

2. Facility specifications

2-1. Utilities

Electrical supply source:	480 V, 450 kVA (Value for information)
	220 V, 150 kVA (Value for information)
Air:	800 L/min (at 0.5 MPa)
Water:	100 L/min (at 0.3 MPa)

2-2. Press main unit

		1 unit
Model:		C2F-20GW
Capacity:	At 6 mm above the lower dead point:	20 MN (2,000 TON)
Stroke length:		400 mm
Press No. of revolutions:	Continuous (Press master)	30-50 min ⁻¹
	Interlocked inching	5 min ⁻¹
	Press single inching at setup	3 min ⁻¹
Allowable eccentric load:		20 MN
Allowable eccentric distance:	One side of right or left	300 mm
	One side of FR or RR	50 mm
Die height: (Stroke down at ADJ UP)		977 mm
Die height adjustment: Slide side hydraulic type digital indication		10 mm
Bolster bottom dimension:	(R/L) 1,600 × (F/R) 1,080 × (Thickness) 250 mm	
Bolster top dimension:	(R/L) 1,600 × (F/R) 1,080 × (Thickness) 150 mm	
	SKT-4 hard plated mounted at center (HRC43 to 48)	
Distance between columns:		2,000 mm
Side opening:		1,200 mm
Upper knock-out device:		None
Lower knock-out device:	(Mechanical type) 1 to 5 stations, Max. 400 kN each station	
	Total: 1 MN × 100 mm	
Main motor:	(Vector inverter control)	480 V, 60 Hz, 200 kW × 4 P
Hydraulic pump motor:	For slide adjustment	1.1 kW × 6 P
	For clampers	2.2 kW × 6 P
Lubricating oil pump motor:	For main system	0.75 kW × 6 P
	For gib system	0.1 kW × 4 P
Grease lubrication pump motor		0.1 kW × 4 P

Load meter (Strain gauge type)	Digital display (with overload detecting function)	1 set
Bearing temperature detecting device		1 set
	Main bearing (L. R.)	
	Con rod (big end) (L. R.)	
	Con rod (small end) (L. R.)	
	Dual-stage shaft (L. R.)	
	Guide gib at 8 places, total 16 places	
Automatic die height adjustment device		1 set
	1-mm adjustment at 40 spm	
	0.6-mm adjustment at 45 spm	
	0.3-mm adjustment at 50 spm (Try item)	
	With control device capable of making offset by 0.1 mm toward up side in manual operations during automatic run and further clearing the data upon stop of the run	
Bed top face SUS building-up		1 set
Bolster plate top and bottom faces SUS building-up		1 set
Smoke extraction flange (2 places on rear side of press)		1 set
2-3. Transfer machine		1 unit
Model No.:	TES-60D	
	Intermittent	
Feed stroke (die pitch)	0 to max. 300 mm	
Clamping stroke (one side)	0 to max. 50 mm	
Lifting stroke	0 to max. 50 mm	
Internal width (as clamped)	Min. 298 mm	
	(Ref. dim. setting: 304 and 314 mm)	
Feed direction	R → L	
Driving method	AC servo drive type	
Feed servomotor	22 kW × 1 unit	
Clamping servomotor	7 kW × 2 units	
Lifting servomotor	5 kW × 2 units	
Miss-chuck detector (with indication of times per station)	1 set	
Zero-return method	Absolute type	
Lubricating method	Ball screw ... Auto lubrication, Guide ... Manual grease pump	
Intermediate beam (sub plate is of hydraulic clamp type with mounting surface of SUS)	Bolting type, 1 set	

