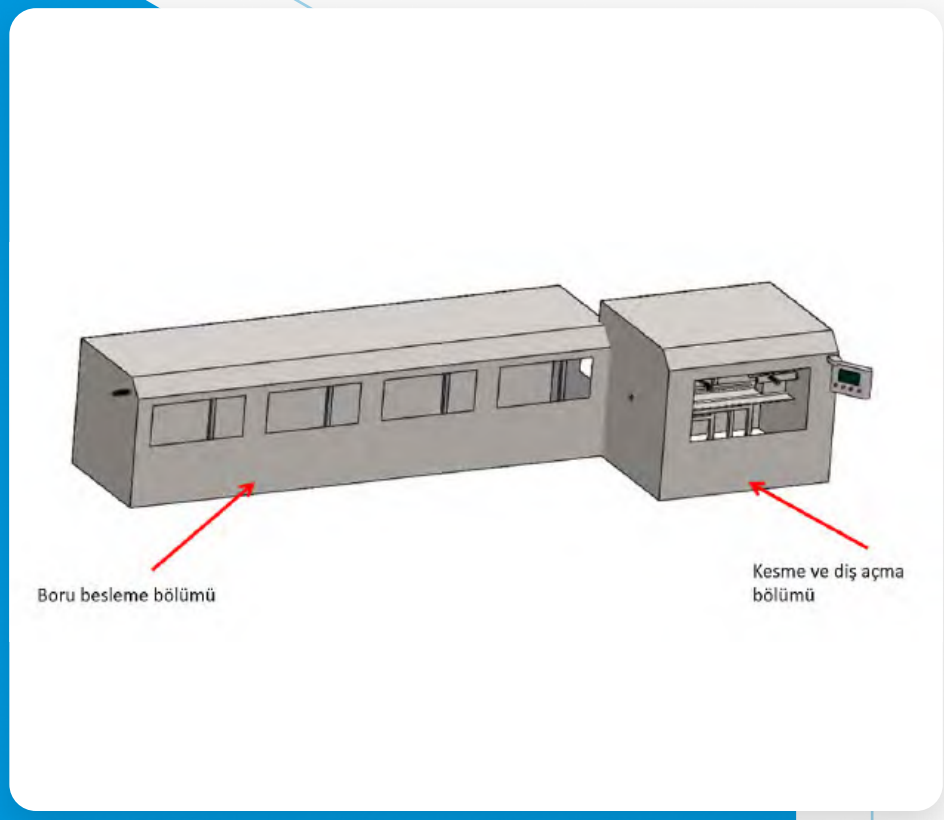
+90 554 692 71 87

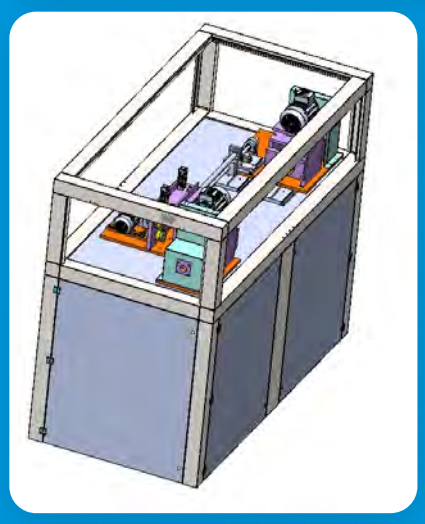
akdimuhendislik.com

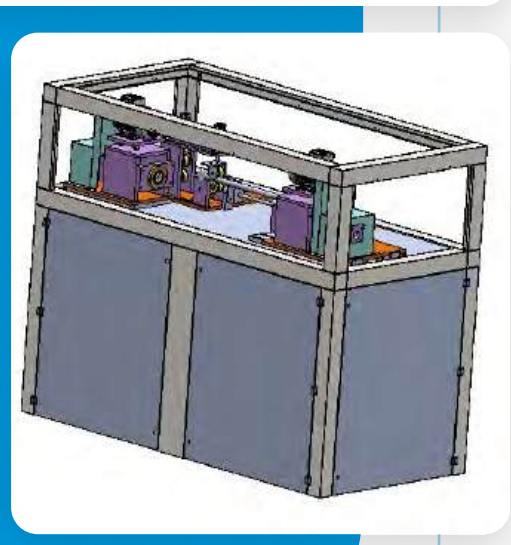
AKDI MAKİNE

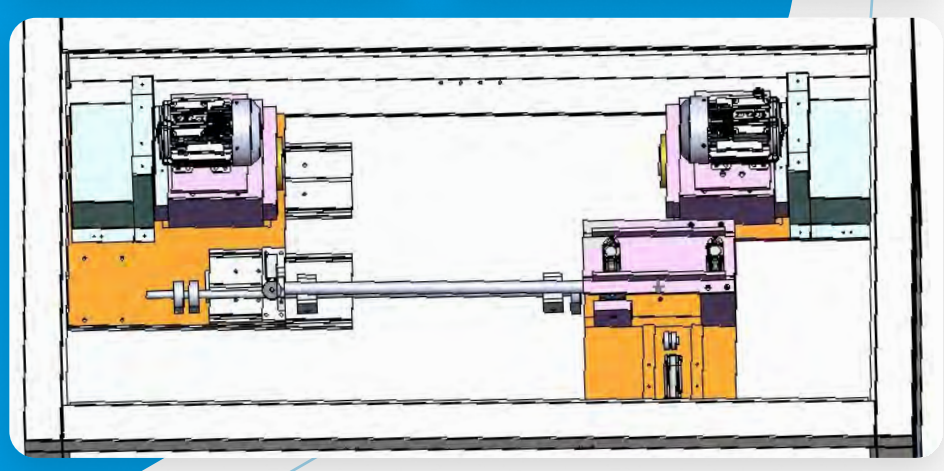
Double Sided Threading Machine

AKDI 23-27









Technical Data

The machine cuts thread to the outer end of plastic pipes from two- sides at the same time. The length of the pipes to be threaded can be adjusted as desired between 20-75 cm. The 6 m long pipes to be filled into the loading driver are pushed from this driver to the cutting and threading machine, where both length completion and threading are performed. Up to 100 pipes with a diameter of 32 mm can be loaded into the loading driver. Pipes will be cut with a disc saw, and the cutting disc and saw speed that will produce minimum burr are selected. Machine production speed is 8-12 pieces/minute. This value varies depending on pipe length and processing speed. Each product is counted, verified twice, and reflected on the screen. Daily production pipe length, pipe quantity and production time report are both displayed on the screen and saved to USB as Excel.

Area of Use
Steel, copper, plastic, aluminum materials

Dimensions
Width 120*Length 2500*Height 200 cm

Motor Power
10 kW

Capacity
8-12 pieces/ minute

Precision
0,1 mm

Processing Feature
Double Sided Processing at the same time

Additional Info
As an OHS precaution, hand protection was provided by covering the area where threading was performed.

Akdı Makine San. Tic. Ltd. Şti.
KOS Innopark D1 Blok, No:6B, 42250 Selçuklu/Konya

