

## GT13E2

One of the first and leading non-OEM manufacturer of GT13 E2 hot section parts, PARTO Company developed several parts of this turbine through sophisticated re-engineering and reverse engineering processes.

Today, components delivered to the customers are running smoothly in the gas turbine, showing the same reliability and stability working level as of the OEM.

The GT13E2 (VA/96) is a medium-sized gas turbine of the 170 MW class. It has a 21-stage compressor with a variable inlet guide vane, an annular combustion system with close-loop combustor cooling and a 5-stage turbine.

Type	Material	Weight	Coat	Cooling	No. In row
First Stage Blade	IN738 LC	6.1 Kg.	Yes	Yes	63
Second Stage Blade	IN738 LC	9.8 Kg.	Yes	Yes	63
Third Stage Blade	IN 738 LC	12.4 Kg.	Yes	Yes	63
Fourth Stage Blade	IN 792	14.6 Kg.	Yes	No	63
Fifth Stage Blade	NIM 101	24.1 Kg.	No	No	63
First Stage Vane	IN738LC	8.8 Kg.	Yes	Yes	40
Second Stage Vane	IN 939	8.4Kg.	Yes	Yes	60
Third Stage Vane	IN 738 LC	10.8 Kg.	Yes	No	60
Fourth Stage Vane	X45	69 Kg.	Yes	No	20
Fifth Stage Vane	X45	29.17Kg.	No	No	50



GT 13 E2 - Blade Stage 1



GT 13 E2 - Blade Stage 2



GT 13 E2 - Blade Stage 3



GT 13 E2 - Vane Stage 1



GT 13 E2 - Vane Stage 4



GT 13 E2 - Vane Stage 5

## GT13E2

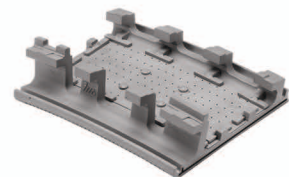
Type	Material	Weight	Coat	Cooling	No. In row
<b>Stator Heat Shield Row 1</b>	IN738	1.95 Kg.	No	Yes	36
<b>Stator Heat Shield Row 3</b>	Hastelloy X	19.5 Kg.	No	No	20
<b>Stator Heat Shield Row 4</b>	Hastelloy X	27.1 Kg.	No	No	20
<b>Stator Heat Shield Row 5</b>	Hastelloy X	11.95 Kg.	No	No	40
<b>Inside Segment 1</b>	Hastelloy X	2.8 Kg.	No	Yes	36
<b>Inside Segment 2</b>	Hastelloy X	2.8 Kg.	No	Yes	36
<b>Inside Segment 3</b>	Hastelloy X	2.8 Kg.	No	Yes	36
<b>Outer Segment 1</b>	Hastelloy X	4.2Kg.	No	Yes	36
<b>Outer Segment 2</b>	Hastelloy X	4.2 Kg.	No	Yes	36
<b>Outer Segment 3</b>	Hastelloy X	4.2 Kg.	No	Yes	36
<b>Front Segment</b>	Hastelloy X	6.7 Kg.	Yes	Yes	36
<b>Generator Fan Blade (DE &amp; NDE)</b>	Al6082	2 Kg.	No	No	46
<b>EV Burner</b>	Hastelloy X	28.9 Kg.	Yes	Yes	72
<b>Rotor Heat Shield 1</b>	IN738	3kg.	No	Yes	63
<b>Rotor Heat Shield 2</b>	IN738	3.2 Kg.	No	Yes	63
<b>Rotor Heat Shield 3</b>	IN738	3.8 Kg.	No	Yes	63
<b>Rotor Heat Shield 4</b>	IN738	3.8 Kg.	No	Yes	63
<b>Lance</b>	Stainless Steel	8kg.	No	No	72



GT 13 E2 - Stator Heat Shield Row 1



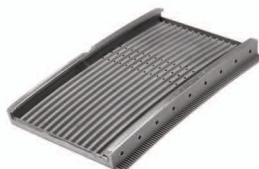
GT 13 E2 - Stator Heat Shield Row 3



GT 13 E2 - Stator Heat Shield Row 5



GT 13 E2 - Front Segment



GT 13 E2 - Outer Segment 3



GT 13 E2 - Ev Burner