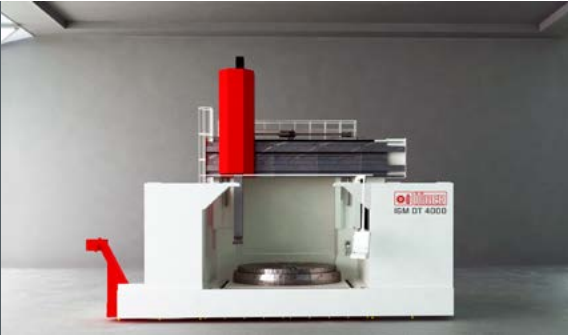




MACHINE TOOLS



IGM FR 3500
5 Axis Gantry



IGM DT 4000
Vertical Lathe



IGM FR 1100T
5 Axis Tilting Table



IGM FR 1000
Single Column Milling

ABOUT US



İĞREK MAKİNA: RELIABLE PARTNER FOUNDRY

İğrek Makina, founded by A. Osman İğrek in 1946, is a family-owned and managed industrial company in Bursa, Turkey. It aimed to be a leader of the sector through its product variety, capacity, technology and made up of three main divisions:

Pattern production, world wide, a top performer of its class in production of polystyrol patterns for full mould casting method. This department allowed the company to produce any complicated and big part in short amount of time and make casting process possible.

Foundry, 70 years of experience in production of gray iron, nodular iron and steel castings (GG-GGG-GS) especially for machine tools.

Machining, milling – turning and grinding services for big and heavy duty casting parts with high precision and good lead times.

The facility upgraded both in volume and lay-out and reached to 40.000 m² of area today. Integrating its production centre with 125 employees including 25 engineers and 20 qualified technicians leading production and quality and 7 experts in administration and planning.

İğrek Makina offers flexible and diverse abilities in supplying heavy industry demands with good timing, cost and high quality.





MACHINE TOOL DESIGN & PRODUCTION

The experience of the company increased by supplying machine tool parts for global market and working with a highly equipped **internal machining department**. This department includes:

- Waldrich Coburg Grinding Machine: 6000 x 2000 x 1500 mm
- Fermat Horizontal Boring & Milling Machine with rotary table: 12000 x 4000 x 2000 mm
- 10 Bridge Type Milling Machines with various functions, sizes up to 10000 mm in X Axis.
- 3 Vertical Lathe Machines with CNC and C-Axis, diameters up to 5000 mm.

All this Know How and machinery finally led to constitution of the new machine tool production department.

Igrek Machine Tools production began with 2 different machines and they are both active in the premises: **IGREK PORTAL HSM5000 & IGREK ÖNCÜ SERIES**.

The Machine Tool Design, Assembly and Service Team is now preparing the new **4 machine types** explained within this booklet. The aim of the company is to build:

- High technology & quality machines in good price level
- Cast Iron machine structure for best rigidity & dynamic stability
- Specializing designs for special customer demands