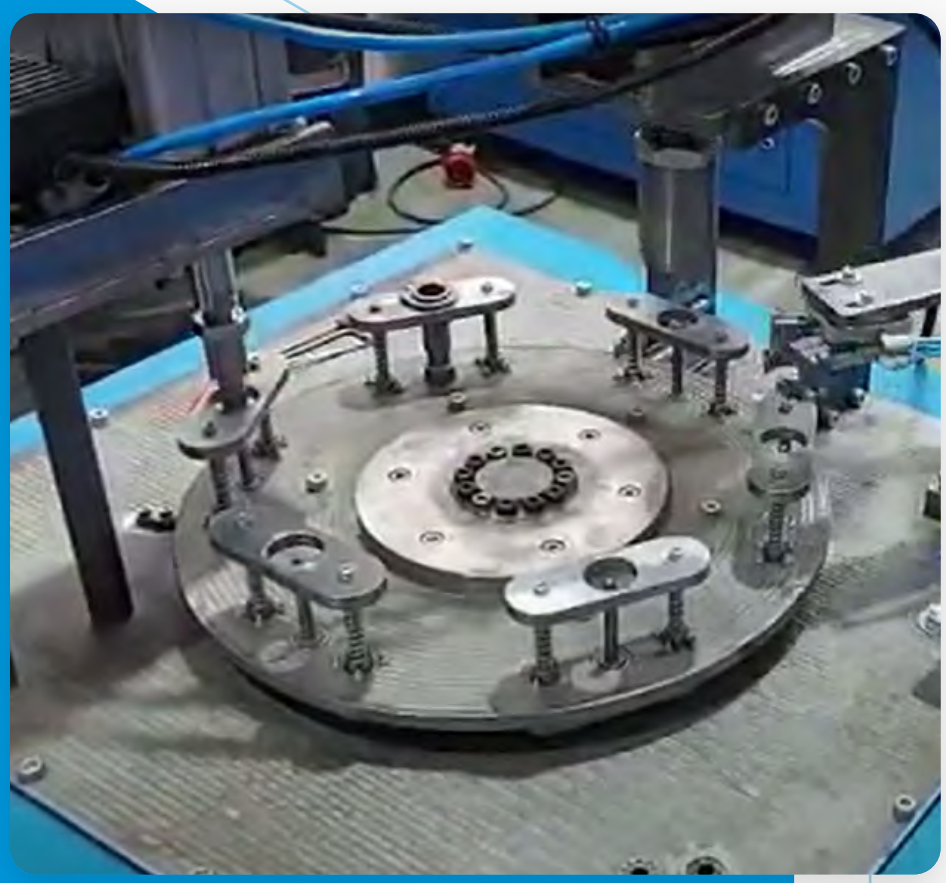
+90 554 692 71 87

akdimuhendislik.com

AKDI MAKİNE

Caliper Assembly Machine

AKDI 21-24



Technical Data

The device has a rotating drum and assembles 4 different components together using pneumatics at 4 different stations. Pneumatics are load and speed controlled and assembly control is verified by sensors. Feeding is done by the operator and the assembled product is exited from the system by a robot gripper.

Area of Use

Steel, copper, plastic, aluminum materials

Dimensions

Width 70*Length 70*Height 120 cm

Motor Power

1,5 kW

Capacity

20-25 pcs/ minute

Processing Feature

4 component assembly

Station

Max 8 station

Additional Info

There is mica protection on the doors against burr splashing, and as an OHS precaution, the machine does not operate until the doors are closed.

Akdı Makine San. Tic. Ltd. Şti.
KOS Innopark D1 Blok, No:6B, 42250 Selçuklu/Konya

