

SINCE 1975

THIS IS
THE
MACHINE

www.gokcuoglu.com



 **GOVAMA®**

Thread Rolling Machines
End Facing Machines

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About Us

GÖKÇÜOĞLU A.Ş. has been established since 1975 and carries on activities in 3500 sqm closed area.

GÖKÇÜOĞLU A.Ş., who is synonymous with Thread Rolling Machine in Turkey, meet high portion of local markets' demand and %70 of its' production is exported mainly to Germany, Canada, America, Russia, Iran and other Middle East countries.

Additionally, our company who has ability to produce every kind of machining product with its' modern structure and high capability, get benefit from R&D support of TUBITAK and as the result, deserved to got award of "Aegean Region Chamber of Industry – High Investment – 30 th year"

GÖKÇÜOĞLU aims the best and because of that still carries on activities with high quality production, service and after sales service, Professional and expert staff; internal training of staff.

Vision & Mission

Creating differencies in Strategic Principles to catch sustainable growth and advantage in Competition; continue to its' way with keeping business values, are our Vision.

Focussing on continuos improvement with our keeping up enviromental and quality understanding, being loyal to our long term partners' trust and add value to country, by having an active part in improvement of industry, are our Mission.

Since 1975 till today...

FROM PAST TO PRESENT **MILESTONES**

1975

In September 1975, Gökçüoğlu has been established in Izmir.

1982

In 1982, First Export has been achieved.

1993

In 1993, started production of coloumn type with inclination adjustment in Thread Rolling Machine.

2001

In 2001, with participation to EMO Hannover/ Germany, made expansion to European market.

2002

In 2002, started export of fully Gökçüoğlu design and production, to Europe.

2004

In 2004, 3 die Thread Rolling Machines' design and production made. Additionally, changed over studies, according to ISO Standarts.

2005

In 2005, First export of first 3 die Thread Rolling Machine achieved.

2006

In 2006,
* End facing
* Railway Bolt Thread Rolling Machines design and production has been completed.

2008

In 2008, With Improvement in equipment/machine pool by modern technology CNC Machines, increased quality level in production.

In same year, 30 pcs of 3 die Thread Rolling Machine Export to China in same order, has been achieved.

2010

In 2010, 2 die, 2 head moved, PLC Controlled Thread Rolling Machine has been designed and produced.

2011

In 2011, Speacially automated, 2 Station (Burnishing and Thread Rolling), PLC Controlled Thread Rolling Machine has been designed and started production.

2013

In 2013, 2 die and 3 die Thread Rolling Machines Export has been achieved to Canada



EVERYWHERE
AROUND THE
WORLD
SINCE 1975...

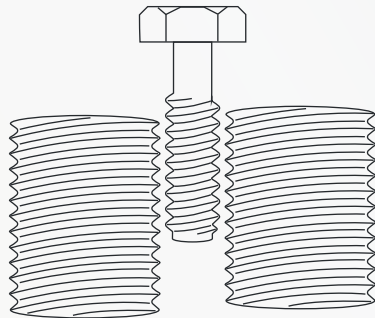
IN-FEED & THROUGH FEED PROCESS APPLICATIONS

Thread Rolling; production model has a history for nearly 100 years. Nevertheless thread Rolling technology is not prevalent in production fields, where gain big advantages.

It is a kind of production method, which provides faster, more quality and more economical production than machining. Workpiece is pressed through dies with mechanical and hydraulic pressure effect. Dies are rotated by high torque, in order to continue pressing effect on whole around workpiece, as the result creating requested Threading form on surface of Workpiece. Used energy for thread Rolling is lower than hobbing machine or lathe, that do the same operation. Rolling dies lifetime is longer than cutting tools of machining equipment for thread rolling.