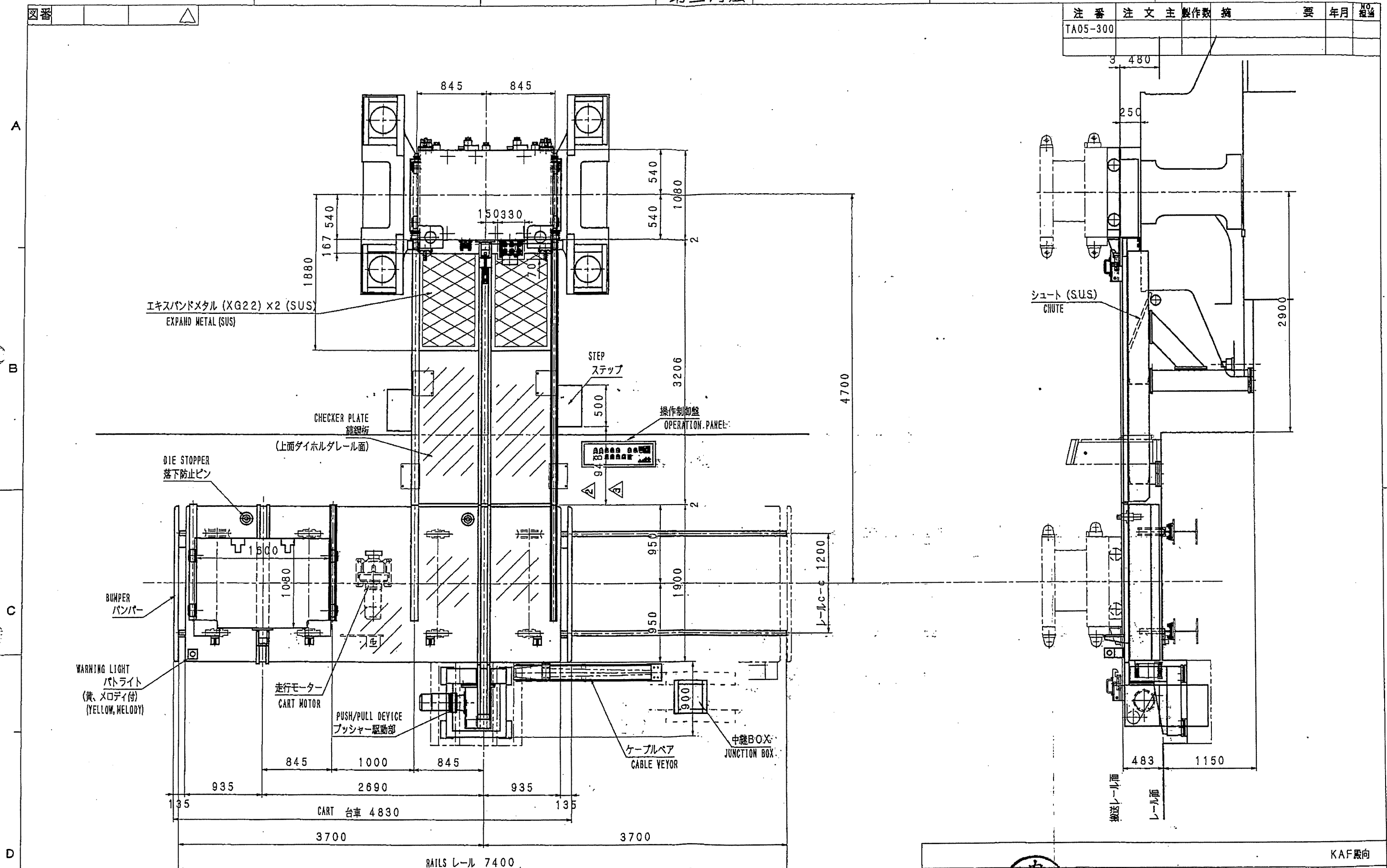
2-4.	Material feeder	1 unit
	Type: Charge conveyor of $\phi 28$ to 50, L/D of 1.2 to 1.8 and length of 33.6 to 90 mm	
	Charge conveyor	1 set
	Cage chute (3 chutes with shifting function)	1 set
	Bypass chute	1 set
	With 1- piece skipping or full work selecting function (servo type)	1 set
	Parts of 5 types corresponding to material diameters (for 35, 39, 44, 47 and 50)	1 set
2-5.	Die holder	None
2-6.	Die holder changer	1 set
	Type	T-type on rear side of press
	Driving method	Inverter motor driven type
2-7.	Die holder, clamper and lifting device	1 set
	For top force: 4 units For bottom force: 6 units Die lifter (1 unit each for R and L)	
2-8.	Die lubrication device	1 set
	Supply tank unit: 1 unit	
	Pit inside tank base: 1 unit	
2-9.	Top force changer	1 set
	KITO hoist	0.9 kW \times 4 P
2-10.	Press main unit lubricating oil purifier	1 unit
	Purifier motor	0.2 kW \times 4 P
2-11.	Press main unit lubricating oil forced return unit (diaphragm type)	4 units
	1 unit each for left main system, right main system, left gib system and right gib system	
2-12.	Motorized shutter (1 unit each for FR and RR)	1 set
	Motor for chain block	0.56 kW \times 4 P
2-13.	Smoke extraction flange	1 set
	No. of pieces	2 places
	Mounting position	Rear cover
2-14.	Unloading conveyor	1 set
	Medium burr/bypass	1 unit each

