



Jiangyin Unique Flange Manufacturing Co.,Ltd.

Mill Certificates

EN 10204/3.1



Certified in accordance to Pressure Equipment Directive 2014/68/EU, Annex I, Paragraph 4.3 und AD 2000-W0/TRD 100 by TÜV Industries Service GmbH (Notified Body Identification No. 0035)

Customer:	STAPPERT Ceska repulika spol. s.r.o.	Certificate No. : UF180330-5
Product name:	Hot Forged Flange	Order No.: OVO-4596/2017
Specification:	PED 2014/68/EU, AD 2000-W2/W9/W10/TRD100	Order Dated: Dec. 14-2017
Material:	1.4301/07	According to: EN 10222-5:2017
Melting process:	Electric furnace	
Heat treatment:	Solution annealing+ quenching in water: 1060°C/2.0hrs	
Marking:		
Standard, Nominal Size, Nominal Pressure, Material, Heat No.		
Mark of Manufacturer:		
Stamp of Work inspector:		

Content of delivery

Item-no	Q'ty	Size		Heat No.	Specimen No.
1	50	DIN EN1092-1 05A PN10/16	DN100 B=10	180117AS11	UH33195
2	15	DIN EN1092-1 05A PN10/16	DN125 B=12	180117AS11	UH33195
10	60	DIN EN1092-1 05A PN10/16	DN80 B=10	180117AS11	UH33195
11	250	DIN EN1092-1 01A PN10/16	DN100/104.0 B=10	180117AS11	UH33195
12	50	DIN EN1092-1 01A PN10/16	DN100/108.0 B=10	180117AS11	UH33195
13	250	DIN EN1092-1 01A PN10/16	DN100/114.3 B=10	180117AS11	UH33195
48	150	DIN EN1092-1 02A PN10/16	DN100/104.0 B=10	180117AS11	UH33195
49	40	DIN EN1092-1 02A PN10/16	DN100/108.0 B=10	180117AS11	UH33195
52	12	DIN EN1092-1 02A PN10/16	DN125/139.7 B=12	180117AS11	UH33195

A)chemical analysis

Heat No.	C	Si	Mn	P	S	Cr	Ni	Mo	Cu	Ti	Nb	N
Requirements	%	%	%	%	%	%	%	%	%	%	%	%
EN	min.											
	max.											
180117AS11	0.030	1.00	2.00	0.045	0.015	17.50	8.00	---	---	---	---	0.10
	0.021	0.38	1.34	0.035	0.001	18.30	8.04					0.078

B)Mechanical test

Specimen No.	Dim. Of specimen		Sampling of specimen			Test temp	Yield strength	Tensile Strength	Elongation	Necking	Hardness	Energy of impact (ISO V-specimen) Joule			
	Thickness	Width, ϕ	Location	Direction	Position							1	2	3	$\Sigma/3$
	mm	mm				°C	Rp Mpa/ N/mm ²	Rm Mpa/ N/mm ²	A ₅ %	Z %	HB				
EN	Requirements			Tr		RT	0.2/1.0 200/230	500~700	≥ 35	/	/	≥ 60	≥ 60	≥ 60	≥ 60
UH33195		10.0		Tr		RT	240/260	565	51	62	149	272	283	295	283
UH33195						-196°C						144	151	162	153

C)Dimensional check and NDT

Testing	Details	Results
Visual inspection	100%	OK
Dimensional check	100%	OK
PMI(Positive Material Identification) test	100% with X-ray fluorescence analyzer	OK

D)Other Test:

Intergranular corrosion test	EN ISO 3651-2	OK
Material requirements	NACE MR 0175-15 / MR 0103-15 / ISO 15156-15	OK

Place: Jiangyin

Date: 2018-03-30

Work inspector

