

PROJECT: LSB PAUT PROCEDURE DUMMY BLADES PROCUREMENT AT KUSILE POWER STATION

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
1	ITEM 1 MANUFACTURING OF DUMMY BLADES				
1.1	LH Dummy Blade, including complete foot geometry + 200mm aerofoil length. Machined all over. Material attenuation <0,04dB/mm. Dimensions within +/- 0,1mm from 3D scan datasJDDIed. Material: 1.4922/ 1.4313	Each	7		
1.2	RH Dummy Blade, including complete foot geometry + 200mm aerofoil length. Machined all over. Material attenuation <0,04dB/mm. Dimensions within +/- 0,1mm from 3D scan datasJDDIed. Material: 1.4922/ 1.4313	Each	7		
	Subtotal Item 1 (Manufacturing of Dummy Blades) carried to Final Summary				
2	ITEM 2 EDM AND NOTCHES				
	Electrical Discharge Machining of Notches in Dummy Blades - Location of EDM Notches Kusile-Medupi LP L-0 Dummy Blades - CAD of Blade Root				
	Concept, Basic, and Detail Design of Notch Defects in Sample Blades - Identification and specification of notch locations and dimensions - Documentation of defect design for approval				
	Machining Preparations a) Electrode Preparations - Material selection and fabrication of electrodes - Electrode inspection and verification against design - Shaping and finishing electrodes to required geometry b) Tool Path Preparations - CNC programming of electrode movement - Simulation and validation of tool paths - Verification of machining parameters (spark gap, feed rates, etc.)				
2.1		Each	20		
	EDM Machining Execution - Setup of sample blades in EDM machine - Mounting and alignment of electrodes - Machining of notches according to design specifications - Monitoring and adjustment of EDM parameters during machining				
	Inspection and Quality Control - Dimensional inspection of machined notches where possible - Final reporting of completed work				
	Deliverables - Electrical Discharge Machining of Notches in Dummy Blades				
	Subtotal Item 2 (EDM and Notches) to Final Summary				
3	ITEM 3 DELIVERY AND DOCUMENTATION				
3.1	Delivery Transportation	Each	1		
	Documentation: Inspection certificate DIN EN 10204/3.1 - Covering chemical analysis and mechanical testing, ultrasonic examination of base material - Magnetic particle surface crack testing after finish- machining - Record of actual dimensions				
3.2	Packed in sets, marked with: - Material number - Delivery number - Weight - Dimensions - Material	Each	14		
	Quality test and Balancing --Each Blade including Data pack.				
	Subtotal Item 3 (Delivery and Documentation) to Final Summary				
	FINAL SUMMARY				
ITEM 1	MANUFACTURING OF DUMMY BLADES				
ITEM 2	EDM AND NOTCHES				
ITEM 3	DELIVERY AND DOCUMENTATION				
	Final Summary Total (Excl. VAT)				