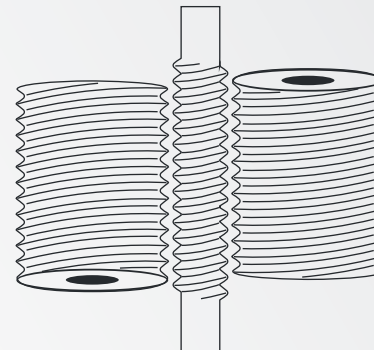
In-feed Process

In-feed or plunge dies are preferred when workpiece thread length is shorter than die length or equal to die length. Die have the same thread form with workpiece surface. During In-feed or plunge operation, workpiece rotates with pressure, does not move backward or forward. If there is a step front or behind of thread section, Infeed or plunge application should be preferred by manufacturer.



Through Feed Process

A kind of “walking” effect is utilized, allowing the work piece to follow the shaft direction forward as it is rotated and formed. In order to achieve that forward motion, the main die shafts are set at an inclination. For machines without incline capability, the lead angle of the dies has a compensation angle. Because the work piece moves through while the dies are set at a fixed distance, this process is ideal for long parts such as long threaded parts and long worm gears. This process is only applied to work pieces without flanges and having a lead.



HK SERIES

- HK SERIES are hydraulic circular type thread Rolling machines and have 2 die bodies. One body of machine is stationary and other one is moved.
- Machines' control can be optional as PLC controlled or conventional controlled.
- Thread Rolling force, for this serie, has range from 3 tonnes to 120 tonnes.
- Used components are CE certified and has advantages such as quality, reliability and easy to reach.
- Fast and precise in-feed or thru-feed operations are available with these type machines. These machines are also ideally conformed to thread all known thread types (ISO, ACME, TPN, WORM SCREWS) on cylindrical materials.
- Grooving, Burnishing and ring dies are also available processes for these type of machines
- Optionally offered brake system provides precise and accurate Spline rolling.

Optional Equipments

- ** Additional Covers, Referring to Customers Request
- ** Automation Applications
- ** Hydraulic Brake Systems
- ** Pneumatic Centring Equipment
- ** Pitch Adjustment at Gearbox

HK-18



HK-40



HK-85



HK SERIES

TECHNICAL FEATURES

TECHNICAL FEATURES	HK-S	HK-3	HK-18	HK-25	HK-40	HK-60	HK-85
FREQUENCY CONTROL (FU)		Standard	Standard	Standard	Standard	Standard	Standard
ROLLING FORCE (kN)		10 - 30	10 - 180	10 - 250	10 - 400	10 - 600	10 - 850
SLIDE (MOVING DIE) SPEED (mm/s)		0-6	0-6	0-6	0-6	0-6	0-6
SPEED RANGE (RPM)	158 - 212 - 263 386 - 486 - 654	38 - 124	18 - 62	18-60	17-53	13 - 42	13 - 42
MIN. – MAX. TOOL DIA. (mm.)	Ø130 - Ø190	Ø80 - Ø110	Ø140 - Ø190	Ø145 - Ø190	Ø160 - Ø210	Ø160 - Ø280	Ø200 - Ø280
DIE SPINDLE DIA (mm)	Ø54	Ø40	Ø54	Ø69.85 (Ø80 optional)	Ø69.85 (Ø80 optional)	Ø80 (Ø100 optional)	Ø100
MAX. DIE LENGTH (mm.)	160	60	125	170	230	245	210
WORKPIECE DIA.(mm.)	Ø3 – Ø20	Ø3 – Ø30	Ø3 – Ø30	Ø3 – Ø48	Ø4 – Ø120	Ø4 – Ø250	Ø4 – Ø250
DISTANCE BETWEEN SHAFTS (mm.)	130-200	90-145	140-215	130-230	150-320	240-470	240-470
MAX PITCH (mm.)	2	1,5	3	4	7	8	10
SWIVEL ANGLE	±8°	±8°	±8°	±8°	±12°	±12°	±12°
CYLINDER STROKE (mm.)		0 - 60	0 - 20	0 - 20	0 - 20	0 - 30	0 - 30
MAIN MOTOR (KW)	7,5	4	5.5	11	18	30	37
TOTAL POWER (KW)	7.8	5.8	7.5	13.7	21,3	40	48
WEIGHT (kg.)(~)	1300	850	1250	2400	4300	9400	9600
DIMENSIONS (LxWxH)(cm.)(~)	160 x 190 x 170	140 x 120 x 170	150 x 150 x 170	160 x 190 x 190	190 x 230 x 210	260 x 300 x 230	260 x 300 x 230