2-15. Piping

1 set

Air piping:	SGP Thin steel pipe under die space. Pipe is of SUS (including joint).
Cooling water piping:	SGP galvanized Thin steel pipe under die space. Pipe is of SUS (including joint).
Die lubricant piping:	SUS
Hydraulic piping:	Thin steel pipe under die space. Pipe is of SUS (including joint).
Lubricant piping:	Thin steel pipe under die space. Pipe is of SUS (including joint).

注 番	注 文 主	製 作 数	備 考	年 月	NO.
TA05-300					



DIE SET WEIGHT: MAX. 15000kgf
 DIE CHANGE LEVEL: from RAIL LEVEL 483mm
 タイホルダ重量: MAX. 15000kg/ヶ
 搬送面ノ高さ: FLヨリ 483

△	ステップ位置変更 (誤記修正):	080407	補換		
△	ステップ位置変更	080225	補換		
△	操作盤、制御盤一体、位置変更	080204	補換		
符号	訂 正 記 事	年 月 日	担 当	課 長	

KAF 殿向

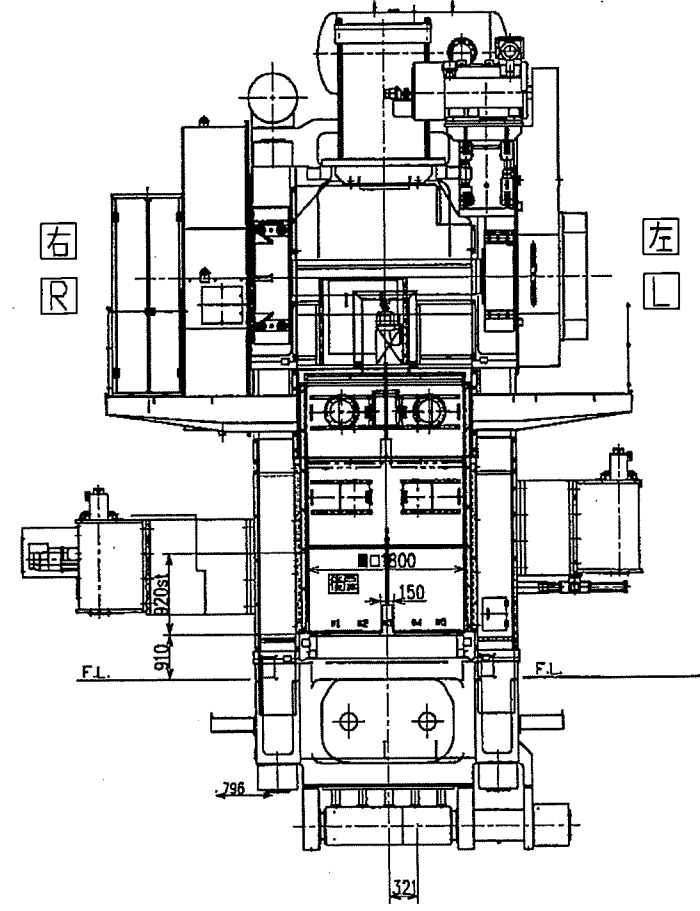
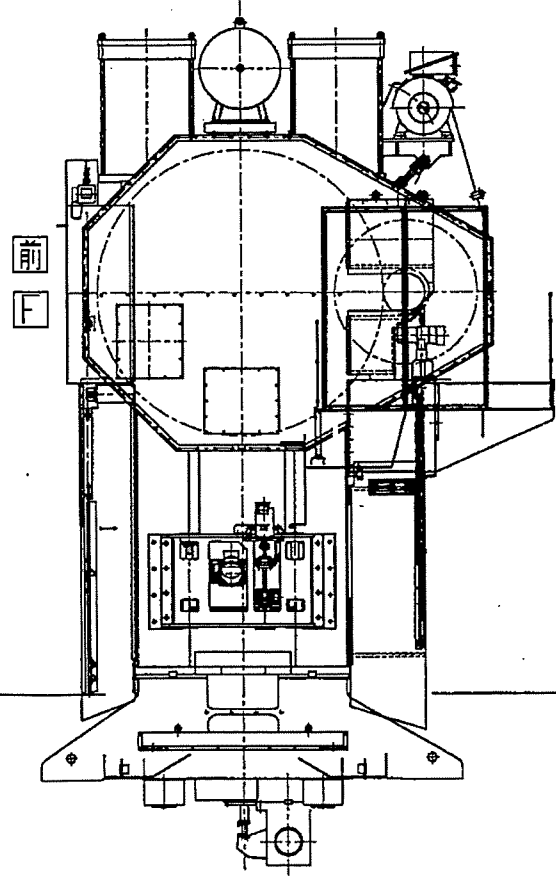
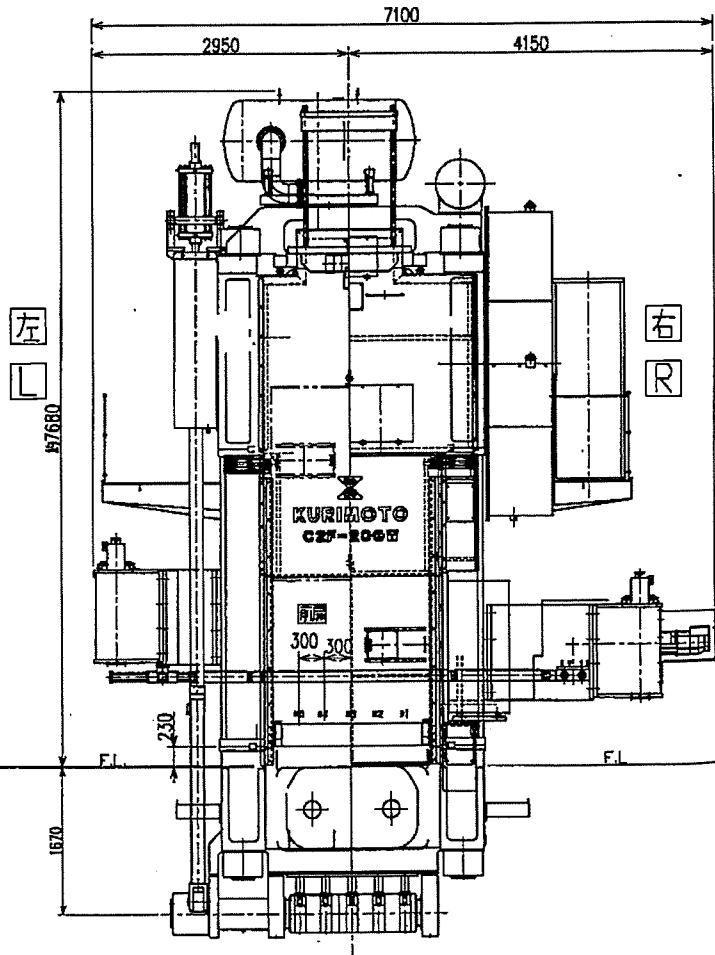
