

PROJECT TECHNICAL DATA

Nomor :
Halaman :
Tanggal :

BIRO ENGINEERING	KETENAGA LISTRIKAN	Tanggal :
NAMA PROYEK :	MUARA KARANG	
PEMILIK :	PT PLN (Persero)	

JENIS PROYEK : Pembangkit Listrik Tenaga Gas Uap

LOKASI : PT PJB UP Muara Karang Jl. Pluit Karang Ayu No. 1, Jakarta Utara.

NO	DE	SCRIPTION			_
1	DESIGN SPESIFICATION		VALUE	UNIT	KETERANGA
	LUAS LAHAN	:	3,750		
	BIAYA KONSTRUKSI	:	3.380.080.398.585,00		
	OUTPUT CAPACITIES NETT SIMPLE CYCLE	:	341,30		
	OUTPUT CAPACITIES NETT HRSG OUTPUT CAPACITIES NETT COMBINED CYCLE	1:	158,70 500,00		
	AUXILIARY POWER COMSUMPTION COMBINED CYCLE	+ + + + + + + + + + + + + + + + + + + +	12,70		
	OUTPUT GROSS CAPACITIES COMBINED CYCLE		512,70	IVIVV	
	GAS TURBINE FLOW			Ton/Hour	
	STEAM TURBINE CONSUMTION	:		Ton/Hour	
	HRSG (Heat Recovery Steam Generator)	:		MW	
	GAS TURBINE GENERATOR	:	428,00		
	STEAM TURBINE GENERATOR	:		MW	
	TOTAL GENERATOR GAS TURBINE TRANSFORMER	:			
	STEAM TURBINE TRANFORMER	- :	215,00	NA)/A	
	TOTAL TRANSFORMER	:	215,00	IVIVA	
	WTP			M3/Hour	
	WWTP			M3/Hour	+
				,	
2	ENGINE CONFIGURATION				
_	MANUFACTURER				+
	MODEL				1
	ENGINE TYPE	:			1
	FUEL TYPE	1:			
	UNIT NUMBER	:			
	COOLING SYSTEM				
	NOMINAL SPEED (RPM)				
	NOMINAL POWER (KW)	:			
	FLUE FLOW (KG/H)	:			
	EFFICIENCY	:			
3	ENGINEE GENERATOR	:			
	MANUFACTURER	:			
	MODEL	:			
	TYPE				
	COLING SYSTEM	:			
	CLASS OF RATING CAPACITY				
	RATED TERMINAL VOLTAGE(V	<u> </u>			
	RATED CURRENT(A)				
	RATED OUTPUT(KVA)				
	RATED POWER (KW)	:			
	RATED VOLTAGE				
	EFFICIENCY	:			
4	TURBINE	:			
	MANUFACTURER				
	MODEL	:			
	TYPE	:			
	RATED POWER (MW)	:			
	LINIT NI IMPER				
	UNIT NUMBER	•			1
	MAIN STEAM RATED PRESS. UPSTREAM (Mpa)	:			
	MAIN STEAM RATED TEMP. UPSTREAM (C)	:			
	MAIN STEAM RATED FLOW RATE (C)	:			
	RATED ROTATING SPEED (RPM)	:			
	MAXIMUM STEAM INPUT VOLUME (t/h)				1
	` '				+
	RATED BACK PRESSURE (Kpa)				+
	FINAL FEEDWATER TEMPERATUR (C)				+
	CALCULATED HEAT CONSUMPTION (TMCR	:			+
	CONDITION) (kJ/KW.H)	:			
					+
5	BOILER				
	MANUFACTURE	:			
	TYPE	:			
	MODEL	:			
	FLOW RATE (t/h)	:			1
	STEAM OUTLET PRESSURE (MPa)	:			1
	STEAM OUTLET FRESSORE (MF4) STEAM OUTLET TEMPERATURE (C)				+
	FEEDWATER TEMPERATURE (C)	:			
	PRIMARY AIR HOT TEMPERATURE (C)				+
	SECONDARY AIR HOT TEMPERATURE (C)				+
	FLUE GAS OUTLET TEMPERATURE (C)				+
	BOILER GUARANTED HEAT EFFICIENCY				+