* Parameters, given in table above, can be revised according to material type.

** Requested machine production, that is not existing in table, is available and would be evaluated Special Project. Please contact with our company, for your request.

3R SERIES

- 3R SERIES are hydraulic circular type thread Rolling machines and have 3 die bodies. All bodies have ability to move.
- Machines' control can be optional as PLC controlled or conventional controlled.
- Thread Rolling force, for this serie, has range from 3 tonnes to 150 tonnes.
- Machines are specified to roll all types of thread forms on 8 mm to 400 mm tube materials. Additionally it has capability to thread and profile Rolling for bars.
- Fast and precise in-feed or thru-feed operations are available with these type machines. These machine are also ideally conformed to thread all known thread types (ISO, ACME, TPN, WORM SCREWS) on cylindrical materials.
- Grooving, Burnishing and ring dies are also available processes for these type of machines.

Optional Equipments

- ** Additional Covers, Complied to Customers Request
- ** Automation Applications

3R-45



3R SERIES

TECHNICAL FEATURES

TECHNICAL FEATURES	3R-3	3R-9	3R-15	3R-21	3R-45	3R-60
FREQUENCY CONTROL (FU)		Standard	Standard	Standard	Standard	Standard
ROLLING FORCE (kN)	10-30	10 - 90	10 - 150	10 - 210	10 - 450	10 - 600
SLIDE (MOVING DIE) SPEED (mm/s)	0-6	0-6	0-6	0-6	0-6	0-6
SPEED RANGE (RPM)	48-71-96-121-174 219-295-435	45 - 146	25 -85	25 - 85	23 - 100	23 - 100
MIN. – MAX. TOOL DIA. (mm.)	Ø41 - Ø80	Ø40 - Ø80	Ø60 - Ø175	Ø110 - Ø175	Ø150 - Ø220	Ø165 - Ø220
DIE SPINDLE DIA (mm)	Ø25,4	Ø25,4	Ø40	Ø54 (Ø69,85 optional)	Ø69.85	Ø80
MAX. DIE LENGTH (mm.)	40	40	90	100	140	140
WORKPIECE DIA.(mm.)	Ø8 – Ø30	Ø10 – Ø40	Ø12 – Ø90 (Ø65)	Ø20 – Ø90 (Ø65)	Ø30 – Ø210 (Ø85)	Ø30 – Ø210 (Ø85)
MAX PITCH FOR PIPE (mm.)	1,75	1,75	4	6,35	7	10
MAX PITCH FOR BARS (mm.)	1,5	2	2,5	3	5	6
SWIVEL ANGLE	±8°	±8°	±8°	±8°	±12°	±12°
CYLINDER STROKE (mm.)	0-35	0 - 20	0 - 20	0 - 20	0 - 20	0 - 20
MAIN MOTOR (KW)	2,2	5,5	11	15	22	30
TOTAL POWER (KW)	3.8	8.8	15,3	19.3	40	38,7
WEIGHT (kg.)(~)	750	1200	2350	2500	7600	7800
DIMENSIONS (LxWxH)(cm.)(~)	160 x 190 x 170	140 x 120 x 170	150 x 150 x 170	160 x 190 x 190	190 x 230 x 210	260 x 300 x 230

* Parameters, given in table above, can be revised according to material type.

** Requested machine production, that is not existing in table, is available and would be evaluated Special Project. Please contact with our company, for your request.

