

Sample ReportMeasurement Report : Root & Shroud

DATE: 25.07.2017

TIME 11:31:13

Blade Drg. No : 0-10307-41004 (LP1R) 500 MW

Serial No. of Blade: 5 (entered by operator in some R parameter on the machine during machining)

Machine: CNC 5 Axes Machine (Model name/Layout number of machine)

Box Nr : 314263

*****|*****
 * Note: '0' in Error denotes "Measured Values are within tolerance" *

Description	Nom. Size	Measured Value	Dev.from Nom.Size	Tol. upper (+)	Tol. lower (-)	Error (Out-Tol)
ROOTWIDTH:	40	40.0345	0.0345	0	-0.05	0.0345
ROOTNECKWIDTH:	24.6	24.5548	-0.0451	0	-0.13	0
SHROUDWIDTH:	39	39.0755	0.0755	0.1	-0.1	0
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ROOT PITCH (Rmin):	21.98	22.1065	0.1265	0.04	-0.02	0.0865
SHR TAPER ANGLE SS:	1.475	1.4943	0.0193	0.05	-0.05	0
SHR PITCH (Rmax):	34.847	34.9773	0.1303	0.04	-0.02	0.0903

Note:

- The Nominal size means the nominal value as mentioned in the drawing/UEB file without application of any tolerance or any adjustment.
- The Tolerance values should be specified in Upper and Lower tolerance as mentioned in the drawing/UEB file and not in any other tolerance band after any adjustment.

Annexure-II

Sample Report

Measurement Report : Profile

DATE: 25.07.2017

TIME 11:31:13

Blade Drg. No : 0-10307-41004 (LP1R) 500 MW

Serial No. of Blade: 5 (entered by operator in some R parameter on the machine)

Height of profile section : Section No. 9/ 200mm from Hub Face)

Machine: CNC 5 Axes Machine (Model name/number of machine)

Box Nr : 314263

Description	Deviation from Nominal value
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POINT: 1	0.0688
POINT: 2	0.0692
POINT: 3	0.0756
POINT: 4	0.0757
POINT: 5	0.0731
POINT: -	
POINT: -	
POINT: -	
POINT: -	
POINT: -	
POINT: 55	0.0633
POINT: 56	0.0613
POINT: 57	0.063
POINT: 58	0.0652
POINT: 59	0.0663
POINT: 60	0.0637

Sample Project Master Page

Project identification :

Component Description :

Drawing Number :

Revision Number display :

Path for storage of NC Programs output : (Selection by 'Browsing')

Input Definition: (Selection: Data type, Drawing type)

Blade Type: (Selection: TX, Twisted)

Blade Definition: (Selection: LH Moving, RH Moving, LH Guide, RH Guide)

Shroud Definition: (Selection: Rhomboidal, Z Shaped, Stepped)

Hub Definition: (Selection: Hook, T-Slot, Double T-Slot)

Open Drawing

(Manual entry of Hub and shroud data from drawings guided by sketches given as per Hub and Shroud type defined above - **only in case of 'Input Definition' – 'drawing type' if defined above**)

UEB data File: (Selection by 'Browsing' **in case of Input Definition – 'Data type' if defined above**)

Data definition Joint blade (only for guide blade)

Parameter 1

Parameter 2

Parameter 3

Profile data File: (Selection by 'Browsing')

Profile type: (Selection : xyz, STRAK, xyz without trailing edge)

Raw data File: (Selection by 'Browsing')

Template: (Manual selection of Template with simultaneous opening of selected template page for customised definition of operations suitable for this particular project).

Postprocessor selection: (list of available PPs for Selection)
(Multiple selection of PPs should be possible)

Fixture Translation (for each selected PP):

Fixture Rotation (for each selected PP):

ProfileReference :

Hub Reference Section :

Optional Part:

ProfileApprox :

ProfileEdens :

ProfileNRearr :

ProfileNSec :

ProfileSizeup :

ProfileSourceSec :

Save

Cancel

Note :

- This is a sample Master project page and the vendor can modify or add new parameters as per their CAM software to fulfil the requirement of Automation system in totality as per point no. 2.22 of tender specifications.
- Provision and flexibility must be provided to create new operation templates as well as modify existing operation templates easily and it's method of storage at proper location.
- In case of further clarifications, the project master page can be finalized during technical discussion

Annexure-IV

Sample Report of Operation Summary

Component name: Moving Blade HM4R 500MW

Drawing Number: 1-10102-41004

Machine: CNC 5-AXIS MACHINING CENTRE (Model name/Layout number)

Machine Type :

Operation list

Sl. Nr	Operation Description	Tool Id	Tool offset (D) No.	Tool desc.	Feed [mm/min]	Speed [rpm]	Cutting time	Accum time
1	Roughing rhomboid LE	101	1	Face mill D50 Round insert r6 z5	2101	1401	00:00:54	00:00:54
2	Roughing rhomboid PS	101	1	Face mill D50 Round insert r6 z5	2101	1401	00:00:44	00:01:38
3	Roughing rhomboid TE	101	1	Face mill D50 Round insert r6 z5	2101	1401	00:00:51	00:02:29
4	Roughing rhomboid SS	101	1	Face mill D50 Round insert r6 z5	2101	1401	00:00:44	00:03:13
5	Roughing rooftop PS	101	1	Face mill D50 Round insert r6 z5	2101	1401	00:00:25	00:03:38
6	Roughing rooftop SS1	101	1	Face mill D50 Round insert r6 z5	2101	1401	00:00:26	00:04:04
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12	Finish Root LE	205	2	Finishing Face Mill cutter D80	384	915	00:00:20	00:05:20

				r0.4 z7				
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---	-----	---	---	-----	----	-----	---	----
67	Measuring taper tip ps upper	999	1	Renishaw probe r3	531	531	00:00:07	00:52:01
68	Measuring taper tip ss upper	999	1	Renishaw probe r3	531	531	00:00:08	00:52:09

Cycle Time:

Cutting time:	00:52:09
Tool change time:	00:05:20
Additional probing time:	00:05:30
Part change time:	00:04:00
Machine cleaning time:	00:01:10
Total workpiece cycle time:	01:08:09

Tools Used :

Tool desc.	Tool Id
Face mill D50 Round insert r6 z5	101
Finishing Face Mill cutter D80 r0.4 z7	205
Renishaw probe r3	999
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Indexable Ball nose cutter R8 z3	203
Solid carbide Ball Nose cutter Dia 10,z=4	107
Chamfering tool D10 z4 45deg.	109

'Z' SHAPED SHROUD DIMENSIONS TO BE
CHECKED FOR POST PROCESS GAUGING