IGREK PORTAL HSM5000

5 Axis Gantry Type Milling Machine
10000 x 5000 x 2000 mm
5000 rpm continuous head
Siemens 840D CNC



IGREK ÖNCÜ SERIES

Light Weight, High Speed Milling Machine
6000 x 4000 x 1500 mm
Siemens 828 CNC

IGM FR 3500

5 Axis Gantry Type Milling Machine

5 Eksen Gantry Köprü Tipi Freze



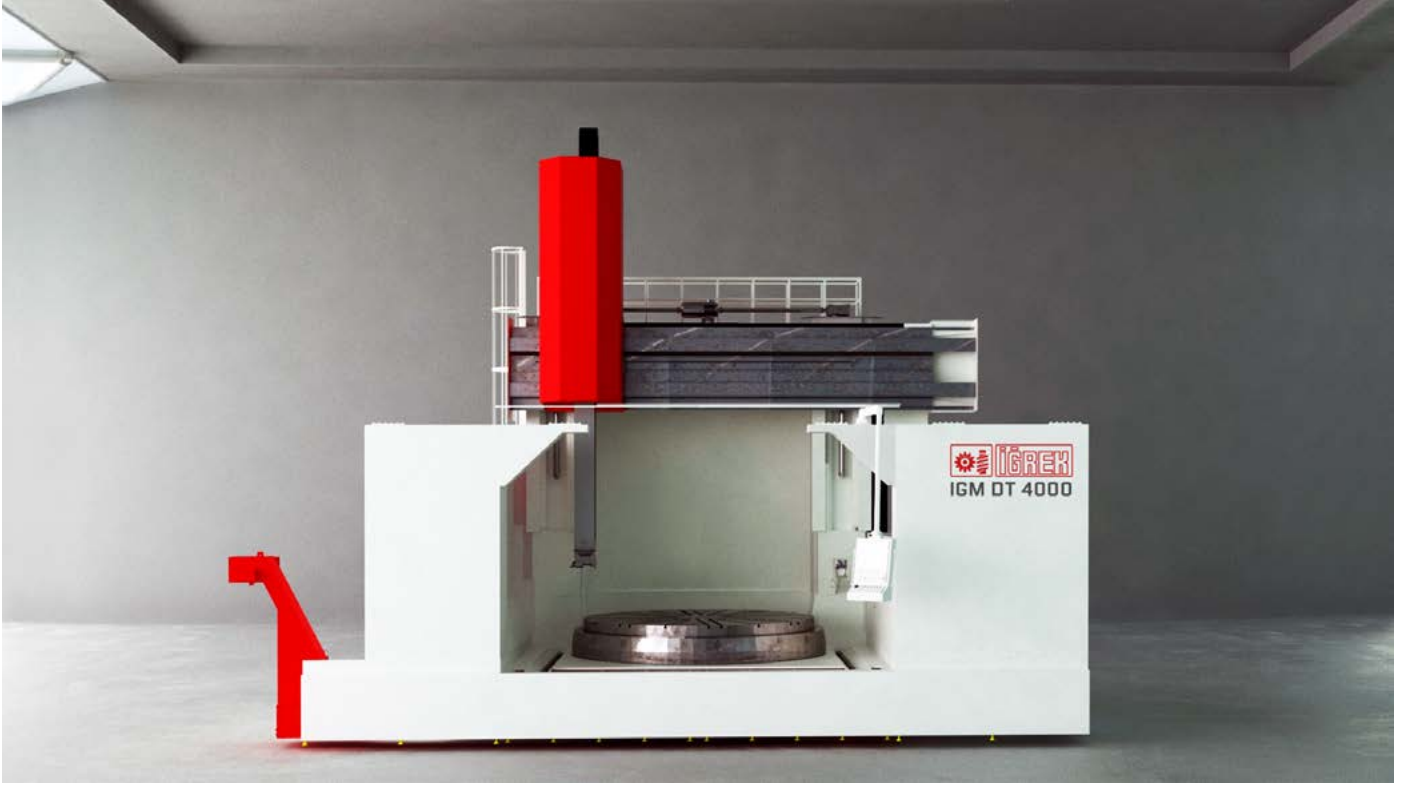
IGM FR 3500

Stroke / İşleme Ebatları	mm	X*	2500
		Y	3500
*X Axis is extendable / *X eksen boyu talebe göre uzatılabilir		Z	1400
A Axis Rotation / A Ekseni Dönüşü	°		< +120 / -120 >
C Axis Rotation / C Ekseni Dönüşü	°		Continuous / Sürekli
Rapid Feedrate / Hızlı İlerleme	m/min	X	60
		Y	60
		Z	40
Spindle Speed / İş Mili Devri	rpm		15000
Spindle Power / İş Mili Gücü	KW	S6/S1	42 / 105
Spindle Torque / İş Mili Torku	Nm	S6/S1	205 / 512,5
Tooling Taper Type / Tutucu Tipi			HSK-A100
Positioning Accuracy / Pozisyonlama Hassasiyeti	mm		0,028
Repeatability Accuracy / Tekrarlama Hassasiyeti	mm		0,012
Table Load / Tabla Yük Kapasitesi	Kg		70000
Machine Size / Makine Ebatları	mm	X	7800
		Y	7370
		Z	6600
Machine Weight / Makine Ağırlığı	Kg		65000



IGM DT 4000

Vertical Lathe Machine with Direct Drive Rotary Table and Moving Traverse
Direkt Tahrikli Ayna Sistemli, Hareketli Köprülü CNC Dik Torna