KZ SERIES

KZ SERIES

- KZ SERIES are hydraulic circular type thread Rolling machines and have 2 die bodies. One body of machine is stationary and other one is moved.
- Machines' control can be optional as PLC controlled or conventional controlled.
- Die bodies are connected to each other with Sledges.
- In this machine serie, ther are 2 options for Rolling pressure. (25 ton and 40 ton.)
- Fast and precise in-feed or thru-feed operations are available with these type machines. These machine are also ideally conformed to thread all known thread types (ISO, ACME, TPN, WORM SCREWS) on cylindrical materials.
- Grooving, Burnishing and ring dies are also available processes for these type of machines.

Optional Equipments

- ** Additonal Covers, Referring to Customers Request
- ** Automation Applications
- ** Hydraulic Brake Systems
- ** Pneumatic Centring Equipment

KZ-40



KZ - 40

KZ SERIES TECHNICAL FEATURES

TECHNICAL FEATURES	KZ-25	KZ-40
FREQUENCY CONTROL (FU)	Standard	Standard
ROLLING FORCE (kN)	10 - 250	10 - 400
SLIDE (MOVING DIE) SPEED (mm/s)	0-6	0-6
SPEED RANGE (RPM)	23-75	13-57
MIN. – MAX. TOOL DIA. (mm.)	Ø145 - Ø190	Ø160 - Ø210
DIE SPINDLE DIA (mm)	Ø69.85 (Ø80 optional)	Ø69.85 (Ø80 optional)
MAX. DIE LENGTH (mm.)	170	230
WORKPIECE DIA.(mm.)	Ø3 – Ø40	Ø4 – Ø120
DISTANCE BETWEEN SHAFTS (mm.)	148-230	150-339
MAX PITCH (mm.)	4	7
SWIVEL ANGLE	±8°	±12°
CYLINDER STROKE (mm.)	0 - 20	0 - 20
MAIN MOTOR (KW)	11	22
TOTAL POWER (KW)	13.7	26
WEIGHT (kg.)(~)	2045	4350
DIMENSIONS (LxWxH)(cm.)(~)	150 x 170 x 180	195 x 227 x 190

SPECIAL THREAD ROLLING MACHINES



* Parameters, given in table above, can be revised according to material type.

** Requested machine production, that is not existing in table, is available and would be evaluated Special Project. Please contact with our company, for your request.

GOVAMA®

2 HK 25-F

- 2HK 25 - F hydraulic powered thread Rolling machine has 2 die bodies and both bodies have ability to move.
- These two moved bodies provides more precised and requested depth Spline Rolling.
- Machine has PLC control unit in standart model.
- Pitch adjustment at Gearbox function is also avaiable with Servo drives, in standart version.
- Cylinder axis control is avaiable with PLC control unit in precision $\pm 0,03$ mm
- Centring axis control is avaiable optionally with servo drives.
- Each moved body has ability Rolling pressure 25 tonnes.

TECHNICAL FEATURES	2 HK 25-F
FREQUENCY CONTROL (FU)	PLC CONTROLLED
ROLLING FORCE (kN)	10-250 X 2
SLIDE (MOVING DIE) SPEED(mm)	0-6
SPEED RANGE (RPM)	20-65
MIN. – MAX. TOOL DIA.(mm)	Ø160 - Ø200

DIE SPINDLE DIA (mm)	Ø54 (Ø69,85 Optional)
MAX. DIE LENGTH (mm)	175
WORKPIECE DIA. (mm)	Ø3 - Ø40
MAX PITCH (mm)	3,5
SWIVEL ANGLE	$\pm 8^\circ$
CYLINDER STROKE (mm)	0 - 50
MAIN MOTOR (KW)	11
TOTAL POWER (KW)	14
WEIGHT (KG)(—)	5700
DIMENSIONS (LxWxH)(cm.)(—)	280 x 350 x 210

* Parameters, given in table above, can be revised according to material type.

