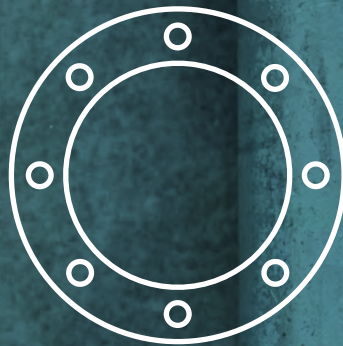




FORGING & FLANGES



FLANGES
NOZZLE
TUBE SHEET
SPECTACLE

FORGING & FLANGES

WE PROVIDE MULTIPLE TYPES OF CUSTOMIZED FORGING & FLANGES

PRODUCT



Weld-Neck



Slip-On / Lap-joint



Socket weld



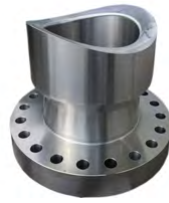
Threaded



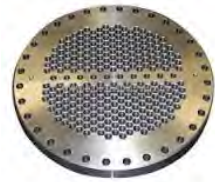
Blind



Spectacle



Nozzle



Tube Sheet

STOCK

200T

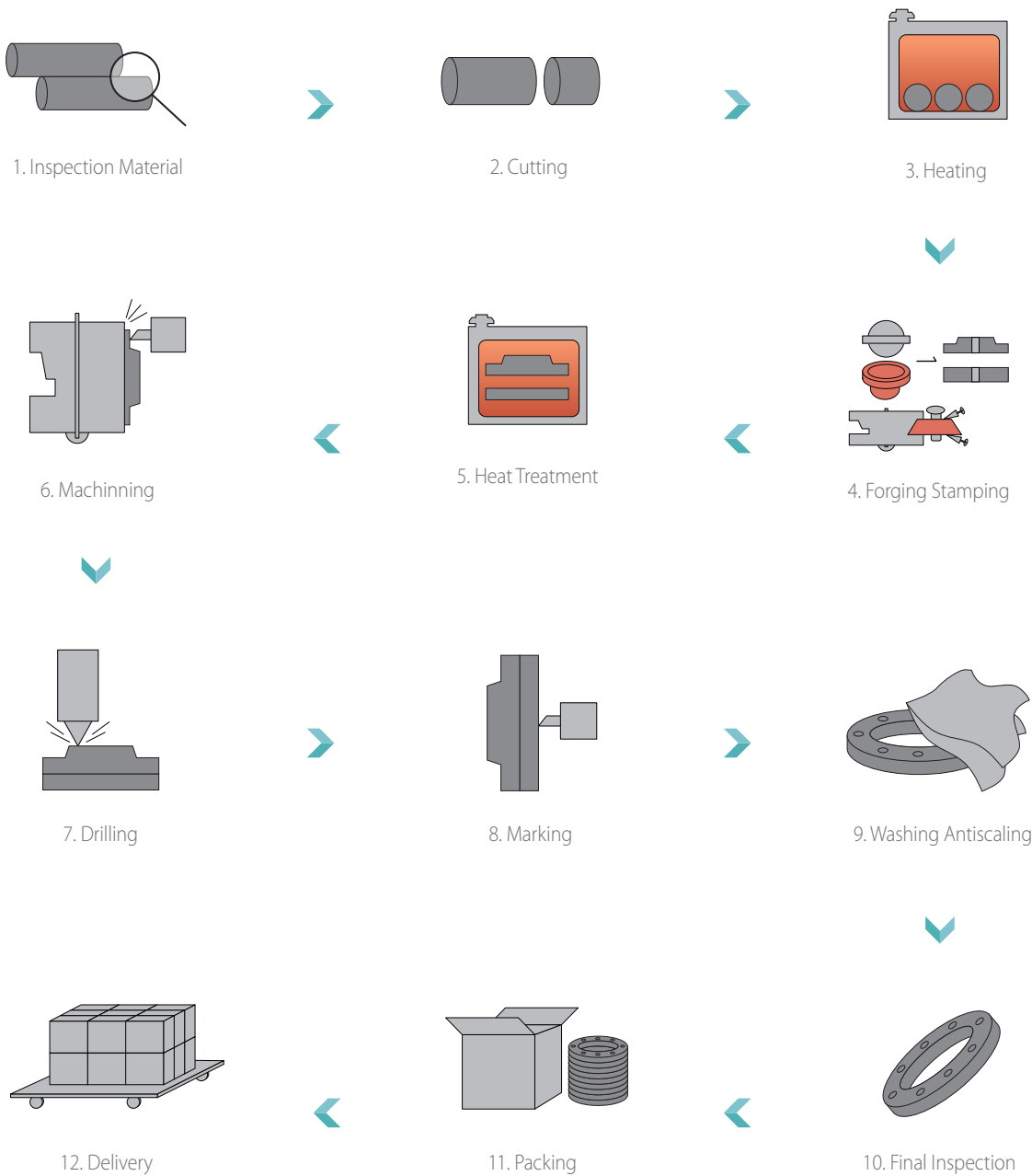
RANGE

AS PER
CODE

ANNUAL
PRODUCTION

10,000T

FLANGE PRODUCTION PROCESS



MATERIAL SPECIFICATION

- ASTM STANDARD

GROUP 1 MATERIAL				PRODUCT FORM			
Material Group No.	Nominal Designation Steel	Forging		Casting		Plate	
		Spec. - Gr	Note	Spec. - Gr	Note	Spec. - Gr	Note
1.1	Carbon	A105 A350-LF2	(1) (3)	A216 - WCB	(1)	A515-70 A516-70	(1)
	C - Mn Si	-	-	-	-	A537-C1.1	-
1.2	Carbon	-	-	A216-WCC	(1)	-	-
	-	-	-	A352-LLC	-	-	-
	2-1/2 Ni	-	-	A352-LC2	-	A203-B	-
	3-1/2 Ni	A350-LF3	-	A352-LC2	-	A203-E	-
1.3	Carbon	-	-	A352-LCB	(1)	A203-A A203-D A515-65 A516-65	-
1.4	Carbon	A350-LF1 CL1	-	-	-	A515-60 A516-60	(1)
1.5	C-1/2 Mo	A182-F1	(2)	A217-WC1 A352-LC1	(2) (4)	A204-A A204-B	(2)
1.7	C-1/2 Mo	-	-	-	-	A204-C	(2)
	1/2 Cr - 1/2 Mo	A182-F2	-	-	-	-	-
	Ni - Cr - 1/2 Mo	-	-	A217-WC4	(4)	-	-