IGM DT 4000

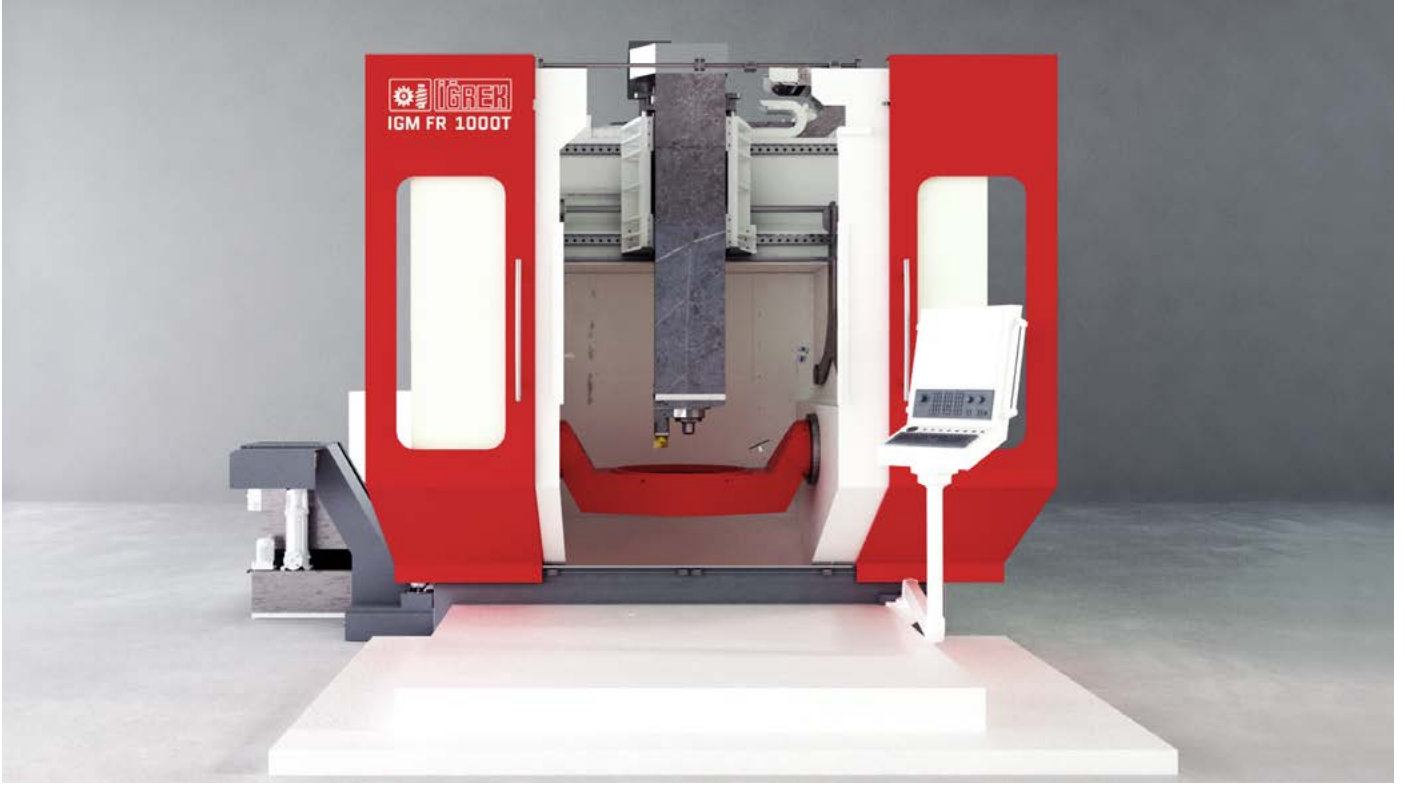
Table Diameter / Tabla Çapı	mm	4000
Max Turning Diameter / Maks. Tornalama Çapı	mm	5000
Max Turning Height From Table / Maks. Yükseklik	mm	2000
Ram Slide Stroke / Ram Hareketi	mm	2100
Ram Section / Ram Kesiti	mm	350 x 350
Travel of the Moving Traverse / Köprünün Hareketi	mm	2000
Table Drive System / Tabla Tahrik Sistemi		Direct Drive Magnetic Motors
Tooling Taper Type / Tutucu Tipi		ISO50
Table Speed / Tabla Devri	rpm	60
Table Load / Tabla Yük Kapasitesi	Kg	40000
Table Guide System / Tabla Yataklama Tipi		Hydrostatic Bearing and Guides
Spindle Speed / İş Mili Devri	rpm	80
Spindle Power / İş Mili Gücü	KW	37
Spindle Torque / İş Mili Torku	Nm	1200
Machine Size / Makine Ebatları	mm	X 7500 Y 12000 Z 9500
Machine Weight / Makine Ağırlığı	Kg	100000



