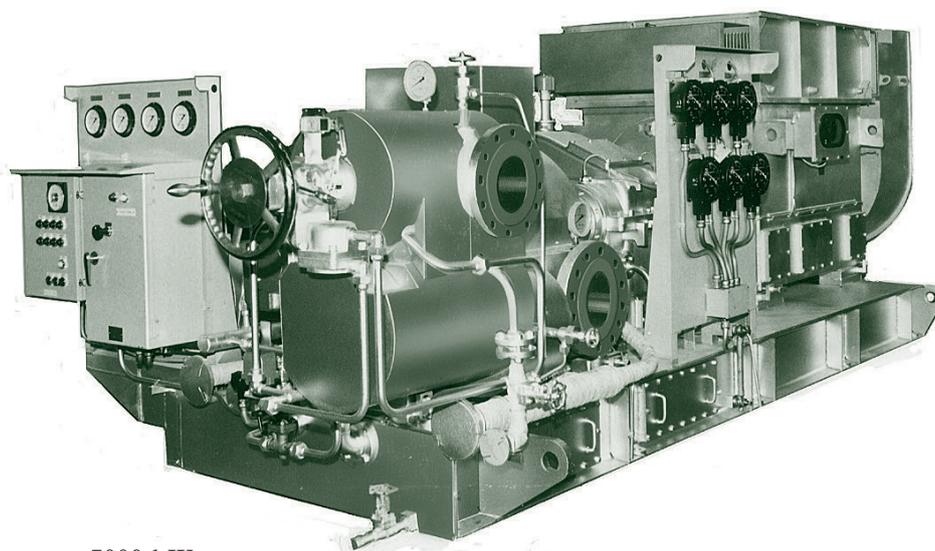


Curtis single-stage (with reduction gear) STEAM TURBINES

SHINKO DE.DEG

■ APPLICATIONS

Boiler feed pumps
Cooling water pumps
Compressors
Generators
Sugar mills
Cane knives
Others



■ SPECIFICATIONS

Max. output 5000 kW
Max. exhaust steam pressure .. 2.5 MPaG
Gland seal Labyrinth packing
Lubrication system Forced lubrication

■ GENERAL CHARACTERISTICS

Item	Model	DE 41	DE 61	DE 62	DE 81	DE 41A	DE 61A	DE 62A	DE 61K	DE 62K
Max. output	(kW)	2000	3000	5000	3000	2000	3000	5000	3000	5000
Max. speed	(rpm)	7500	7200	7200	5400	7500	7200	7200	7200	7200
Direction of rotation		CW facing turbine toward driven machine								
Max. inlet steam pressure	(MPaG)	6.2								
Max. inlet steam temperature	(°C)	510								
Max. exhaust steam pressure	(MPaG)	0.5			2.5			600mmHg		
Steam inlet bore	(mm)	150	150	200	150	150	150	200	150	200
Steam exhaust bore	(mm)	200	300	350	300	200	250	350	600	600
Lubrication system		Forced lubrication								
Main LO pump	(m ³ /h)	3.7	5	5	5	3.7	5	5	5	5
Aux. LO pump	(m ³ /h)	3.7	5	5	5	3.7	5	5	5	5
Governor		Woodward UG or PG								
Hand nozzle valve		Available according to requirement								
Weight (turbine proper)	(kg)	1350	2200	2900	2450	1400	2300	2950	2400	2700

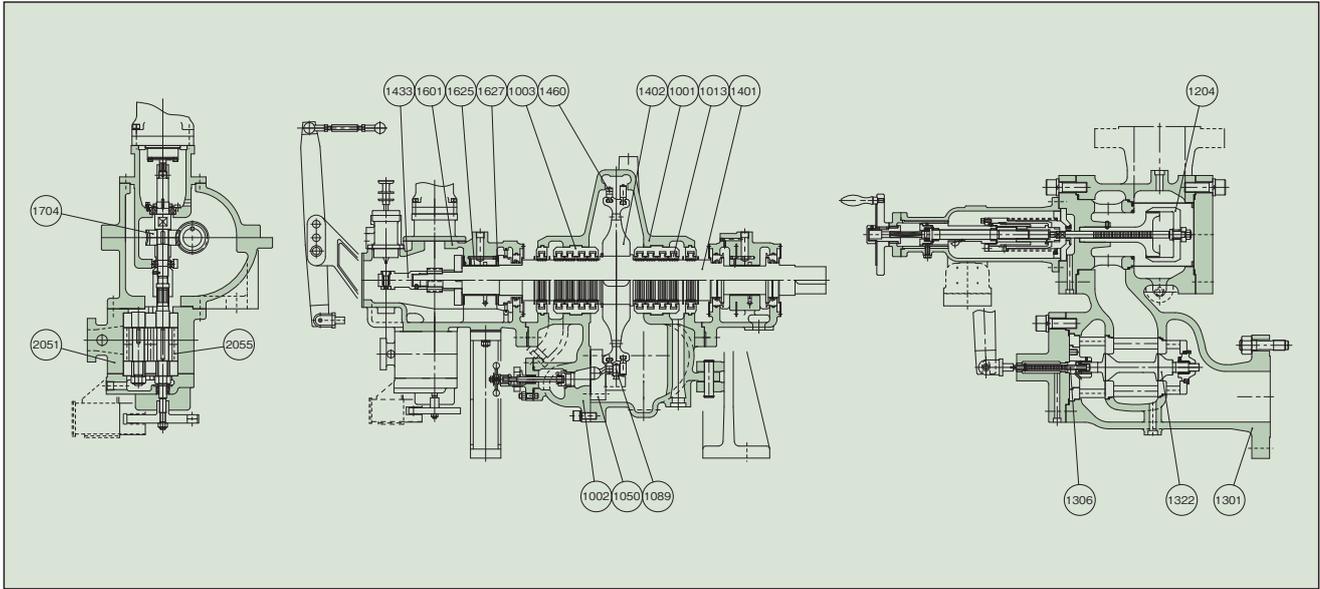
● Governor

Max. speed regulation 0.5%, 0 ~ 4%
Max. speed variation ±0.25%
Max. speed rise 7%
Speed range +5 ~ -30%
NEMA class D