** Requested machine production, that is not existing in table, is avaiable and would be evaluated Special Project. Please contact with our company, for your request.



3R-21 TRC

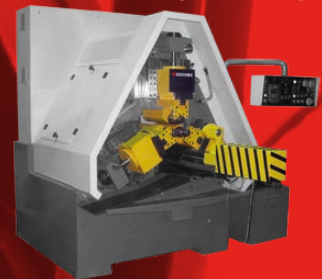
- 3R21-TRC hydraulic powered Cylindrical Thread Rolling machine has 3 rolling bodies and all these 3 bodies have ability to move.
- Workpiece (speacial raw material Railway Bolt – spike large screw) in hot form with special additonal induction heater, can be thread rolled with this machine at 12,67 mm pitch size.
- Rolling pressure for this machine is 210 KN.

TECHNICAL FEATURES	3R-21 TRC
FREQUENCY CONTROL (FU)	STANDARD
ROLLING FORCE (kN)	10-210
SLIDE (MOVING DIE) SPEED(mm)	0-6
SPEED RANGE (RPM)	39 - 131
MIN. – MAX. TOOL DIA. (mm)	Ø80 - Ø140

* Parameters, given in table above, can be revised according to material type.

** Requested machine production, that is not existing in table, is available and would be evaluated Special Project. Please contact with our company, for your request.

DIE SPINDLE DIA (mm)	Ø40
MAX. DIE LENGTH (mm)	80
WORKPIECE DIA. (mm)	Ø14 - Ø90
MAX PITCH (mm)	0,5" (for spikes)
SWIVEL ANGLE	±8°
CYLINDER STROKE (mm)	0 - 20
MAIN MOTOR (KW)	15
TOTAL POWER (KW)	26
WEIGHT (KG)(—)	~4280
DIMENSIONS (LxWxH)(cm.)(—)	280 x 160 x 210



3R-21 TRC

ROT-1

- This machine has been designed and produced to meet Ball stud producers with high volume demand.
- There are total 2 stations for different Rolling forms. At Station 1 burnishing process and at Station 2 thread Rolling operation have been completed efficiently. Process flow and types can be modified up to customer request.
- PLC control unit for this machine is standart. Supplied with integrated automation system for part carriage, loading through dies and unload to hopper.
- CE certificate is available for this machine.
- Used components are CE certified and has advantages such as quality, reliability and easy to reach.

TECHNICAL FEATURES	ROTIL 2	
	STATION 1	STATION 2
ROLLING FORCE (kN)	10-250 X 2	
MAX. DIE LENGTH (mm.)	100	
DIE SPINDLE DIA (mm)	Ø100	
MIN. – MAX. TOOL DIA. (mm)	Ø195 - Ø250	
DISTANCE BETWEEN SHAFTS (mm.)	253-295	

WORKPIECE DIA. (mm.)	Ø3 - Ø100
MAX PITCH (mm.)	4
SPEED RANGE (RPM)	18-60
MAIN MOTOR (KW)	7,5 (11 opt.)
HYDRAULIC MOTOR (KW)	4
TOTAL POWER (KW)	19,5
WEIGHT (kg.)(~)	9,000
DIMENSIONS (LxWxH)(cm.)(~)	150 x 270 x 250

* Parameters, given in table above, can be revised according to material type.

** Requested machine production, that is not existing in table, is available and would be evaluated Special Project. Please contact with our company, for your request.