NO	DESCRIPTION					
6	HRSG	:				
	MANUFACTURE	Ė				
	MODEL	:				
	TYPE	:				
	GAS FLOW DIRECTION	:				
	TYPE OF EVAPORATOR CIRCULATION	:				
	TYPE OF CONDENSATE DEARATION	:				
	DESIGN TEMPERATURE(C)	:				
	DESIGN PRESSURE(MMH2O)	:				
	DUCT MATERIAL	:				
	TYPE OF INSULATION	:				
	INSULATION MATERIAL & THICKNESS MAX MEAN GAS VELOCITY (WS)	1				
	EFFICIENCY	<u>:</u>				
7	HRSG GENERATOR	:				
	MANUFACTURER	:				
	MODEL	:				
	TYPE	:				
	UNIT	:				
	CAPACITY BOILER TYPE	1:				
	RATED TERMINAL VOLTAGE(V	:				
	RATED CURRENT(A)	Ė				
	RATED OUTPUT(KVA)	:				
	MAXIMUM VOLTAGE	:				
	OPERATING VOLTAGE RATED SHORT TIME WITHSTAND CURRENT (AC component)	:				
	Phase - neutral	:				
	phase - phase	:				
	phase 3	 				
	CB TYPE	:				
	CDITTE	:				
8	POWER TRANSFORMER (GENERATOR TRANSFORMER ; UNIT AUXILIARY TRANSFORMER ; STATION SERVIS)	:				
	Generator Transformer					
	MANUFACTURE	:				
	MODEL	:				
	TYPE RATED CAPACITY	:				
	CLASS AND TYPE OF CORE	:				
	PHASE	:				
	TRANSFORMER RATING AT FULL LOAD (OFAF) NOMINAL SYSTEM VOLTAGE (LINE TO LINE) (KV)	:				
	HOWINAL OTOTEW VOLTAGE (LINE TO LINE) (KV)	Ė				
	TRANSFORMER CONNECTION(WYE OR DELTA)	:				
	COOLING TYPE	:				
	Auxiliary Transformer	:				
	MANUFACTURE MODEL	:				
	TYPE	1				
	RATED CAPACITY	Ė				
	CLASS AND TYPE OF CORE	:				
	PHASE TRANSFORMER RATING AT FULL LOAD (OFAF)	<u>:</u>				
	NOMINAL SYSTEM VOLTAGE (LINE TO LINE) (KV)	:				
	TRANSFORMER CONNECTION(WYE OR DELTA)	:				
	COOLING TYPE	:				
9	HEATING SYSTEM	1				
	HP HEATER	:				
	MANUFAKTUR	:				
	MODEL	:				
	NUMBER OF HP HEATERS ODERATING DESCRIPE (MPa)	:				
	OPERATING PRESSURE (MPa) OPERATING TEMPERATURE (C)	:				
	MAXIMUM FLOW (T/H)	:				
	LP HEATER	:				
	MANUFAKTUR	:				
	NUMBER OF LP HEATERS MODEL	:				
	TYPE	:				
	OPERATING PRESSURE (MPa)	:		-		
	OPERATING TEMPERATURE (C) MAXIMUM FLOW (T/H)	:				
	WINALINION LOW (1/11)	÷				
	DEAERATOR	:				
	MANUFAKTUR	Ė				
	NUMBER OF EQUIPMENT (UNIT)	:				
	WORKING PRESSURE (MPa) WORKING TEMPERATURE (C)	:				
	NORMAL OUTPUT (T/H)	:				
	NET WEIGHT OF THE EQUIPMENT (KG)	:				
	FILLING WATER WEIGHT (KG)	:				
	EFECTIVE VOLUME (M3)	:				
		1	ı	<u> </u>		