	3/4 Ni - 3/4 Cr - 1	-	-	A217-WC5	(4)	-	-
1.9	Mo 1 Cr - 1/2 Mo	A182-F12 CL2 A182-F11 CL2	(4)	A217-WC6	(4)	A387-11 C1.2	-
1.10	1 - 1/4 Cr - 1/2 Mo	A182-F22 CL3	-	A217-WC9	(4)	A387-22 C1.2	-
1.13	2 - 1/4 Cr - 1 Mo 5 Cr - 1/2 Mo	A182-F5 A182-F5a	-	A217-C5	(4)	-	-
1.14	9 Cr - 1 Mo	A182-F9	-	A217-C12	(4)	-	-

GROUP 2 MATERIAL				PRODUCT FORM			
Material Group No.	Nominal Designation Steel	Forging		Casting		Plate	
		Spec. - Gr	Note	Spec. - Gr	Note	Spec. - Gr	Note
2.1	18 Cr - 8 Ni 18 Cr - 8 Ni	A182-F304 A182-F304H	(5)	A351-CF3 A351-CF8	(5)	A240-304 A240-304H	(5) (6)
2.2	16 Cr - 12 Ni - 2 Mo	A182-F316 A182-F616H	(5)	A351-CF3M A351-CF8M	-	A240-316L A240-316H	(5) (6)
	18 Cr - 13 Ni - 3 Mo	-	-	-	-	A240-317	(5) (6)
	19 Cr - 10 Ni - 3 Mo	-	-	A351-CG8M	(5)	-	-
2.3	18 Cr - 8 Ni 16 Cr - 12 Ni - 2 Mo	A182-F304L A182-F316L	-	-	-	A240-304L A240-316L	-
2.4	18 Cr - 10 Ni - Ti	A182-F321 A182-F321H	(5)	-	-	A240-321 A240-321H	(5) (6)
2.5	18 Cr - 10 Ni - Cb	A182-F347 A182-F347H A182-F348 A182-F348H	(5)	A351-CF8C	(5)	A240-347 A240-347H A240-348 A240-348H	(5) (6)
2.6	25 Cr - 12 Ni	-	-	A351-CH20 A351-CH20	(5)	-	-
	23 Cr - 12 Ni	-	-	-	-	A240-309H	(5) (6)
2.7	25 Cr - 20 Ni	A182-F310	(5) (9)	A351-CK20	(5)	A240-310H	(5) (6) (7)

