Bilgin's new service

Plasma cutting
and CNC machining

FAST

PRECISE

WITH 3.2 CERTIFICATE

Plasma cutting

Plate cutting in our new branch

3.2 certified stainless-steel plates are big problem in marine industry. In small quantity plates, it becomes even bigger problem.

Bilgin Denizcilik has been producing stainless steel deck fittings since 1986. Now we are supplying 3.2 certified plate pieces and CNC machining to our customers.

The biggest problem at yacht industry is to get 3.2 stainless steel plates. The best way is to buy a 3.1 certified plate; do mechanical and chemical tests on the plate at the witness of surveyor and get a stamp on the plate. This process helps a lot with large quantities.

When you need a small plate, it becomes a time consuming and expensive process. To ease the problems of the shipyards, we are cutting and selling stainless steel plates from our pre-approved plate stock.

We invested in a plasma cutting machine for our new branch. We can cut 100mm stainless steel plates at the dimension of 2000x6000. New generation plasma cutting machines have accuracy near to the laser jet cutting.

CNC machining

Machining of the heavy plates

We can mill the door cases and window frames,
as one piece at our new CNC milling machine, with a capacity of 1700x3000 mm

Bilgin Denizcilik company produces mooring equipment for mega yachts. Because of this, our products are large and heavy. When we invested in the CNC machine, our main criteria were the capacity to mill heavy products.

Our new 3 axes machine can mill the plates with **1700x3000mm** dimension and billets with **700mm** height.

The double column machine was designed to bear the forces acts on the table and the spindle. All connection parts were pre-bended. So, the machine gives precise milling process.

We can mill the products like door cases and windows frames as one piece.

High speed production

Our second CNC machine is for small mooring equipment and deck fittings.
3-axes vertical machine can mill up to the 1300x540x560mm plates.

CNC 3+1 axes lathe

Certified deck fittings

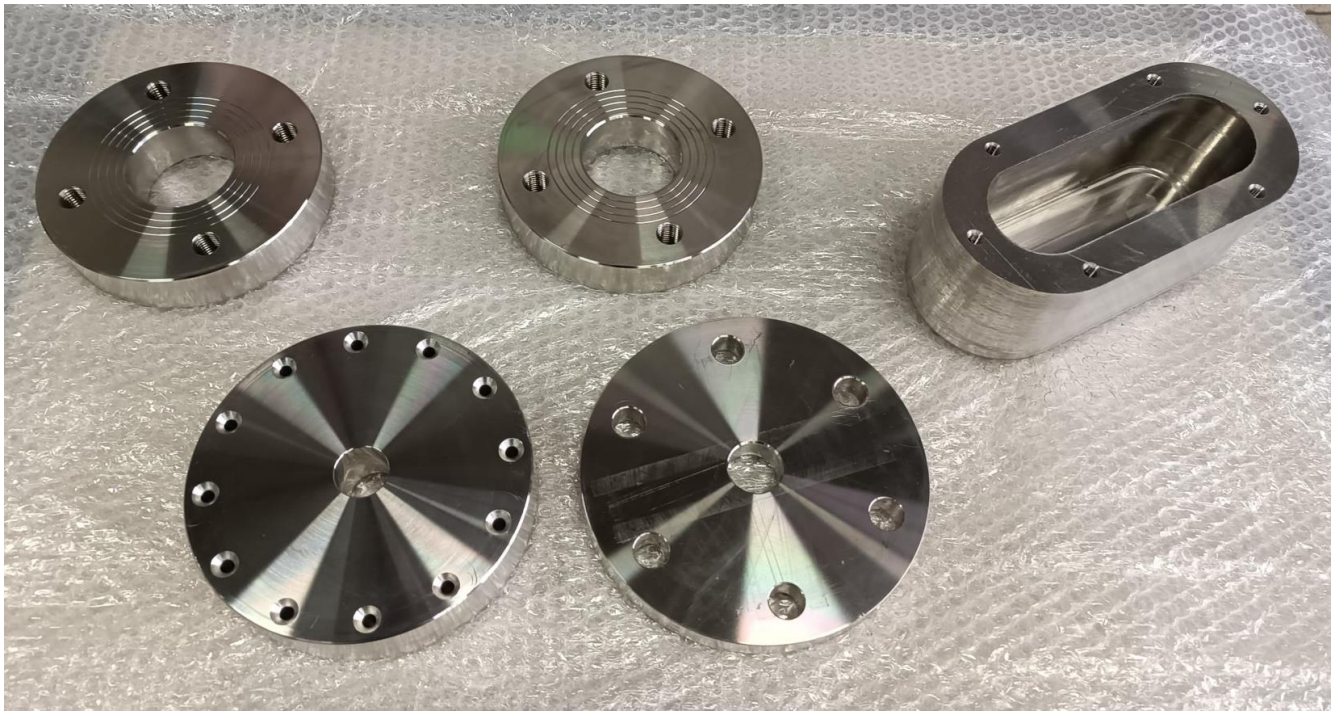
Certified material is also a problem for small deck fittings. We can produce deck fittings from our pre-certified round bars and plates to supply class approved products.