NO	DESCRIPTION			
10	PUMP		 	
	CONDENSATE PUMP	:		
	MANUFAKTUR MODEL	:		
	TYPE	:	 	
	FLOW	:		
	HEAD (Mpa) POWER	:		
	VOLTAGE	:		
	SPEED (RPM)	:		
	BOILER FEED PUMP MANUFAKTUR	:		
	MODEL	:		
	TYPE MOTOR FLOW (T/H)	:		
	SPEED (RPM)	:		
	HEAD (MPa)	:		
	POWER (KW) VOLTAGE (KV)	:		
	UNIT NUMBER (UNIT) CLOSE COOLING WATER PUMP	:		
	MANUFAKTUR	:		
	MODEL	:		
	TYPE MOTOR FLOW (T/H)	:		
	SPEED (RPM)	:		
	HEAD (M) POWER (KW)	:		
	VOLTAGE (KV)	:		
	UNIT NUMBER (UNIT)	:	 	
	VACUUM PUMP	:		
	MANUFAKTUR	:		
	TYPE	:		
	FLOW	:		
	PRESSURE CAPACITY (KG3/H)	:		
	EFFICIENCY UNIT NUMBER	:		
		:		
	TURBINE OVERHEAD CRANE MANUFAKTUR	:		
	NUMBER OF EQUIPMENT (UNIT) MODEL	:		
	TYPE	:		
	OPERATING PRESSURE (MPa) OPERATING TEMPERATURE (C)	:		
	MAXIMUM FLOW (T/H) CONDENSER	:		
	MANUFAKTUR MODEL	:		
	COOLING SURFACE (M2) BACK PRESSURE (MPa)	:		
	DESIGN PRESSURE OF WATER CHAMBER (MPa)	:		
	FLOW OF COOLING WATER (T/H) DESIGN TEMP. OF COOLING WATER (C)	:		
	NETT-WEIGHT (T)	:		
	STEAM SIDE (M3)	:		
	MATERIAL OF TUBE TOTAL NUMBER OF COOLING PIPE (Pc)	:		
	COOLING PIPE LENGTH (mm)	:		
	FILLED WATER WEIGHT (T) ESP	:		
	MANUFAKTUR	:		
	TYPE	:		
	FLOW INLET (M3/S) INLET TEMPERATUR (C)	:		
	INTAKE PUMP			
	MANUFAKTUR MODEL	:		
	TYPE	:		
	FLOW			
	PRESSURE CAPACITY			
	EFFICIENCY	Ė		
	CONDENSATE PUMP			
	MANUFAKTUR			
	MODEL TYPE	:		
	FLOW	:		
	HEAD (Mpa) POWER	:		
	VOLTAGE	:		
	SPEED (RPM)	:	_	
	BOILER FEED PUMP			
	MANUFAKTUR	:		
	MODEL TYPE MOTOR	:		
	FLOW (T/H)	:		
	SPEED (RPM) HEAD (MPa)	:		

NO		DESCRIPTION			
	POWER (KW)		1:		
	VOLTAGE (KV)		T :		
	UNIT NUMBER (UNIT)		:		
	WATER TREATMENT SYSTEM		:_		
	A. ONCE THROUGH SYSTEM (AIR LAUT) B. CLOSE COOLING SYSTEM (AIR TAWAR)				
	B. CLOSE COOLING STSTEM (AIR TAWAR)				
	WTP				
	SYSTEM		:		
	MANUFAKTUR		:		
	MODEL		:		
	TYPE		:		
	CAPACITY		:		
	WWTP				
	SYSTEM		:		
	MANUFAKTUR		:		
	MODEL		:		
	TYPE		:		
	CAPACITY		:		
	DESALINATION WATER PRODUCTION				
			:		
	DEMINERALIZED WATER PRODUCTION		1:		
	DEMINISTRATION OF THE PROPERTY				
12	FUEL SYSTEM		+-		
	OIL SYSTEM	CAPACITY		1	
		FLOW	T :	1	
		PRESSURE	T :		
		CONSUMTION	1:		
	COAL SYSTEM	CAPACITY	:		
		COAL	:		
		FLY ASH CAPACITY	:		
		BOTTOM ASH CAPACITY	:		
		ASH DISPOSAL AREA	T:		
		LIME STONE HANDLING AREA	<u> </u>		

