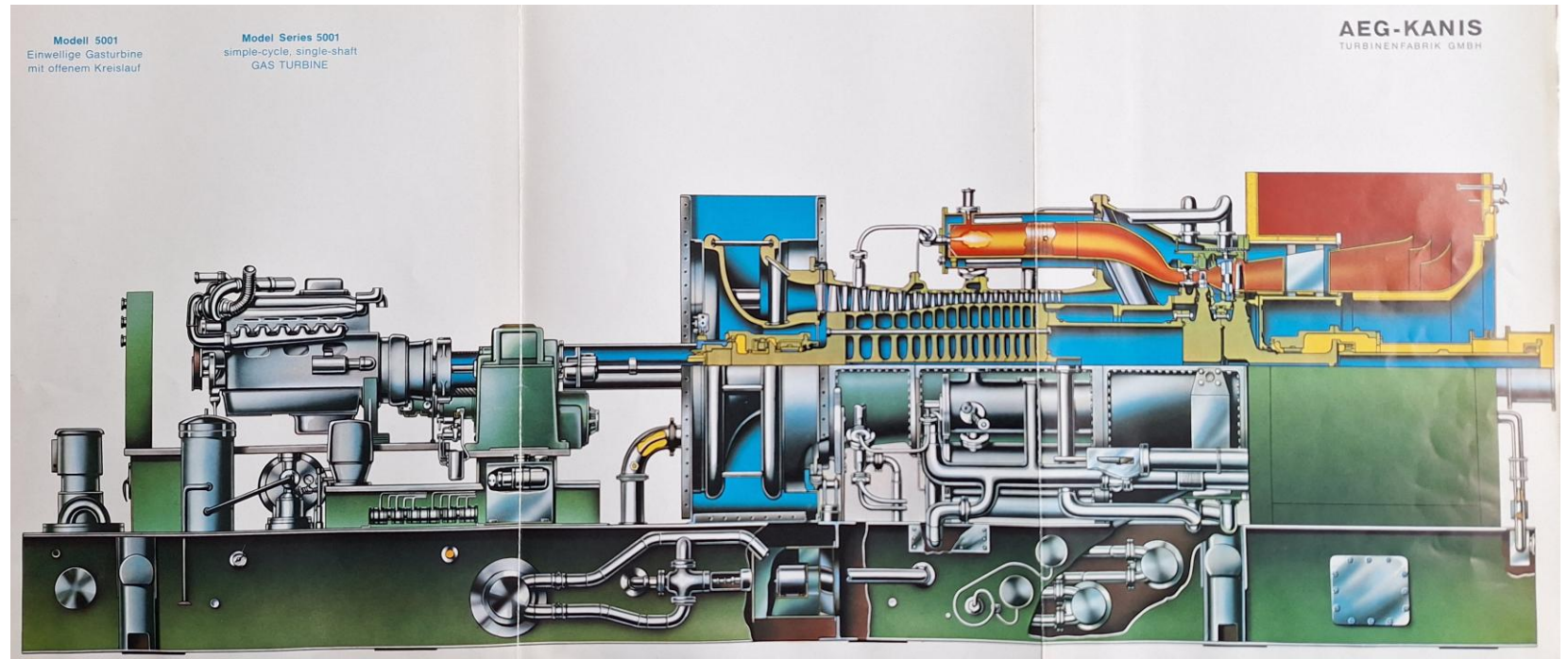


Gasturbine Frame 5 SCGT Unit 1-3 technical data

Available for purchase:

- - **3 x Frame 5** gas turbines as a package unit
- - single-cycle gas turbines (SCGT)
- - incl. GE starting motor (black-start capable)
- - incl. generator
- - control system, if desired

- Unit 1 was in full operation up to 31.12.2022
- Unit 2 was in service until 31.03.2026
- Final shut-down of unit 3 is expected to the end of 2026



Gasturbine Frame 5
SCGT Unit 1-3
technical data

⊕

AEG-KANIS

GASTURBINE

⊕

SERIEN-NR. 226120

LEISTUNG 23.100kW

HÖHE ÜBER N.N. 218 m.

