



**SUBMERGED ARC WELDING FLUX
PRODUCTION KNOW-HOW
FRAMEWORK**

WESPEC.NET

Table of Contents

Code of Document	Number of Papers	Title	N
DOC A	1	Flux Formula for Manufacturing of XXXXX	4
DOC B	1	Production Instruction for Manufacturing of XXXXX Based on Related Formula	6
DOC C	26	Specification of Raw Materials for Manufacturing of XXXX for Related Formula	8
DOC D	4	Guidance for the Production of XXXXX, Based on the Related Know-How	35
DOC E	5	Guidance to Quality Tests of XXXXXX Based on AWS X	40
DOC F	9	Guidance For the Correct Use of Technical Specification Documents	46
DOC G	2	Specification of XXXXX As a Final Product	56

DOC A

DOC A , 1 PAPER

Flux Formula for the Manufacturing of XXXXXX

Code of Powder	Name of the Powder	%
1	X	X
2	X	X
3	X	X
4	X	X
5	X	X
6	X	X
7	X	X
8	X	X
9	X	X
10	X	X
11	X	X
TOTAL		100

DOC B

DOC B , 1 PAPER

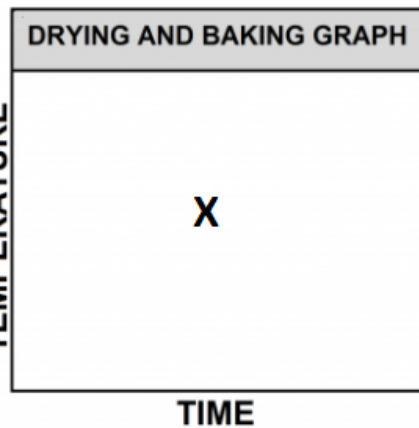
Production Instruction for Manufacturing of XXXX Based on Related Formula

CLASSIFICATION OF PRODUCT IN RELATED STANDARDS		
AWS	DIN	EN
X	X	X

BINDER	
TYPE OF BINDER	KGR
1	
2	
⋮	
⋮	
⋮	

TIME OF DRY MIX	TIME OF WET MIX
X	X

DRYING & BAKING	
DRYING IN FURNACE 1	
TIME	TEMPETURE
X	X
BAKING IN FURNACE 2	
TIME	TEMPETURE
X	X



X	X
X	X

DOC C

Bulk Density & Density:

	Min	Max	Typical
Bulk Density(g/cm3)	X	X	X
Density(g/cm3)	X	X	X

Other technical specifications	Min	Max	Typical
LOI	X	X	X
ASH	X	X	X
Humidity 120	X	X	X
Humidity 1000	X	X	X
GV 1000	X	X	X

Approved Suppliers:

Name	Contact info	Origin
X	X	X
X	X	X
X	X	X
X	X	X
X	X	X

Specification of the Raw Material for the Flux Formula of XXXX

Code of Powder	Name of Powder
2	X

Chemical Analysis:

Element or Component	Min	Max	Typical
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X

Grain Size Analysis:

Micron	Mesh	RCU%
X	X	X
X	X	X
X	X	X
X	X	X
X	X	X
X	X	X
X	X	X
X	X	X

Bulk Density & Density:

	Min	Max	Typical
Bulk Density(g/cm3)	X	X	X
Density(g/cm3)	X	X	X

Other technical specifications	Min	Max	Typical
LOI	X	X	X
ASH	X	X	X
Humidity 120	X	X	X
Humidity 1000	X	X	X
GV 1000	X	X	X

Approved Suppliers:

Name	Contact info	Origin
X	X	X
X	X	X
X	X	X
X	X	X
X	X	X

Specification of the Raw Material for the Flux Formula of XXXX

Code of Powder	Name of Powder
3	X

Chemical Analysis:

Element or Component	Min	Max	Typical
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X

Grain Size Analysis:

Micron	Mesh	RCU%
X	X	X
X	X	X
X	X	X
X	X	X
X	X	X
X	X	X
X	X	X
X	X	X

Bulk Density & Density:

	Min	Max	Typical
Bulk Density(g/cm3)	X	X	X
Density(g/cm3)	X	X	X

Other technical specifications	Min	Max	Typical
LOI	X	X	X
ASH	X	X	X
Humidity 120	X	X	X
Humidity 1000	X	X	X
GV 1000	X	X	X

Approved Suppliers:

Name	Contact info	Origin
X	X	X
X	X	X
X	X	X
X	X	X
X	X	X

Specification of the Raw Material for the Flux Formula of XXXX

Code of Powder	Name of Powder
4	X

Chemical Analysis:

Element or Component	Min	Max	Typical
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X

Grain Size Analysis:

Micron	Mesh	RCU%
X	X	X
X	X	X
X	X	X
X	X	X
X	X	X
X	X	X
X	X	X

Bulk Density & Density:

	Min	Max	Typical
Bulk Density(g/cm3)	X	X	X
Density(g/cm3)	X	X	X

Other technical specifications	Min	Max	Typical
LOI	X	X	X
ASH	X	X	X
Humidity 120	X	X	X
Humidity 1000	X	X	X
GV 1000	X	X	X

Approved Suppliers:

Name	Contact info	Origin
X	X	X
X	X	X
X	X	X
X	X	X
X	X	X

Specification of the Raw Material for the Flux Formula of XXXX

Code of Powder	Name of Powder
5	X

Chemical Analysis:

Element or Component	Min	Max	Typical
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X

Grain Size Analysis:

Micron	Mesh	RCU%
X	X	X
X	X	X
X	X	X
X	X	X
X	X	X
X	X	X
X	X	X
X	X	X

Bulk Density & Density:

	Min	Max	Typical
Bulk Density(g/cm3)	X	X	X
Density(g/cm3)	X	X	X

Other technical specifications	Min	Max	Typical
LOI	X	X	X
ASH	X	X	X
Humidity 120	X	X	X
Humidity 1000	X	X	X
GV 1000	X	X	X

Approved Suppliers:

Name	Contact info	Origin
X	X	X
X	X	X
X	X	X
X	X	X
X	X	X

Bulk Density & Density:

	Min	Max	Typical
Bulk Density(g/cm3)	X	X	X
Density(g/cm3)	X	X	X

Other technical specifications	Min	Max	Typical
LOI	X	X	X
ASH	X	X	X
Humidity 120	X	X	X
Humidity 1000	X	X	X
GV 1000	X	X	X

Approved Suppliers:

Name	Contact info	Origin
X	X	X
X	X	X
X	X	X
X	X	X
X	X	X

Specification of the Raw Material for the Flux Formula of XXXX

Code of Powder	Name of Powder
7	X

Chemical Analysis:

Element or Component	Min	Max	Typical
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X

Grain Size Analysis:

Micron	Mesh	RCU%
X	X	X
X	X	X
X	X	X
X	X	X
X	X	X
X	X	X
X	X	X
X	X	X

Bulk Density & Density:

	Min	Max	Typical
Bulk Density(g/cm3)	X	X	X
Density(g/cm3)	X	X	X

Other technical specifications	Min	Max	Typical
LOI	X	X	X
ASH	X	X	X
Humidity 120	X	X	X
Humidity 1000	X	X	X
GV 1000	X	X	X

Approved Suppliers:

Name	Contact info	Origin
X	X	X
X	X	X
X	X	X
X	X	X
X	X	X

Specification of the Raw Material for the Flux Formula of XXXX

Code of Powder	Name of Powder
8	X

Chemical Analysis:

Element or Component	Min	Max	Typical
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X

Grain Size Analysis:

Micron	Mesh	RCU%
X	X	X
X	X	X
X	X	X
X	X	X
X	X	X
X	X	X
X	X	X

Bulk Density & Density:

	Min	Max	Typical
Bulk Density(g/cm3)	X	X	X
Density(g/cm3)	X	X	X

Other technical specifications	Min	Max	Typical
LOI	X	X	X
ASH	X	X	X
Humidity 120	X	X	X
Humidity 1000	X	X	X
GV 1000	X	X	X

Approved Suppliers:

Name	Contact info	Origin
X	X	X
X	X	X
X	X	X
X	X	X
X	X	X

Specification of the Raw Material for the Flux Formula of EXXXX

Code of Powder	Name of Powder
9	X

Chemical Analysis:

Element or Component	Min	Max	Typical
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X

Grain Size Analysis:

Micron	Mesh	RCU%
X	X	X
X	X	X
X	X	X
X	X	X
X	X	X
X	X	X
X	X	X

Bulk Density & Density:

	Min	Max	Typical
Bulk Density(g/cm3)	X	X	X
Density(g/cm3)	X	X	X

Other technical specifications	Min	Max	Typical
LOI	X	X	X
ASH	X	X	X
Humidity 120	X	X	X
Humidity 1000	X	X	X
GV 1000	X	X	X

Approved Suppliers:

Name	Contact info	Origin
X	X	X
X	X	X
X	X	X
X	X	X
X	X	X

Specification of the Raw Material for the Flux Formula of XXXX

Code of Powder	Name of Powder
10	X

Chemical Analysis:

Element or Component	Min	Max	Typical
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X

Grain Size Analysis:

Micron	Mesh	RCU%
X	X	X
X	X	X
X	X	X
X	X	X
X	X	X
X	X	X
X	X	X

Bulk Density & Density:

	Min	Max	Typical
Bulk Density(g/cm3)	X	X	X
Density(g/cm3)	X	X	X

Other technical specifications	Min	Max	Typical
LOI	X	X	X
ASH	X	X	X
Humidity 120	X	X	X
Humidity 1000	X	X	X
GV 1000	X	X	X

Approved Suppliers:

Name	Contact info	Origin
X	X	X
X	X	X
X	X	X
X	X	X
X	X	X

Specification of the Raw Material for the Flux Formula of XXXX

Code of Powder	Name of Powder
11	X

Chemical Analysis:

Element or Component	Min	Max	Typical
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X

Grain Size Analysis:

Micron	Mesh	RCU%
X	X	X
X	X	X
X	X	X
X	X	X
X	X	X
X	X	X
X	X	X

Bulk Density & Density:

	Min	Max	Typical
Bulk Density(g/cm3)	X	X	X
Density(g/cm3)	X	X	X

Other technical specifications	Min	Max	Typical
LOI	X	X	X
ASH	X	X	X
Humidity 120	X	X	X
Humidity 1000	X	X	X
GV 1000	X	X	X

Approved Suppliers:

Name	Contact info	Origin
X	X	X
X	X	X
X	X	X
X	X	X
X	X	X

Specification of the Raw Material for the Flux Formula of XXXX

Code of Binder	Name of Binder
1	X

Chemical Analysis:

Element or Component	Min	Max	Typical
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X

Liquid Specification:

	Min	Max
Density g/cm ³ at x c	X	X
Viscosity g/cm ³ at x c	X	X
Molecular Ratio	X	X
x	X	X
x	X	X
x	X	X
x	X	X

Approved Suppliers:

Name	Contact info	Origin
X	X	X
X	X	X
X	X	X
X	X	X
X	X	X

Approved Suppliers:

Name	Contact info	Origin
X	X	X
X	X	X
X	X	X
X	X	X
X	X	X

DOC D

DOC D, 4 PAPER

Guidance For the Production of XXXXXXXX Based on the Related Know-How









DOC E

DOC E,5 PAPER

**Guidance to Quality Tests of XXXX Based on
American Welding Society Standard (AWS
XXXX)**











DOC F

DOC F,9 PAPER

Guidance For the Correct Use of Technical Specification Documents



















DOC G

DOC G,9 PAPER

FINAL PRODUCT SPECIFICATION

CHEMICAL COMPOSITION OF WELD METAL WITH ... WIRE (BASED ON ... STANDARD)

ELEMENT	C	Mn	Si	S	P	Cr	Ni	Mo	V	N _{ppm}
max										
min										
Typical										

Hydrogen less than...ml/100gr deposited metal Type Of Current: AC/DCEP/DCEN

FLUX ANALYSIS (xray fluorescence)

Ca _{total}	MnO	MgO	Na2O+K2O	SiO2	TiO2	Al2O3	Fe2O3	P2O5	P

TYPE OF SLAG: basic rutile glassy porous self releasing easy remove

IMPORTANT ITEMS

Boniszewski Basicity	Bulk Weight (kgr/dm ³)	Grain size Range	Moisture karl fischer

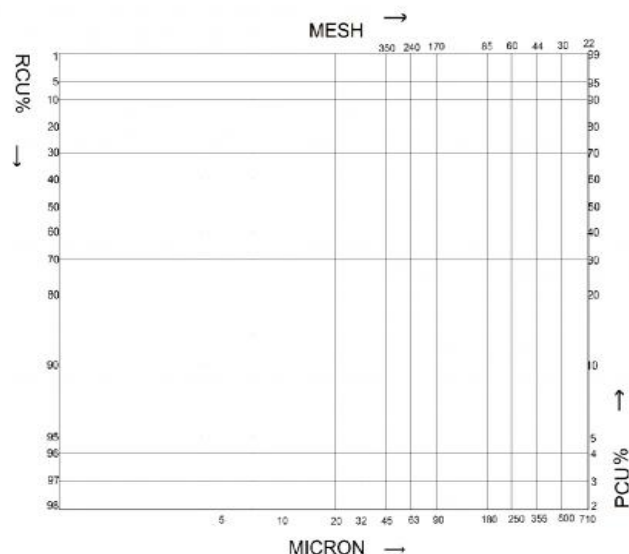
Mechanical Properties Of Weld

UTS (mpa)	
YIELD (mpa)	
EL%	
IMPACT TEST <small>joule</small>	

NAME OF FLUX IN RELATED STANDARDS

DIN	
EN	
AWS	

SCREEN ANALYSIS OF AGGLOMERATED FLUX



END