IGM FR 1000T

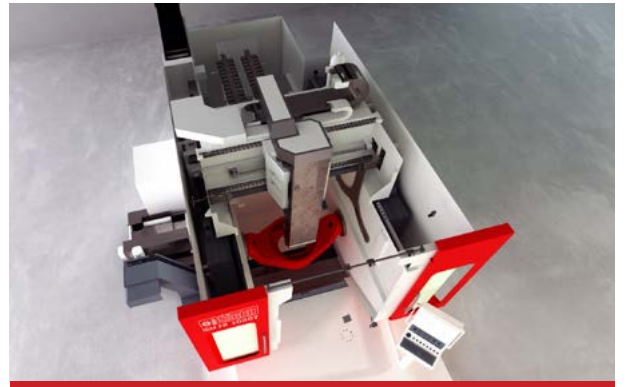
5 Axis Tilting Table Vertical Milling & Turning Center

Beşik Tablalı 5 Eksen İşleme Merkezi



IGM FR 1000T

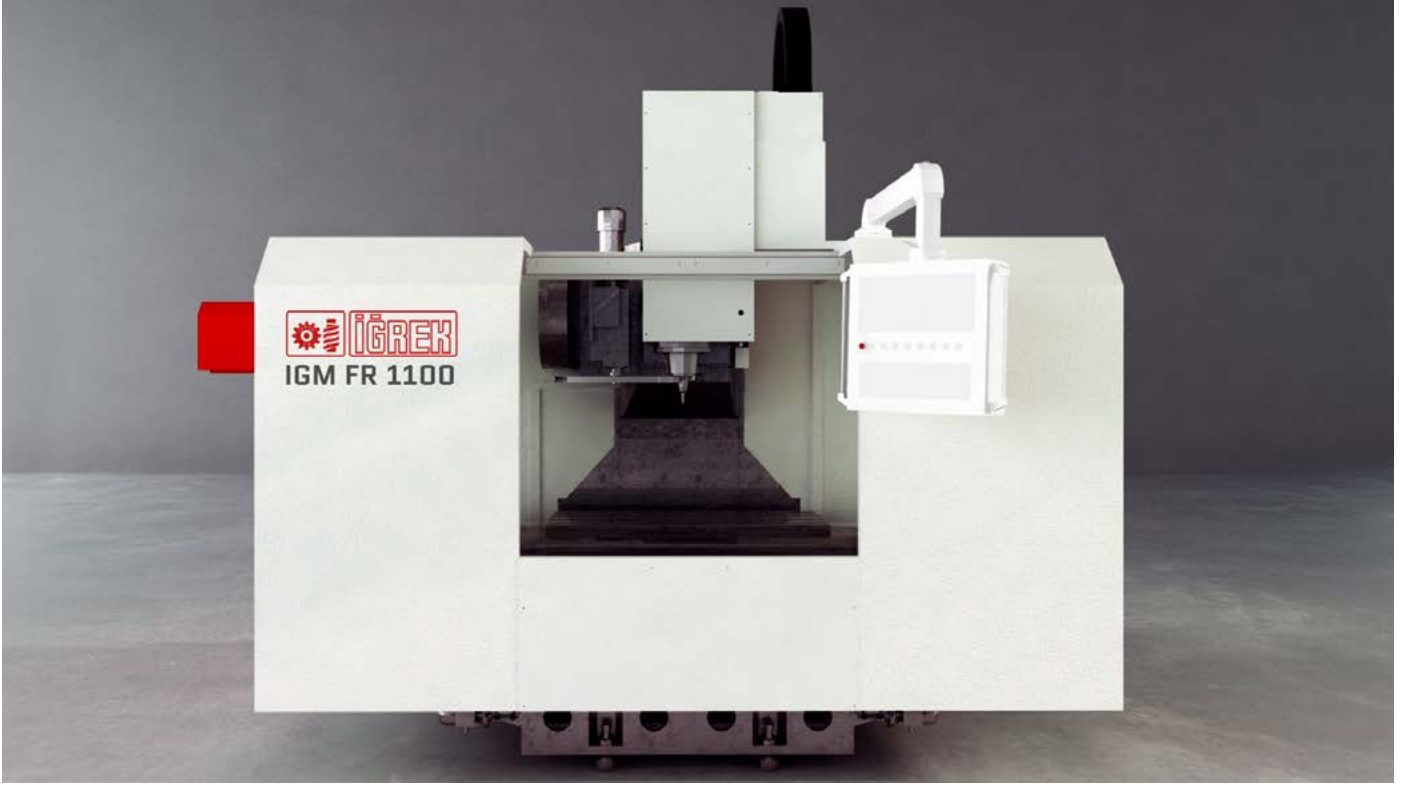
Stroke / İşleme Ebatları	mm	X	1350
		Y	1500
		Z	900
A Axis Rotation / A Eksen Dönüşü	°	< +120 / -30 >	
C Axis Rotation / C Eksen Dönüşü	°	+360	
Accerelation / İvme	m/s ²	5	
Rapid Feedrate / Hızlı İlerleme	m/min	X	48
		Y	48
		Z	48
Spindle Speed / İş Mili Devri	rpm	14000	
Nominal Spindle Power / İş Mili Gücü	KW	60	
Nominal Spindle Torque / İş Mili Torku	Nm	240	
Tooling Taper Type / Tutucu Tipi		HSK-A100	
Tilting Table Properties / Beşik Tabla Özellikleri:			
Max Workpiece Diameter / Maks. Parça Çapı	mm	1000	
A Axis Stroke / A Eksen Hareketi	°	< +120 / -30 >	
A Axis Nominal Power / A Eksen Gücü	KW	20,34	
A Axis Max Speed / A Eksen Maks. Devri	rpm	100	
Table Load / Tabla Yük Kapasitesi	Kg	2000	
A Axis Max. Brake Torque / A Eksen Maks. Fren Torku	Nm	10000	
C Axis Nominal Power / C Eksen Gücü	KW	43	
C Axis Max Speed / C Eksen Maks. Devri	rpm	600	
C Axis Nominal Torque / C Eksen Torku	Nm	3176	
C Axis Max. Brake Torque / C Eksen Maks. Fren Torku	Nm	9900	
Machine Size / Makine Ebatları	mm	X	3200
		Y	6400
		Z	4050
Machine Weight / Makine Ağırlığı	Kg	25000	
ATC Capacity / Magazin Takım Sayısı		48	