VERDICHT. 17 STUFEN

5100 U/min.

TURBINE 2 STUFEN

5100 U/min.

LUFTEINTRITTS-TEMPERATUR

15 °C

TURBINEN-ABGASTEMPERATUR

482 °C

LUFTEINTRITTSDRUCK

1,007 kg/cm²

TURBINEN-ABGASDRUCK

1,007 kg/cm²

ACHTUNG !

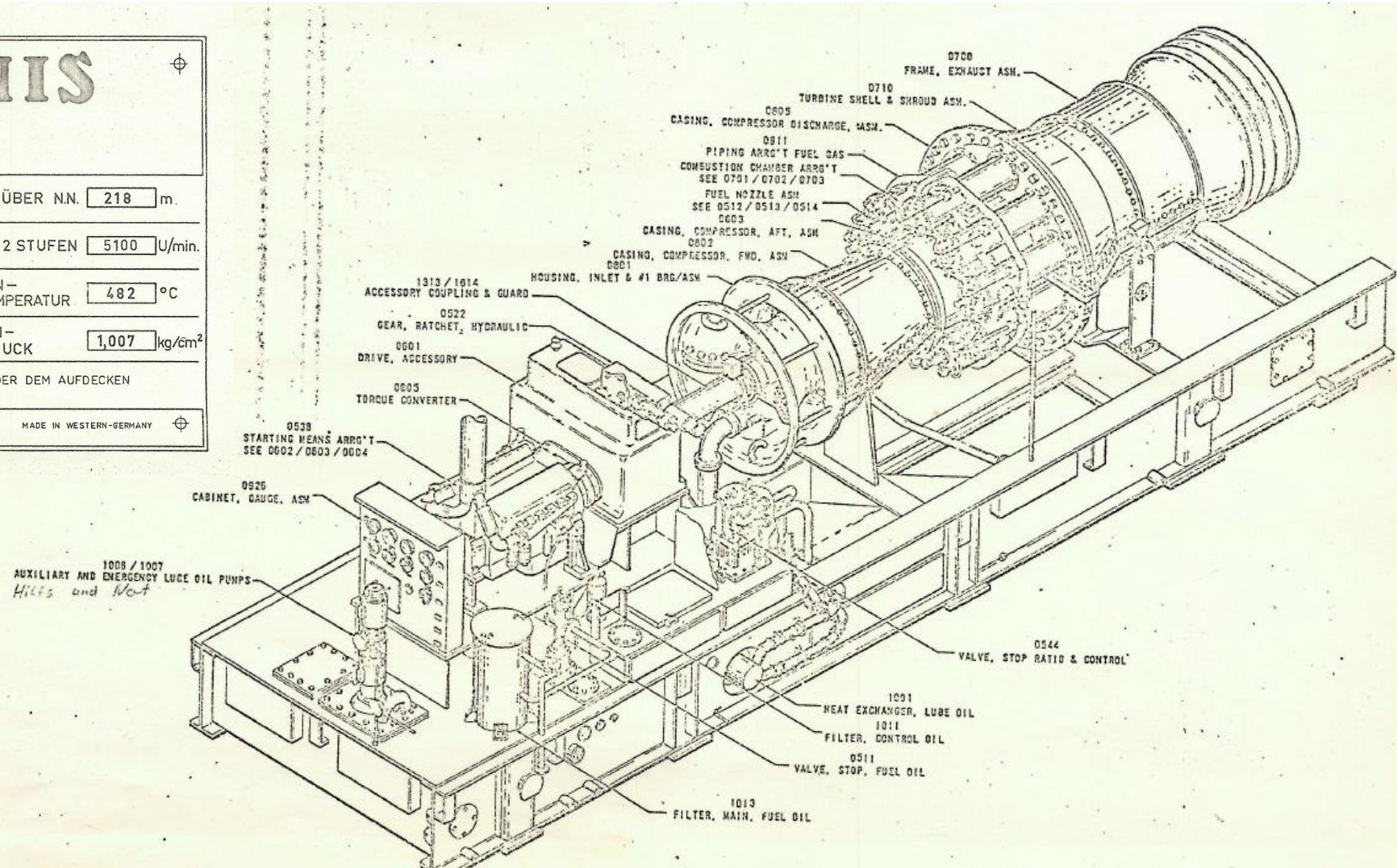
VOR AUFSTELLUNG, INBETRIEBNAHME ODER DEM AUFDECKEN BETRIEBSVORSCHRIFT LESEN !