10 DR. WORK TOWER PLANT FOUNDATION WORKS PPE OF FOUNDATION DMENSION OF FOUNDATION I NOSPPILE DEPTH OF FOUNDATION I DMENSION OF FOUNDATION I D	NO		DESCRIPTION			
POWER PLANT FOUNDATION WORKS PROVER PLANT FOUNDATION WORKS TYPE OF POUNDATION DIMENSION OF POUNDATION DIMENSION OF POUNDATION NUMBER OF POUNDATION NUMBER OF POUNDATION NUMBER OF POUNDATION NUMBER OF POUNDATION NOSPILE DEPTH OF FOUNDATION I MAM MIN	13	CIVIL WORK				
DRENSION OF FOUNDATION : NUMBER OF FOUNDATION : NOSPILE NUMBER OF FOUNDATION : NOSPILE DEPTH OF FOUNDATION : NOSPILE COMMERTE GRADE : NOPA REBAR GRADE : NOPA JETTY CONSTRUCTION DIMENSION DIMENSION : NOSPILE MAY JETTY CONSTRUCTION DIMENSION OF JETTY : MA JETTY CONSTRUCTION DIMENSION DIMENSION : NOSPILE DEPTH OF FOUNDATION : NOSPILE DEPTH OF SANDER : NOPA JETTY CONSTRUCTION DIMENSION : NOSPILE DEPTH OF SANDER : NOPA DEPTH OF			LARGE AREA	:		
DRENSION OF FOUNDATION : NUMBER OF FOUNDATION : NOSPILE NUMBER OF FOUNDATION : NOSPILE DEPTH OF FOUNDATION : NOSPILE COMMERTE GRADE : NOPA REBAR GRADE : NOPA JETTY CONSTRUCTION DIMENSION DIMENSION : NOSPILE MAY JETTY CONSTRUCTION DIMENSION OF JETTY : MA JETTY CONSTRUCTION DIMENSION DIMENSION : NOSPILE DEPTH OF FOUNDATION : NOSPILE DEPTH OF SANDER : NOPA JETTY CONSTRUCTION DIMENSION : NOSPILE DEPTH OF SANDER : NOPA DEPTH OF						
AUDISER OF FOUNDATION : NOSPILE DEPTH OF FOUNDATION : MAI CONCRETE GRADE : MAI MIN mm CONCRETE GRADE : MAI MIN mm CONCRETE GRADE : MAPA REBAR GRADE : MAPA JETTY CONSTRUCTION DIMENSION OF JETTY MIN		POWER PLANT FOUNDATION WORKS				
DEPTH OF FOUNDATION : MM mm CONCRETE GRADE : MPA REBAR GRADE : MPA JETTY CONSTRUCTION DIMENSION OF JETTY : M JETTY CONSTRUCTION DIMENSION DIMENSION : MMPA DEPTH OF FOUNDATION : MMPA DEPTH OF FOUNDATION : MMPA DEPTH OF FOUNDATION : MPA REBAR GRADE : MPA REBAR GRAD			DIMENSION OF FOUNDATION	1		
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DEPTH OF FOUNDATION : MM mm CONCRETE GRADE : MPA REBAR GRADE : MPA JETTY CONSTRUCTION DAMENSION OF JETTY I M JETTY CONSTRUCTION DAMENSION D						
DEPTH OF FOUNDATION : MM mm CONCRETE GRADE : MPA REBAR GRADE : MPA JETTY CONSTRUCTION DAMENSION OF JETTY I M JETTY CONSTRUCTION DAMENSION D						
DEPTH OF FOUNDATION : MM mm CONCRETE GRADE : MPA REBAR GRADE : MPA JETTY CONSTRUCTION DAMENSION OF JETTY I M JETTY CONSTRUCTION DAMENSION D						
DEPTH OF FOUNDATION : MM TITLE CONCRETE GRADE : MPA REBAR GRADE : MPA JETTY CONSTRUCTION DMENSION OF JETTY I M JETTY CONSTRUCTION DMENSION DMENSION I MARCH I MAR						
DEPTH OF FOUNDATION : MM mm CONCRETE GRADE : MPA REBAR GRADE : MPA JETTY CONSTRUCTION DAMENSION OF JETTY I M JETTY CONSTRUCTION DAMENSION D						
DEPTH OF FOUNDATION : MM mm CONCRETE GRADE : MPA REBAR GRADE : MPA JETTY CONSTRUCTION DAMENSION OF JETTY I M JETTY CONSTRUCTION DAMENSION D						
DEPTH OF FOUNDATION : MM mm CONCRETE GRADE : MPA REBAR GRADE : MPA JETTY CONSTRUCTION DAMENSION OF JETTY I M JETTY CONSTRUCTION DAMENSION D						
CONCRETE GRADE : MPA REBAR GRADE : MFA JUMENSION OF JETTY : M M MACHINE GRADE : MFA REBAR GRADE : MMA REBAR GRADE : MFA			NUMBER OF FOUNDATION	:	NOS/PILE	
CONCRETE GRADE : MPA REBAR GRADE : MFA JUMENSION OF JETTY : M M MACHINE GRADE : MFA REBAR GRADE : MMA REBAR GRADE : MFA						
CONCRETE GRADE : MPA REBAR GRADE : MFA JUMENSION OF JETTY : M M MACHINE GRADE : MFA REBAR GRADE : MMA REBAR GRADE : MFA						
CONCRETE GRADE : MPA REBAR GRADE : MFA JUMENSION OF JETTY : M M MACHINE GRADE : MFA REBAR GRADE : MMA REBAR GRADE : MFA						
