ภาคผนวก ข

ใบเทคนิคการทดสอบ (Technique Sheet)

TECHNIQUE SHEET OF LIQUID PENETRANT TESTING

CLIENT	Welding Evaluation and Learning Laboratory (WELLab)
ADDRESS	126 Pracha-utid Rd., Bangmod, Thungkru, Bangkok 10140
PROJECT NAME	Effect of Hard Surface Finish Processes on Abrasive Wear in Impeller Mixing Applications

NAME OF PRODUCT	Hardfacing
TEST PRODUCT	☑ Plate ☐ Pipe ☐ Other……
SURFACE CONDITION	☑ As-welded ☐ As-casted ☐ Other……
MATERIAL	☐ Steel ☐ Aluminium ☐ Other……Stellite 6……
DIMENSION OF TEST PRODUCT	25.4 x 152.4 x 10 mm
REF. CODE&STANDARD	ASME Section V
ACCEPTANCE CRITERIA	ASME Section IX
RECEIVED DATE	27 Oct 20012
EQUIPMENTS&FACILITIES	☑ PORTABLE ☐ STATIONARY

1. SURFACE PREPARATION

1.1 Cleaning method:	☑ Mechanical Cleaning: ……...Brushing……... ☑ Chemical Cleaning: ……...Solvent……...
1.2 Check temperature	☑ 10-52 ˚C ☐ Other……
1.3 Check viewing area	☑ Light Intensity (for White/Day light …..1000….. Lux, Ultra violet light …… µW/cm^2)

2. APPLY LIQUID PENETRANT

Type	☐ Fluorescent dye	☑ Visible dye (Colour dye)	☐ Dual mode penetrant	
Apply	☑ Spray	☐ Brush	☐ Dip	☐ Other……

BRAND	MODEL	SERIAL No./LOT No.	EXPRIED DATE
MAGNAFLUX	SKL-SP1	08274	11L20K

Temperature	☑ 10-52 ˚C ☐ Other……
Dwell time:	……..5 minutes……..……

3. REMOVING EXCESS PENETRANT

Type	☐ Water washable	☐ Post emulsifier …….	☑ Solvent

BRAND	MODEL	SERIAL No./LOT No.	EXPRIED DATE
MAGNAFLUX	SKC-S	056731	11K10K

3.1 Technique for removing excessive penetrant: ……. Solvent…….	☑ Manual wipe		
3.2 Surface preparation after excessive penetrant removed	☑ Clothes wiping	☐ Dry (temp ……)	☐ Other

4. APPLY DEVELOPER

Type	☐ Dry powder	☐ Aqueous wet	☑ Nonaqueous wet	
Apply	☑ Spray	☐ Brush	☐ Dip	☐ Other……

BRAND	MODEL	SERIAL No./LOT No.	EXPRIED DATE
MAGNAFLUX	SKD-S2	08106	11D22K

Developer time: ……..10 minutes……..……

5. INSPECTION, RECORD, INTERPRETATION AND EVALUATION (Reference code&standard) See detail in attached report

☑ Visible Light Intensity > 1000 Lux ☐ Ultra Violet Light > 1000 µW/cm^2

6. POST CLEANING

Cleaning method ☑ Solvent ☐ Other……

BRAND	MODEL	SERIAL No./LOT No.	EXPRIED DATE
MAGNAFLUX	SKC-S	056731	11K10K

TECHNIQUE SHEET OF RADIOGRAPHIC TESTING

CLIENT	Welding Evaluation and Learning Laboratory (WELLab)
ADDRESS	126 Pracha-utid Rd., Bangmod, Thungkru, Bangkok 10140
PROJECT NAME	Effect of Hard Surface Finish Processes on Abrasive Wear in Impeller Mixing Applications

DESCRIPTION OF PART	Brazing Process
MATERIAL TYPE/GRADE	Carbon Steel A36 & Stellite 6
THICKNESS	5 mm
IQI TYPE/DESIGN	ASTM 1A 6
SOURCE TO FILM DISTANCE	700 mm
EXPOSURE TIME	2 min
NUMBER OF RADIOGRAPHIC (EXPOSURE)	2 mA
X-RAY VOLTAGE	160 kV
ISOTOPE TYPE USED	☐ Ir-192 ☐ Co-60 ☐ Other……..……
FOCAL SPOT SIZE	☑ X-RAY 3 mm ☐ Isotope……..……
FILM MANUFACTURER	Kodak AA400
No. OF FILM IN EACH FILM HOLDER/CASSETTE	1

RADIOGRAPHIC TECHNIQUE	☑ Single wall	☐ Double wall
	☑ Single wall viewing	☐ Double wall viewing
MARKER PLACEMENT	☑ Source side	☐ Film side
IQI PLACEMENT	☑ Source side	☐ Film side
DEVELOPING PROCESSING	☑ Manual	☐ Auto
BACKSCATTER SYMBOL "B"	☐ Yes	☑ No
LEAD SCREEN THICKNESS	☐ Front 0.125 mm	☐ Back 0.125 mm

REF. CODE&STANDARD	ASME Section V
ACCEPTANCE CRITERIA	N/A
DENSITY	1.8 - 4