⊕

529852-D-1

MADE IN WESTERN-GERMANY

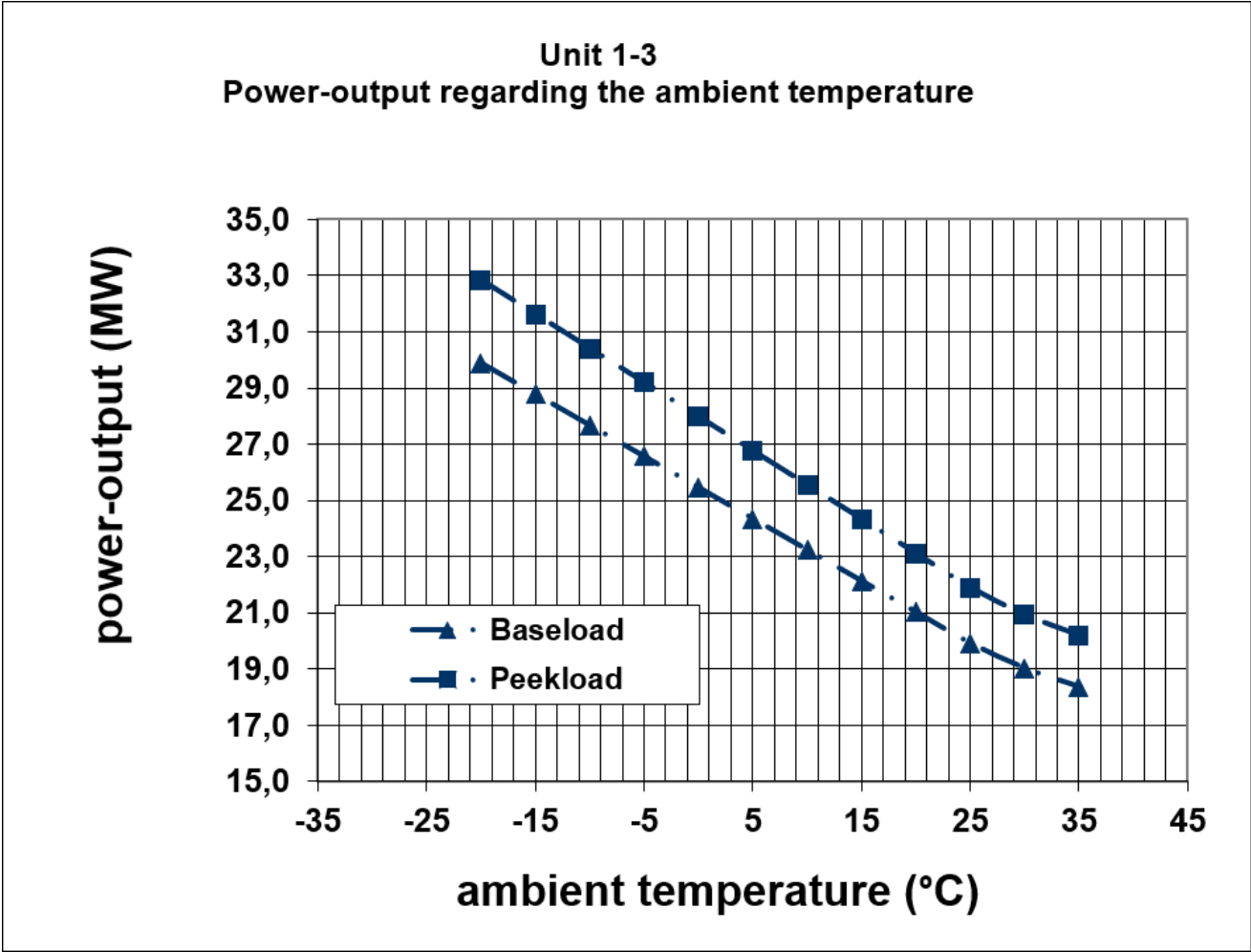
⊕



Gasturbine Frame 5
SCGT Unit 1-3
technical data

SCGT (single cycle gas turbine)				
Main data	units	Unit 1	Unit 2	Unit 3
Main Fuel		fuel oil	fuel oil	fuel oil
type of power plant		SCGT	SCGT	SCGT
Commissioning	[year]	1974	1974	1974
Gross Power Output	MW	23 MW	23 MW	23 MW
Net Power Output	MW	23 MW	23 MW	23 MW
district heating	MW	---	---	---
efficiency at base load	%	25,5 %	25,5 %	25,5 %
Commissioning		1974	1974	1974
Decommissioning		31.12.2022	31.03.2026	--
eq. Operating Hours (Generator) 31.12.2022	EOH	7.634	7.390	7.520
Turbine	unit	Unit 1	Unit 2	Unit 3
Type		Open-Air-Gasturbine	Open-Air-Gasturbine	Open-Air-Gasturbine
Manufacturer		AEG-Kanis	AEG-Kanis	AEG-Kanis
Gross Power Output	MW	23	23	23
Year of construction		1973	1973	1973
Steam Generator	unit	Unit 1	Unit 2	Unit 3
Type		no steam generator	no steam generator	no steam generator
Manufacturer				
Thermal output	MW			
Nominal steam output	t/h			
Live steam pressure (at Turbine)	bar			
Live steam temperature (at Turbine)	°C			
Generator	unit	Unit 1	Unit 2	Unit 3
Type		Rade-Conar	Rade-Conar	Rade-Conar
Manufacturer		Air-Cooling	Air-Cooling	Air-Cooling
Cooling System				
Apparent Power	MVA	28,0	28,0	28,0
Nominal Voltage	kV	10,5	10,5	10,5

Gasturbine Frame 5
SCGT Unit 1-3
technical data



ambient temperature °C	fuel oil			
	baseload		peekload	
	Power Output	Efficiency	Power Output	Efficiency