CONCRETE GRADE : MPA REBAR GRADE : MFA JUMENSION OF JETTY : M M MACHINE GRADE : MFA REBAR GRADE : MMA REBAR GRADE : MFA						
CONCRETE GRADE : MPA REBAR GRADE : MFA JUMENSION OF JETTY : M M MACHINE GRADE : MFA REBAR GRADE : MMA REBAR GRADE : MFA				-		
CONCRETE GRADE : MPA REBAR GRADE : MFA JUMENSION OF JETTY : M M MACHINE GRADE : MFA REBAR GRADE : MMA REBAR GRADE : MFA						
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CONCRETE GRADE : MPA REBAR GRADE : MFA JUMENSION OF JETTY : M M MACHINE GRADE : MFA REBAR GRADE : MMA REBAR GRADE : MFA			DEPTH OF FOLINDATION	+-	NANA	
CONCRETE GRADE : MPA REBAR GRADE : MPA JETTY CONSTRUCTION DIMENSION OF JETTY : M JETTY CONSTRUCTION DIMENSION OF JETTY : M JUMBER OF FOUNDATION : NOSIPILE DEPTH OF FOUNDATION : NOSIPILE DEPTH OF FOUNDATION : MPA REBAR GRADE : MPA GRADE : MPA FOUNDATION ENGINE DIMENSION : MM2 THICKNESS : MM1 CONCRETE GRADE : MPA REBAR GRADE : MM1 ANCHOR BOLT SIZE : MM1 ANCHOR BOLT SIZE : MM2 FOUNDATION POWER HOUSE DIMENSION : MM2 (TRANSFORMER, AUXILIARY TRANSFORMER) THICKNESS : MM1 ANCHOR BOLT TYPE : MPA REBAR GRADE : MPA ANCHOR BOLT SIZE : MM1 ANCHOR BOLT SIZE : MM2 FOUNDATION TURBINE DIMENSION : MM2 THICKNESS : MM1 ANCHOR BOLT SIZE : MPA REBAR GRADE : MPA REBAR			DEFINIO FOUNDATION	+	<u> </u>	
REBAR GRADE						
REBAR GRADE				1		
REBAR GRADE		1		1		
REBAR GRADE				L		
REBAR GRADE						
REBAR GRADE						
REBAR GRADE						
REBAR GRADE						
JETTY CONSTRUCTION				_		
Cultivarian			REBAR GRADE	- :	MPA	
Cultivarian		JETTY CONSTRUCTION	DIMENSION OF JETTY		М	
DEPTH OF FOUNDATION						
CONCRETE GRADE						
REBAR GRADE				+		
FOUNDATION ENGINE				_		
THICKNESS			REDAR GRADE	1	WIFA	
CONCRETE GRADE		FOUNDATION ENGINE		_		
REBAR GRADE						
LEAN CONCRETE :				<u> </u>		
ANCHOR BOLT SIZE :				_		
FOUNDATION POWER HOUSE DIMENSION :			ANCHOR BOLT TYPE	:		
THICKNESS CONCRETE GRADE CONCRETE CONCRETE GRADE CONCRETE CONC			ANCHOR BOLT SIZE	:		
THICKNESS CONCRETE GRADE CONCRETE CONCRETE GRADE CONCRETE CONC		FOLINDATION POWER HOUSE	DIMENSION	٠.	MM2	
CONCRETE GRADE				_		
LEAN CONCRETE		,		:		
ANCHOR BOLT TYPE : :						
ANCHOR BOLT SIZE :		1		<u> </u>	IVIIVI	
FOUNDATION TURBINE DIMENSION :						
THICKNESS						
CONCRETE GRADE		FOUNDATION TURBINE		•		
REBAR GRADE : MPA LEAN CONCRETE : MM ANCHOR BOLT TYPE : . ANCHOR BOLT SIZE : mm FOUNDATION BOILER DIMENSION : . FOUNDATION BOILER DIMENSION : . MM2 . . . CONCRETE GRADE : . . MPA . . . MM . . . ANCHOR BOLT TYPE . . . ANCHOR BOLT SIZE . . . FOUNDATION PUMP HOUSE DIMENSION . . . FOUNDATION PUMP HOUSE DIMENSION . <t< td=""><td></td><td>1</td><td></td><td><u> </u></td><td></td><td></td></t<>		1		<u> </u>		
ANCHOR BOLT TYPE : :			REBAR GRADE	1:	MPA	
ANCHOR BOLT SIZE : mm FOUNDATION BOILER DIMENSION : MM2 THICKNESS : MM CONCRETE GRADE : MPA REBAR GRADE : MPA REBAR GRADE : MPA LEAN CONCRETE : MM ANCHOR BOLT TYPE : MM ANCHOR BOLT TYPE : MM FOUNDATION PUMP HOUSE DIMENSION : MM2 THICKNESS : MMM				_	MM	
FOUNDATION BOILER DIMENSION :				_	mm	
THICKNESS		<u> </u>	ANOTHER BOLT OIZE	÷		
CONCRETE GRADE		FOUNDATION BOILER				
REBAR GRADE						
LEAN CONCRETE		1		_		
ANCHOR BOLT TYPE : :				_		
FOUNDATION PUMP HOUSE			ANCHOR BOLT TYPE			
THICKNESS : MM			ANCHOR BOLT SIZE	:		
THICKNESS : MM		FOUNDATION PUMP HOUSE	DIMENSION	+-	MM2	
		TELEVISION CHI TIOGE			MM	
			CONCRETE GRADE	:	MPA	
REBAR GRADE : MPA LEAN CONCRETE : MM						
LEAN CONCRETE : MM ANCHOR BOLT TYPE : :				<u> </u>	IVIIVI	
ANCHOR BOLT SIZE :						
FOUNDATION WAREHOUSE/ WORKSHOP DIMENSION : MM2		FOUNDATION WAREHOUSE/ WORKSHOP				
CONCRETE GRADE : MPA		1		_		
			REBAR GRADE	_	MPA	