Small deck fittings at the main deck should be certified. It can be a problem to find 3.2-point certificate material at stainless-steel.

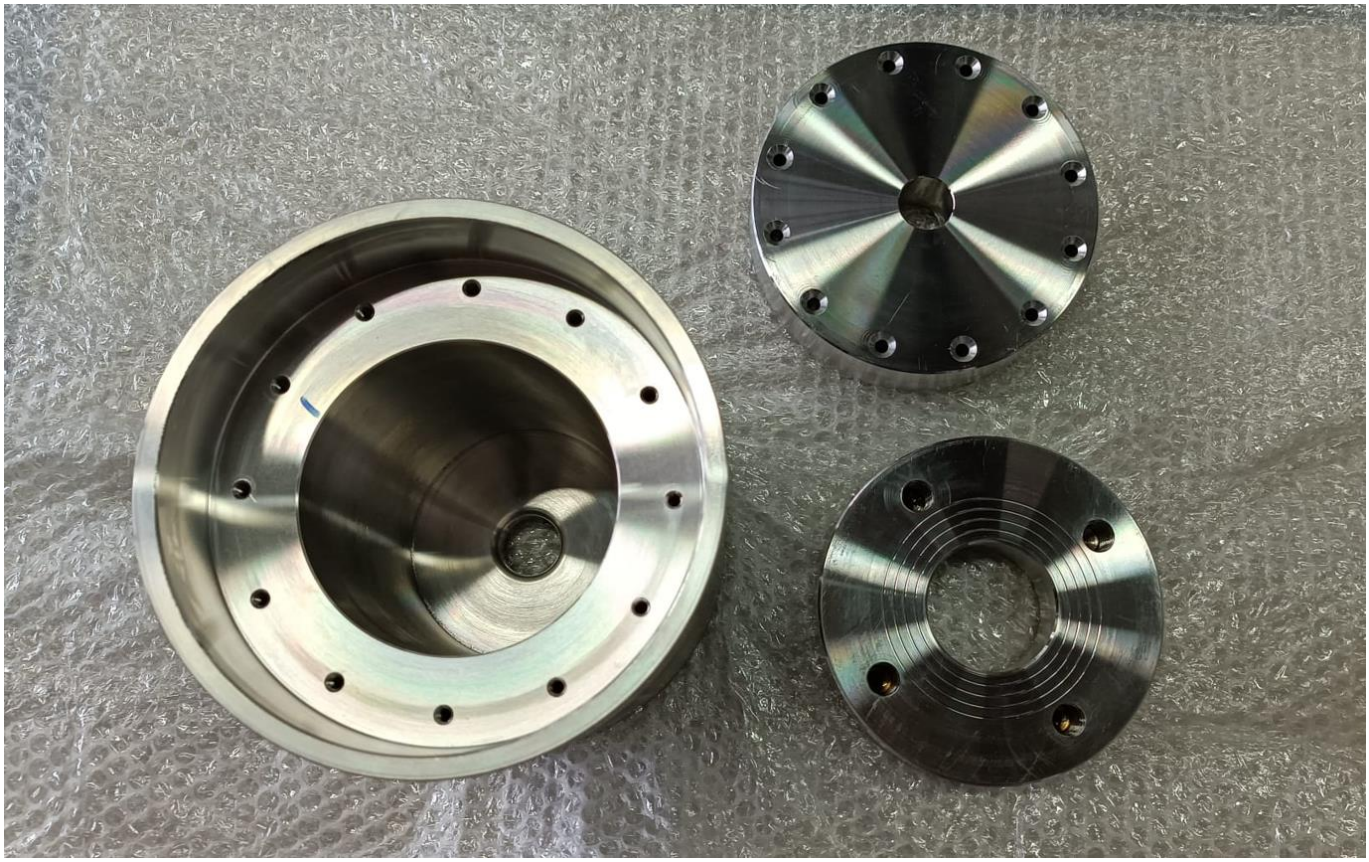
Bilgin Denizcilik is producing small deck fittings for shipyards from its pre-approved material stock.