SPECIALLY
PURPOSED
MACHINES



 **GOVAMA[®]**



3BR-38

- Designed and produced for Ø 38 and Ø 48 Adjustment prop bars in Scaffolding industries.
- Modern Design
- CE certified
- Economical solution
- Fast Production

TECHNICAL FEATURES	3BR - 38
SLIDE (MOVING DIE) SPEED (mm/s)	15
SPEED RANGE (RPM)	47
DIE SPINDLE DIA (mm)	Ø40
MIN.-MAX. TOOL DIA. (mm)	Ø140 - Ø155
MAX. DIE LENGTH (mm)	50

WORKPIECE DIA. X PITCH (mm)	Ø38 x 4
MAIN MOTOR (KW)	4,2
TOTAL POWER (KW)	4
WEIGHT(kg.) (—)	1100
DIMENSIONS (LxWxH)(cm) (—)	65 X 250 X 117

* Parameters, given in table above, can be revised according to material type.

** Requested machine production, that is not existing in table, is available and would be evaluated Special Project. Please contact with our company, for your request.

4BR-60

- Designed and produced for Ø 60 Adjustment prop bars in Scaffolding industries.
- Modern Design
- CE certified
- Economical solution
- Fast Production

TECHNICAL FEATURES	4BR - 60
SLIDE (MOVING DIE) SPEED (mm/s)	15
SPEED RANGE (RPM)	47
DIE SPINDLE DIA (mm)	Ø40
MIN.-MAX. TOOL DIA. (mm)	Ø116 - Ø135
MAX. DIE LENGTH (mm)	50

WORKPIECE DIA. X PITCH (mm)	Ø60 x 3
MAIN MOTOR (KW)	4,2
TOTAL POWER (KW)	4
WEIGHT(kg.) (—)	1100
DIMENSIONS (LxWxH)(cm) (—)	65 X 250 X 117

* Parameters, given in table above, can be revised according to material type.

** Requested machine production, that is not existing in table, is available and would be evaluated Special Project. Please contact with our company, for your request.

SIZING (END FACING) MACHINES

BT - 500

BT - 1000

BT - 1500

BT machine has 2 stations and capable precise facing, chamfering and centring workpiece diameters between Ø20 and Ø200 and length between 120 mm ile 1500 mm.



SIZING (END FACING) MACHINES

SIZING (END FACING) MACHINES TECHNICAL SPECIFICATIONS

Structure of Machine

- One body is stationary , other one is designed as adjustable, according to requested length of workpiece.
- Workpiece is fixed on machine, operation can be carried out with movement of bodies.

- Chassis is steel construction and bodies are made of GGG40 casting and after stress relieving, parts are machined in house.
- Sliding body carriage systems bearings are made as Swallow Slides.
- Workpiece holderclamps have 4 moved jaws to hold workpiece on same axis, in order to absorb variation on workpiece surface. Workpiece holder clamps work with method hydraulic locking system.
- Workpiece length adjustment can be made on Control Pannel or manually.
- Machines facing and centring speed ranges and sliding speeds can be adjusted by Frequency control drivers.
- Function controls can be made with Sensors.
- In case of request, these functions are also available with servo drivers on PLC control Unit.
- Machines are produced with ISO 9001 : 2008 standarts and CE certified.

FREQUENCE UNIT (FU)	SPEED RANGE (rpm)	FACING DIA.	WORKPIECE DIA.	WORKPIECE LENGTH	CLAMPING PRESSURE	CENTRING SHAFT CYLINDER STROKE
Standard	Centring max. 1000 Facing max. 800	Ø125 mm.	min.= 20mm max.= 100 mm	min.= 120mm max.= 1500 mm	Max. 40 bar	0-20 mm
FACING & CENTRING BODIES CYLINDER STROKE (BACKWARD)	FACING & CENTRING BODIES MOTOR	FACING & CENTRING BODIES ACTUATOR	TOTAL POWER	DIMENSIONS (WxLxH)	WEIGHT	
0-5 mm.	2 x 4 kW	2 x 3 kW	20 kW.	~ 130 x 320 x 140 cm	~ 3500 kg.	

AUTOMATION APPLICATIONS

The background of the slide is a photograph of industrial automation equipment, specifically a robotic arm or assembly line component, overlaid with a semi-transparent red filter. The equipment features various mechanical parts, cables, and structural frames.