● Emergency Trip Device

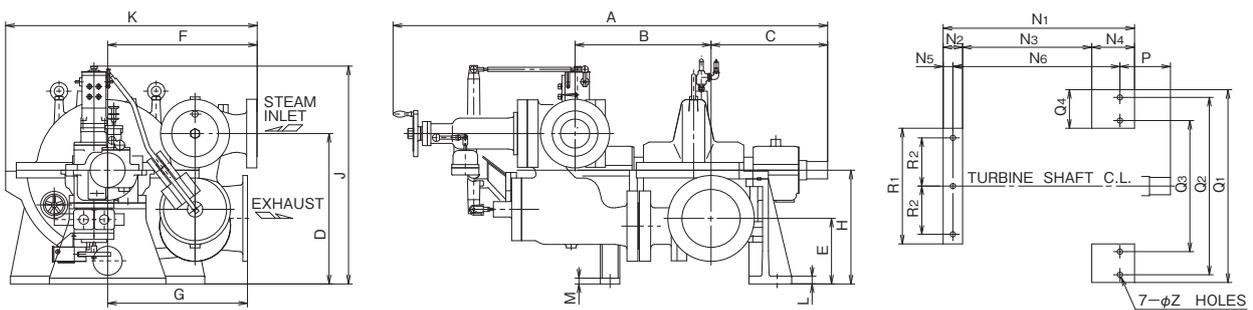
Actuation of overspeed trip 115% of rated speed
Actuation of low LO pressure trip Below 0.05 MPaG

DESIGN & MATERIALS



PART NO.	NAME OF PART	MATERIAL		REQ.NO. FOR 1 TURBINE	PART NO.	NAME OF PART	MATERIAL		REQ.NO. FOR 1 TURBINE
		NAME	JIS				NAME	JIS	
1001	TURBINE CASING	CAST STEEL	SCPH2	1SET	1401	TURBINE SHAFT	FORGED STEEL	SF540A	1
1002	STEAM CHEST	"	"	1	1402	DISC ROTOR	NI-CR STEEL	SNC836	1
1003	PACKING CASE	CARBON STEEL	S35C	1SET	1433	OVERSPEED TRIP SHAFT	CARBON STEEL	S35C	1
1013	LABYRINTH PACKING	Ni-Br CASTING		10SETS	1460	MOVING BLADE	STAINLESS STEEL	SUS410J1	1SET
1050	NOZZLE	STAINLESS STEEL	SUS403	1	1601	BEARING HOUSING	CAST IRON	FC200	1SET
1089	STATIONARY BLADE	"	"	1SET	1625	BEARING METAL	WHITE METAL WITH STEEL	WJ2 S25C	1SET
1204	EMERGENCY VALVE	"	SUS420J2	1	1627	THRUST BEARING METAL	"	"	1SET
1301	GOVERNOR VALVE CASING	CAST STEEL	SCPH2	1	1704	WORM WHEEL	PHOSPHOR BRONZE	PBC3	1
1306	VALVE STEM	STELLITE		1	2051	LO PUMP CASING	CAST IRON	FC200	1
1322	GOVERNOR VALVE	STAINLESS STEEL	SUS420J2	1	2055	PUMPING GEAR	CARBON STEEL	S45C	1SET

OUTLINE DIMENSIONS



Dimensions : mm

Model	A	B	C	D	E	F	G	H	J	K	L	M	N ₁	N ₂	N ₃	N ₄	N ₅	N ₆	P	Q ₁	Q ₂	Q ₃	Q ₄	R ₁	R ₂	Z
DE 41	2259	702	620	720	290	740	570	470	1180	1115	40	30	975	100	655	220	50	850	340	880	800	560	200	500	200	27
DE 61	2250	700	600	780	340	770	720	590	1300	1295	40	30	985	100	665	220	50	860	260	1000	920	680	200	600	250	27
DE 62	2370	685	650	840	290	870	800	590	1300	1380	40	30	1070	100	750	220	50	945	270	1000	920	680	200	600	250	27
DE 81	2250	700	600	840	400	770	720	650	1360	1395	40	30	985	100	665	220	50	860	260	1150	1060	800	220	700	300	27
DE 41A	2259	702	620	720	290	740	570	470	1180	1115	40	30	975	100	655	220	50	850	340	880	800	560	200	500	200	27
DE 61A	2300	700	650	780	340	770	720	590	1300	1240	40	30	1020	100	700	220	50	895	320	1000	920	680	200	600	250	27
DE 62A	2370	685	650	840	290	870	800	590	1300	1380	40	30	1070	100	750	220	50	945	270	1000	920	680	200	600	250	27
DE 61K	2250	765	535	840	330	770	750	650	1360	1300	40	30	1095	100	775	220	50	970	150	1100	1020	780	200	600	250	27
DE 62K	2345	750	560	900	330	870	800	650	1360	1400	40	30	1095	100	775	220	50	970	175	1100	1020	780	200	600	250	27

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