CNC lathe enables precise production of deck fittings. Milling, drilling and threading the product is done without removing the work piece from the headstock of lathe.

Product samples



MANHOLE
MANHOLE 7



Machine information

CNC milling Akira Seiki V5.5

		V4.5	V5.5
		V4.5 XP	V5.5 XP
CONTROL SYSTEM	AKIRA Mi:845 (Fanuc G code compatible)		
TRAVEL			
X Axis Travel	mm / inch	1150 / 45.3	1350 / 53
Y Axis Travel	mm / inch	640 / 25	640 / 25
Z Axis Travel	mm / inch	660 / 26	660 / 26
Spindle Nose to Table Surface	mm / inch	100~760 / 4~30	100~760 / 4~30
Spindle Center to Column Cover	mm / inch	640 / 25	640 / 25
TABLE			
Table Size (L x W)	mm / inch	1300 x 600 / 51.1 x 23.6	1500 x 600 / 59 x 23.6
T Slot	mm / inch	18 x 100 x 5 slots / 0.7 x 3.94 x 5 slots	18 x 100 x 5 slots / 0.7 x 3.94 x 5 slots
Max. Loading	kgs	1560 / 3439	1800 / 3968
Standard Loading	kgs	1300 / 2866	1500 / 3307

		V4.5	V5.5
		V4.5 XP	V5.5 XP
ACCURACY			
Positioning	mm / inch	0.01 / 0.00039	0.01 / 0.00039
Repeatability	mm / inch	±0.003 / ±0.00012	±0.003 / ±0.00012
ATC(Arm Type)			
Max. Tool Storage	-	28T	28T
Max. Tool Diameter	mm / inch	65 / 2.6	65 / 2.6
Max. Tool Diameter (w/o Neighbor Tool)	mm / inch	130 / 5.1	130 / 5.1
Max. Tool Length	mm / inch	250 / 9.8	250 / 9.8
Max. Tool Weight	kgs	7 / 15	7 / 15
Tool Change Time (T to T, 60hz)	sec.	2.2	2.2