MANUFACTURING FACILITY

ALL OUR FACILITIES HAVE BEEN DESIGNED FOR THE MOST EFFECTIVE PRODUCTION

LATHE MACHINE

Name	Manufacture	Capacity	Q'ty	Remarks
Lathe	HANKOOK	580 X 1500	1	-
Lathe	NAMSUN	400 X 1000	2	-
Lathe	NAMSUN	600 X 1500	2	-
Lathe	YAMAKAWA	1150 X 1000	1	-
Lathe	HANKOOK	900 X 4000	1	HPL-9
Lathe	NAMSUN	800 X 2000	1	-
Lathe	TONGIL	400 X 750	1	-
Lathe	HANKOOK	530 X 1600	1	-

SHOT MACHINE

Name	Manufacture	Capacity	Q'ty	Remarks
Shot blast machine	CHANGSUNG	800kg	1	Hanger
Shot blast machine	JINIL	300kg	1	-

PRESS

Name	Manufacture	Capacity	Q'ty	Remarks
Press	CHANGSIN	100T	1	-
Press	CHANGSIN	300T	1	-
Press	CHANGSIN	500T	1	-
Press	HITACHI	800T	1	-
Press	SSANGYONG	50T	1	-

WELDING MACHINE

Name	Manufacture	Capacity	Q'ty	Remarks
Welding machine	DAEWOO	CO2 ARC	3	MAX 600A
Welding machine	HYOSUNG	CO2 ARC	3	MAX 600A
Welding machine	DAESUNG	TIG ARC	2	DF500A
Welding machine	DAESUNG	CO2 ARC	2	XS500A
Welding machine	DAESUNG	TIG ARC	2	DS500A

BEND SAW

Name	Manufacture	Capacity	Q'ty	Remarks
BEND SAW	ABLE MAX	580	2	-
BEND SAW	AMADA	500	2	-

FORGING FACILITY

ALL OUR FACILITIES HAVE BEEN DESIGNED FOR THE MOST EFFECTIVE PRODUCTION

PRESS

Name	Manufacture	Capacity	Q'ty	Remarks
Press	N.K.K. / Japan	1500 ton	1	Hydraulic
Press	Kawasaki / Japan	700 ton	1	Hydraulic
Manipulator	Clark / Samsung	5 ton	1	-
Manipulator	Hyundai	15 ton	1	-
Manipulator	Doosan	3 ton	1	-
Air-Hammer	Nittan	1 ton	1	-
Manipulator	Clark / Samsung	8 ton	2	-

HEAT TREATMENT AND HEATING FURNACE

Name	Remarks	Capacity	Q'ty	Remarks
Heating Furnace(LNG)	DongSung	1800W X 2200L X 1600H	1	10Ton
Heating Furnace(LNG)	DongSung	2650W X 3000L X 1750H	1	20Ton
Heating Furnace(LNG)	DongSung	3000W X 4000L X 2500H	1	30Ton
Heating Furnace(LNG)	DongSung	2200W X 3700L X 1800H	1	20Ton
Water Quenching Tank	SamSung	1800W X 4000L X 1500H	1	-
Water Quenching Tank	SamSung	1800W X 1800L X 1500H	1	-
Cooling Tower	-	-	5	-