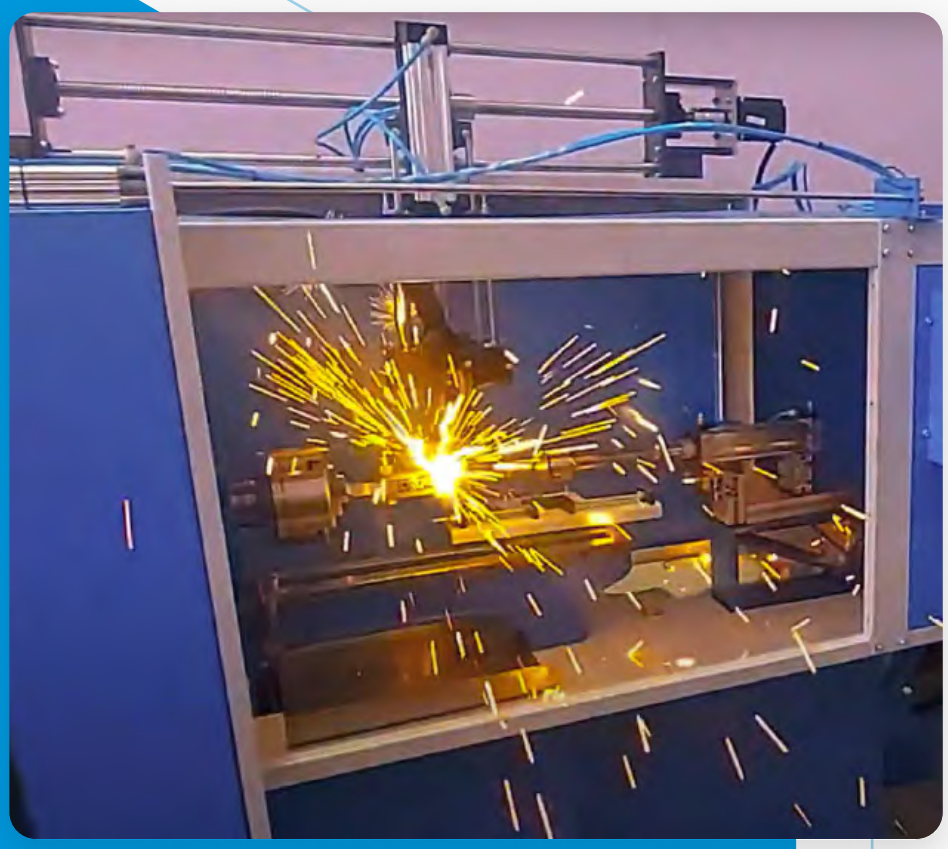
+90 554 692 71 87

akdimuhendislik.com

AKDI MAKİNE

Circle Welding Machine

AKDI 21-12



Technical Data

With the rotary environmental welding machine, gas arc welding can be easily done in an environmentally friendly manner. Welding fixtures specific to any part can be designed. Tailstock movement distance is 1 m. The welding torch is adjusted pneumatically in 2 axes.

Area of Use
Steel materials

Dimensions
Width 50*Length 200*Height 150 cm

Motor Power
1,5 kW

Axis
5 axis controlled

Precision
0.5 mm measurement accuracy

Welding Feature
Horizontal and Vertical

Additional Info
There is mica protection on the doors against burr splashing, and as an OHS precaution, the machine does not operate until the doors are closed.

Akdı Makine San. Tic. Ltd. Şti.
KOS Innopark D1 Blok, No:6B, 42250 Selçuklu/Konya

+90 554 692 71 87

akdimuhendislik.com

AKDI MAKİNE

Powder Metallurgy Press

AKDI 22-07

Technical Data

It is a 3-axis servo, double-acting press used in the powder metallurgy production process. It is used to shape powders in molds before sintering. It works fully automatically with powder feeding.

Area of Use
For powder metallurgy and Ferit Nüve materials

Dimensions
Width 50*Length 120*Height 190 cm

Motor Power
3 kW

Capacity
20 pcs/ minute

Precision
0,05 mm measurement accuracy

Press Power
10 tons

Additional Info
As an OHS precaution, there is mica protection and the machine does not operate until the doors are closed.

Akdı Makine San. Tic. Ltd. Şti.
KOS Innopark D1 Blok, No:6B, 42250 Selçuklu/Konya

+90 554 692 71 87

akdimuhendislik.com

AKDI MAKİNE

Checkweigher

AKDI 2050

Technical Data

The device is used to weigh products before packaging on the mass production line. The production line is not stopped during weighing. According to the weighing results made on the second band on the device, packages that are overweight or underweight on the third band are thrown out of the line. Thus, only products whose weight is within tolerance are sent for packaging.

Area of Use
In paper and plastic materials

Dimensions
Width 50*Length 150*Height 120 cm

Motor Power
750 Watt

Capacity
30 pcs/ minutes

Precision
2 gram

Processing Feature
Automatic Acceptance/Rejection Process

Additional Info
To ensure the accuracy of weighing, a mica cover is placed on the weighing belt.

Akdı Makine San. Tic. Ltd. Şti.
KOS Innopark D1 Blok, No:6B, 42250 Selçuklu/Konya

+90 554 692 71 87

akdimuhendislik.com

AKDI MAKİNE

Hydraulic Cylinder Assembly and Test Line

AKDI 22-48

Technical Data

The cylinders will be washed and dried inside on a 6-meter conveyor belt, and then the jack will be installed. The test of the cylinder will be done by pumping hydraulic oil before it is taken off the line. Hydraulic pressure resistance will be measured.

Area of Use
For Hydraulic Cylinders

Dimensions
Width 200*Length 700*Height 200 cm

Motor Power
20 kW

Capacity
50 cylinders simultaneously

Air Pressure
6 bar

Max Hydraulic Test Pressure
300 bar

Additional Info
As an OHS precaution, when the parts are pressurized, they are in a closed environment. After the part is pressurized, the door can be opened and visually inspected. The door will open and close automatically.

Akdı Makine San. Tic. Ltd. Şti.
KOS Innopark D1 Blok, No:6B, 42250 Selçuklu/Konya

+90 554 692 71 87

akdimuhendislik.com