	DESCRIPTION			
	LEAN CONCRETE	:	MM	
	ANCHOR BOLT TYPE	:		
	ANCHOR BOLT SIZE	1:		
FOUNDATION WTP / WWTP	DIMENSION	:	MM2	
	THICKNESS	:	MM	
	CONCRETE GRADE	:	MPA	
	REBAR GRADE	:	MPA	
	LEAN CONCRETE	:	MM	
	ANCHOR BOLT TYPE	:		
	ANCHOR BOLT SIZE	:		
Peralatan/ mesin yang memerlukan pondasi bisa di	ambahkan sesuai kebutuhan di site (lapangan)			
STACK	HEIGHT OF STACK	1:		М
	TYPE OF STACK	1:		
	NO OF INNER LINE	:		
POND				
a. MAIN POND				
b. REGULATING POND				
ROAD PAVEMENT (RIGID PAVEMENT)	FOUNDATION TYPE	1:		
·	FOUNDATION DIMENSION	:		MM
	FOUNDATION DEPTH	:		M
	PAVEMENT THICKNESS	:		CM
	LEAN CONCRETE THICKNESS	:		CM
	REBAR STEEL GRADE	:		MPA
	CONCRETE GRADE	:		MPA
	CONCRETE SLUMP	:		CM
STEEL STRUCTURE	AREA BOILER 1# & 2#	:		
	COLUMN STEEL DIMENSION	:		MM
	1st Layer	r		
	STEEL GRADE (fu)	:		
	. ,			
	ANCHOR BOLT GRADE	+-		
	WELD THICKNESS	l:		MM
	WELD I LICKNESS	÷		IVIIVI
	ADEA FOR All 9 Oll	-		
	AREA ESP 1# & 2#			
	COLUMN STEEL DIMENSION	:		MM