ADVANTAGES:

FAST PRODUCTION FOR HIGH VOLUMES

CONSISTENCY

RELIABILITY

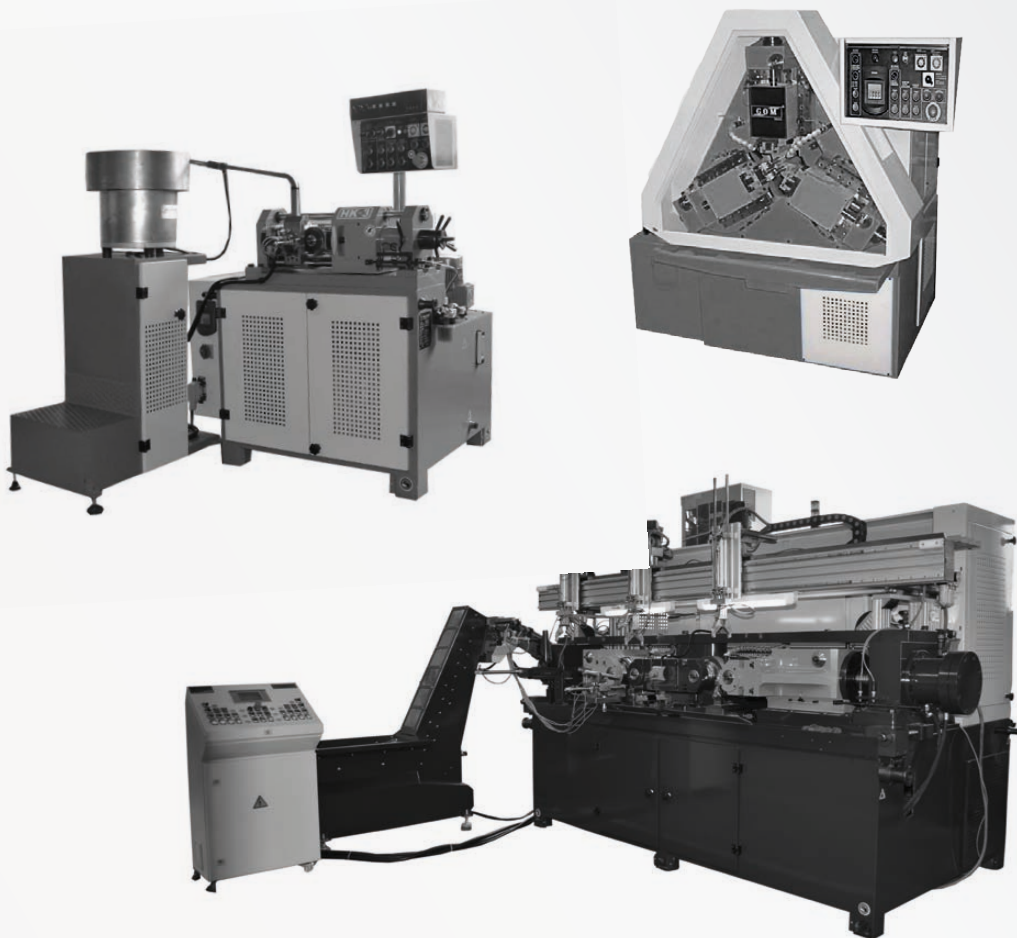
PRODUCTIVITY



AUTOMATION APPLICATIONS

AUTOMATION APPLICATIONS

Only production is not sufficient in recent period, conversely to beginning of Industrial Revolution. Under strict competition conditions, we make possible automated machines for our valuable partners.



SAMPLE WORKPIECES



*GOVAMA is registered Brand of Gökçüoğlu A.Ş.
Govama, carries on activities with trust, quality
and customer satisfaction since 1975*

S I N C E 1 9 7 5

CE ISO
9001-2008

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For your success...

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