



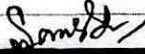
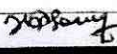
Bharat Heavy Electricals Ltd
Boiler Auxiliaries Plant
Ranipet - 632 406

EDC / AIR PREHEATERS
TECHNICAL SPECIFICATION
Effective Date: 15.09.2018

Specification No : RAH - 543

Rev. No : 00

Page No : 01 of 02

01.	Item	PINION – 50 TEETH (STRAIGHT BORE)			
02.	Application	Used to drive the Rotor of Regenerative Air Preheaters.			
03.	No. of teeth	50			
04.	Diametral pitch	1.000"			
05.	Circular pitch	3.1416"			
06.	Total tooth depth	2.406"			
07.	Chordal height (hk)	29.21 mm			
08.	Chordal width (sk)	-0.282 -0.376 39.75 mm.			
09.	Width across 5 teeth	-0.282 -0.376 357.71 mm.			
10.	Quality & tolerance	DIN - 3967 - 9C			
11.	Mating gear	Pin Rack Pin dia 1.5"			
12.	Dimensions	Shall be as per drawing in page 02 of 02			
13.	Material	a. Single piece type	Forged steel as per AISI 4150		
			Hub : Forged steel as per AISI 1020		
		b. Weld web type	Web : Forged steel as per AISI 1020		
			Rim : Forged steel as per AISI 4140		
14.	Heat treatment	Teeth shall be flame hardened / induction hardened to 550 to 600 BHN. Hub not to be hardened.			
15.	GENERAL				
	a) Only latest revision shall be referred for all the Standards specified.				
	b) Manufacture of Pinion shall be as per NTPC / BHEL approved Quality Plan SQP : APH :112.				
	a) The pinion shall be packed properly in wooden box to avoid damage during transit.				
16.	INSPECTION				
	a) Inspection by BHEL.				
	b) Certificates as per SQP shall be submitted.				
00	15.09.18				FRESH ISSUE
Rev.No	Date	Prepared	Checked	Approved	Record of Revisions.