	MW _{el}	%	MW _{el}	%
-20	29,9	25,6	32,8	26,2
-15	28,8	25,5	31,6	26,1
-10	27,7	25,4	30,4	26,0
-5	26,6	25,3	29,2	25,9
0	25,5	25,3	28,0	25,9
5	24,3	25,2	26,8	25,8
10	23,2	25,1	25,5	25,7
15	22,1	25,0	24,3	25,6
20	21,0	24,9	23,1	25,5
25	19,9	24,8	21,9	25,4
30	19,0	24,8	20,9	25,3
35	18,4	24,7	20,2	25,3

Gasturbine Frame 5
SCGT Unit 1-3
technical data

Operating hours and starts over the last 15 years																	since commissioning up to 31.12.2025	
year		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025		EOH ¹⁾
unit 1	Starts	3	16	25	31	32	15	31	38	19	29	19	13	0	0	0	1.167	7.634
	Oh	3,6	21,1	16,4	38,8	13,7	40,1	129,5	113,3	65,5	60,9	69,2	26,9	0,0	0,0	0,0	1.799	
unit 2	Starts	10	13	16	26	16	27	39	34	20	23	27	20	5	8	14	1.166	7.571
	Oh	6,5	18,9	14,7	36,3	21,0	45,4	119,5	107,3	69,1	52,3	75,0	34,3	4,4	19,9	12,4	1.741	
unit 3	Starts	7	21	22	22	18	19	41	34	20	27	21	11	21	9	13	1.191	7.827
	Oh	6,1	23,6	14,3	38,5	20,4	18,1	116,1	112,2	66,3	68,0	63,3	47,5	49,5	23,5	16,2	1.872	

1) EOH = 5 x Start + Oh

Gasturbine Frame 5 SCGT Unit 1-3 current status

Current status unit 1-3

- Unit 1 was available and in full operation up to and including December 31, 2022.
- Unit 2 was in operation until 31.03.2026.
- Unit 3 is still in service (expected final shut-down: Q3/2026).
- Decommissioning already starts.
- Unit 1 and Unit 2 could be dismantled immediately (declarations for all subcomponents required under licensing law).