CNC milling: Kaoming KMC 318-HIS

ITEM		KMC-218HIS	KMC-221HIS	KMC-223HIS	KMC-318HIS
Travels	X-axis(table longitudinal)	2230(87.8")			
	Y-axis (Spindle lateral)	1700(66.92")	2000(78.84")	2200(86.61")	1700(66.92")
	Z-axis (spindle vertical)	850(33.46") *1050(41.33")			
	Distance from table surface to spindle nose	150~1000(5.90"~39.37")*150~1200(5.90"~47.24") • ISO40 / 200~1050(7.87"~41.34") *200~1250(7.87"~49.21") • ISO50			
Distance between two columns		1800(70.86")	2100(82.67")	2300(90.55")	1800(70.86")
Table	Table working area	1650×2000 (64.96"×78.74")	1850×2000 (72.83"×78.74")	2000×2000 (78.74"×78.74")	1650×3000 (64.96"×118.1")
	Max. table load	8000kg (17600lb)	10000kg (22000lb)	10000kg (22000lb)	10000kg (22000lb)
Spindle	Spindle speed range (DDS)	ISO 40 100~15000rpm • 15/18.5/22kw • 150Nm(Max.) *ISO 50 100~10000rpm • 22/26/35kw • 222Nm(Max.) *ISO 40 100~12000rpm • 22/26/30kw • 286Nm(Max.)[Extra Amp.] *ISO 40 (ISO 50)100~12000rpm(10000rpm) • 22/26/35kw • 222Nm(Max.)[CTS:unavailable] *ISO 40 100~12000rpm • 22/26kw • 165Nm(Max.)[CTS:unavailable]			
	Spindle speed range (BUILT-IN)	ISO 40 100~15000rpm • 15/18.5kw • 79Nm(Max.) 、*ISO 40 100~12000rpm • 22/25kw • 235Nm *ISO 50 100~10000rpm • 22/26/37kw • 326Nm(Max.)			
Feedrate	Rapid traverse (X,Y,Z-M/min)	(24,24,15)	(24,20,15)	(24,20,15)	(20,24,15)
	Cutting feed	1~10000 mm/min (0.1~393ipm)			
ATC	Tool shank shape	BT40(*BT50)			
	Pull stud	MAS P40T-1(*MAS P50T-1)			
	Tool magazine capacity	30(*40,*50,*60,*90) tools			
	Max. tool diameter	ISO 40 ø75(ø2.95"),((ø150 / ø5.90")) ; [*ISO 50 ø130(ø5.11"),((ø200 /ø 7.87"))]			
	Max. tool length	ISO 40 300 (1181"); [*ISO50 350(13.77")]			
	Max. tool weight	ISO 40 10kg (22 lb); [* ISO 50 20kg (44 lb)]			
Power sources	Electrical power supply	ISO 40 50KVA;(*ISO 50 60KVA)			
	Compressed air supply	5~7kg/cm² (71~99.4 psi)			
Machine size	Machine height	4420(174.01")			
	Floor space	6130x4868 (241"x191.6")	6130x5168 (241"x201.5")	6130x5466 (241"x216.2")	8130x4868 (320.1"x191.6")
	Machine net weight	20000kg (44000lb)	21500kg (47300lb)	23500kg (51700lb)	23000kg (50600lb)
Accuracy	Positioning accuracy	±0.004/300mm(±0.0001"/11.81") ; ±0.008/ full travel(±0.0003"/full travel)			
	Repeatability accuracy	±0.002(0.00007")			
CNC controller		FANUC 0i(31i)series,*HEIDENHAIN			

CNC LATHE: SMEC SL2000m

Specification & Technical Data

Capacity

Swing Over the Bed	22.45"
Swing Over the Cross Slide	18.12"
Max. Turning Diameter	14.65"
Max. Turning Length	20.48"

Main Spindle

Chuck Size A [B]	6" [8"]
Spindle speed A [B]	6,000 [4,500] rpm
Spindle Nose A [B]	A2-5 [A2-6]
Bore Diameter A [B]	2.40" [3"]
Draw tube I.D. A [B]	2.05" [2.68"]
Spindle motor (Cont./Max)	20.12/24.8

Turret

Number of Tool Positions	12[24] (BMT55)
Indexing Time	0.2 sec
Shank Size for Square Tool	□1"
Shank Size for Boring Bar	Ø1.58"
Rotary Tool Speed	5,000 rpm
Rotary Tool Motor(Cont./Max)	4.97/7.38 hp

Tailstock travel (quill)

Tailstock Travel	17.72"
Tailstock Quill Travel	3.15"
Tailstock Quill Diameter	2.96"

General

Plasma cutting: Ajan 260A

Width: 2000mm
Length: 6000 mm
Cutting capacity: 100mm stainless-steel plate