FRESH ISSUE



Bharat Heavy Electricals Ltd
Boiler Auxiliaries Plant
Ranipet - 632 406

EDC / AIR PREHEATERS
TECHNICAL SPECIFICATION
Effective Date: 09.01.2017

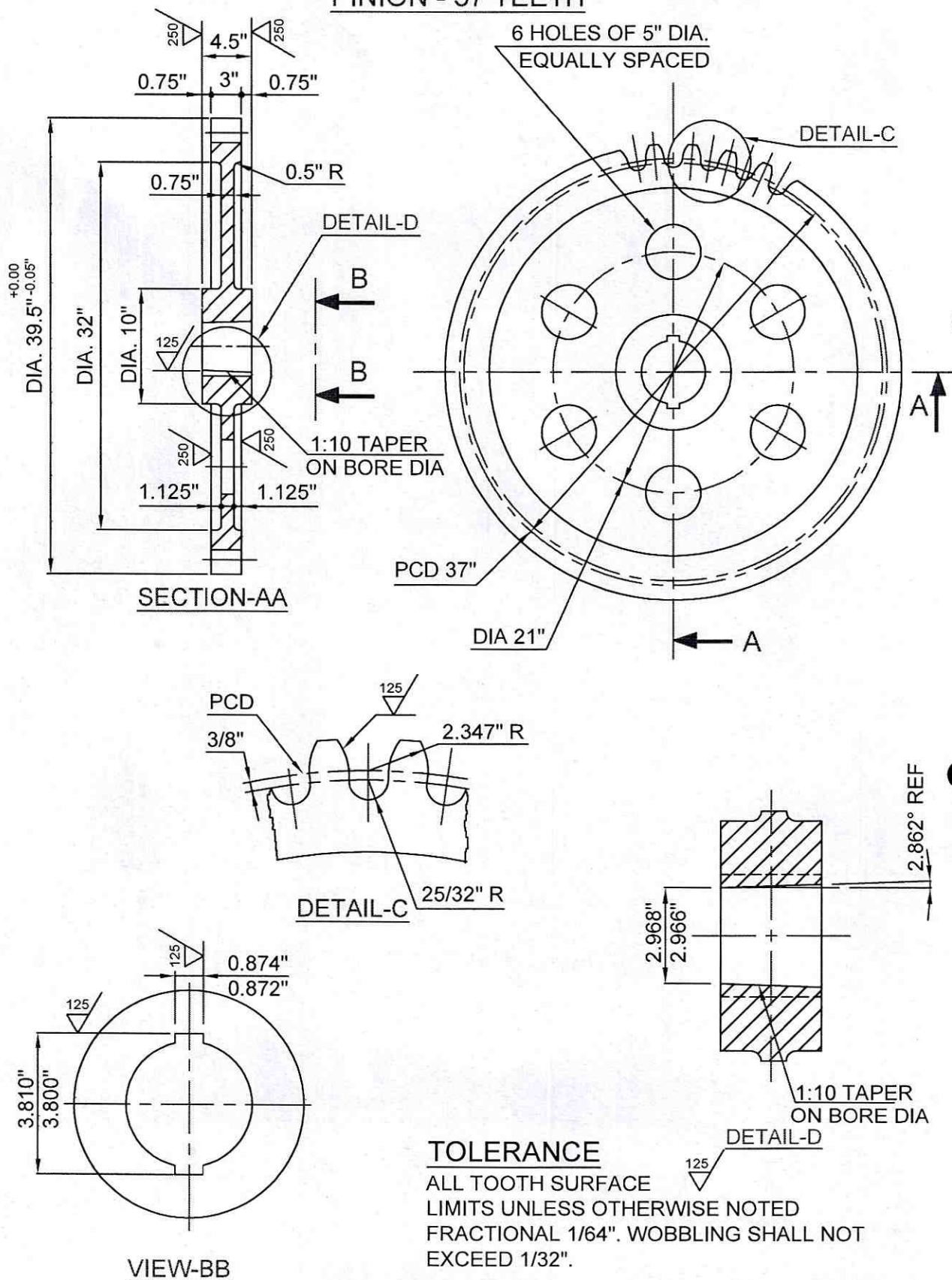
Specification No : RAH-509

Rev. No : 00

Page No : 01 of 02

01.	Item	PINION – 37 TEETH			
02.	Material code	R-item			
03.	Application	Used to drive the Rotor of Regenerative Air Preheaters.			
04.	No. of teeth	37			
05.	Diametral pitch	1.000"			
06.	Circular pitch	3.1416"			
07.	Total tooth depth	2.406"			
08.	Chordal height (hk)	29.22 mm			
09.	Chordal width (sk)	-0.282 -0.376 39.23 mm.			
10.	Width across 5 teeth	-0.282 -0.376 356.04 mm.			
11.	Quality & tolerance	DIN - 3967 - 9C			
12.	Mating gear	Pin Rack Pin dia 1.5"			
13.	Dimensions	Shall be as per drawing in page 02 of 02			
14.	Material	a. Single piece type	Forged steel as per AISI 4150		
			Hub : Forged steel as per AISI 1020		
		b. Weld web type	Web : Forged steel as per AISI 1020		
			Rim : Forged steel as per AISI 4140		
15.	Heat treatment	Teeth shall be flame hardened / induction hardened to 550 to 600 BHN. Hub not to be hardened.			
16.	GENERAL				
	a) Only latest revision shall be referred for all the Standards specified.				
	b) Manufacture of Pinion shall be as per NTPC / BHEL approved Quality Plan SQP : APH :112.				
	c) The pinion shall be packed properly in wooden box to avoid damage during transit.				
17.	INSPECTION				
	a) Inspection by BHEL.				
	b) Certificates as per SQP shall be submitted.				
00	09.01.17				FRESH ISSUE
Rev.No.	Date	Prepared	Checked	Approved	Record of Revisions.

PINION - 37 TEETH



ALL DIMENSIONS ARE IN INCHES.