IGM FR 1100

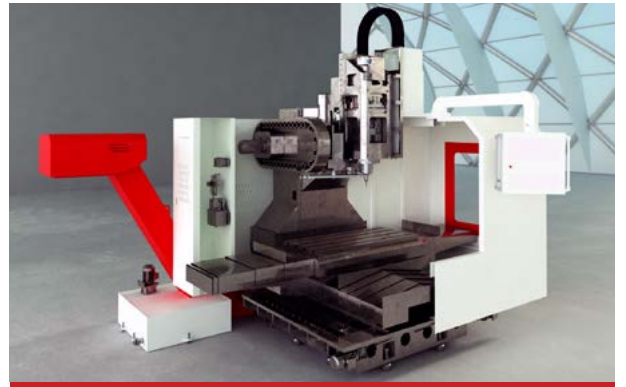
3 Axis Single Column Milling Machine

3 Eksen Tek Sütunlu Freze



IGM FR 1100

Stroke / İşleme Ebatları	mm	X	1320
		Y	610
		Z	600
Rapid Feedrate / Hızlı İlerleme	m/min	X	40
		Y	40
		Z	20
Spindle Speed / İş Mili Devri	rpm		12000
Spindle Power / İş Mili Gücü	KW		13
Tooling Taper Type / Tutucu Tipi			ISO40
Table Load / Tabla Yük Kapasitesi	Kg		10000
Machine Size / Makine Ebatları	mm	X	3460
		Y	2850
		Z	3500
Machine Weight / Makine Ağırlığı	Kg		5000





İGREK MAKİNA SANAYİ ve TİCARET A.Ş.

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High Technology
High Precision
Machine Tools
“Made in Turkey”



Organize Sanayi Bölgesi
A.O. Sönmez Blv. No: 10
16140
Bursa / TURKEY

+90 224 243 16 06
+90 224 243 13 20
igrek@igrek.com.tr
www.igrek.com.tr

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the potential