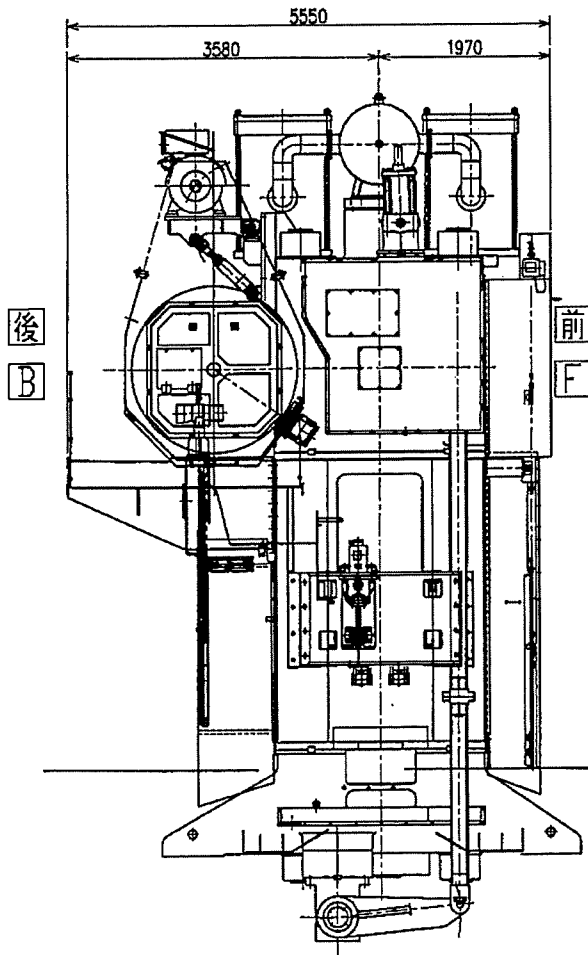
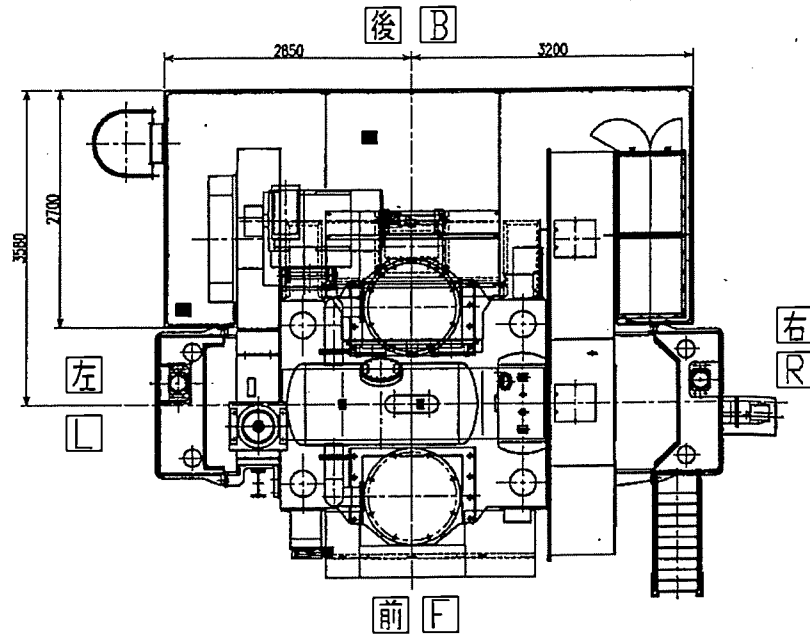
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C2F-20GW QDC LAYOUT

株式会社 栗本鐵工所
KURIMOTO, LTD.

P.C.F. 2020 171

製作番号	注文主	製作数	概	年月日	担当
TAOS-290		1		H19/01	野



FORGING PRESS GENERAL ASSEMBLY
C2F-20GW
 全体組立図

承認	図面	検査	製図	名	小林
				1/50	07.1.9
					年 月 日

株式会社 栗本 鍛工所
 PCF 2014 163

符号	訂正	記事	年月日	担当	課長