

Certificate

Quality-Assurance System for Manufacturer of Materials

acc. to Directive 97/23/EC

Certificate no.: 01 202 IND/Q-11-0025

Name and address of the
manufacturer:

**Shalco Industries Pvt Ltd.
B-11 Mahad MIDC, Mahad
Maharashtra 4021301, India**

Herewith we certify that the material manufacturer has established and applies a Quality Management System. The system was audited according to the European Directive 97/23/EC, Annex I, Par. 4.3, with regard to the materials as listed in the scope of approval.

Tested acc. to Directive
97/23/EC:

**QM System acc. to EN 764-5, article 4.2 and
AD 2000-Merkblatt W0**

Audit report no.:

IND/Q-11-0025

Range of materials:

Manufacturing and supply of Seamless and Welded Pipes & Tubes in Stainless Steel & Nickel Alloys, see annex to certificate

Manufacturing plant:

**Shalco Industries Pvt Ltd.
B-11 Mahad MIDC, Mahad
Maharashtra 4021301, India**

Valid until:

August 21, 2014

Cologne, August 22, 2011

Wichert
Dr.-Ing. W. Wichert



TÜV Rheinland-Certification Body for
Pressure Equipment
TÜV Rheinland Industrie Service GmbH
Notified Body, ID-No. 0035
Am Grauen Stein, D-51105 Köln

E-106b-Rev7

www.tuv.com

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**Annex to Certificate No.: 01 202 IND/Q-11-0025
Details of the Validity of the Approval as Manufacturer of Materials in accordance to DGR 97/23/EC and AD2000-W0/TRD 100 respectively**

Manufacturer		Work				Nationality	Date	Page No..	TÜV-Name /Stamp
Company Name: Shalco Industries Pvt Ltd								1	TÜV Rheinland Industrie Service
Location: B 11, MIDC, Mahad							Rev.:	4	GmbH
Cur-	Materials-term Materials-No.	Material Specification	Delivery Cond. *	Article Type of Product	Dimensions Thickness mm		Weight max	Technical Specifications Requirements Technical Regulations	Remarks
					mm	Ø mm	1=t / 2=kg		
					fro m	fro m	↓	Re sul t	
1	2	3	4	5	6a	7a	8a	9	10
					6b	7b	8b		
<p>The use of the materials according to DGR 97/23/EC is bound to the publication of Harmonized European Standards or to the qualification by a European material approval or to the particular material appraisal. With that the manufacturing reliability for equivalent material grades according to other standards (e.g. BS, AFNOR, ASME) is proved. The requirements and limits of the applicable code respectively the PED must be observed for the use of material grades listed in column 2 to 4.</p>									
1	TP 304/304L/304H/304N/304LN, TP316/316L/316H/316N/316LN/3 16Ti, TP 317/317L, TP 321, TP 347/347H, TP310, 904L (UNS N08904)	ASTM A 269 (S.S. Tubes)	A	Welded Tubes	0.6	15	114		
2	TP 304/304L/304H/304N/304LN, TP316/316L/316H/316N/316LN/3 16Ti, TP 317/317L, TP 321, TP 347/347H, TP310	ASTM A 249 (S.S. Tubes)	A	Welded Tubes	0.6	15	114		
3	TP 304/304L/304H/304N/304LN, TP316/316L/316H/316N/316LN/3 16Ti, TP 317/317L, TP 321, TP 347/347H, TP310	ASTM A 312 (S.S.Pipes)	A	Welded Pipes	0.6	15	114		
Remarks	<p>* AT = solution treated N = Normalized or normalizing formed SR = stress relieved M = thermo mechanical treated AR = not treated</p> <p>QT = quenched and tempered NT = normalized and tempered S = soft annealed</p> <p>a = material b = delivery condition c = article d = dimensions in tech. regulations e = weight f = No. of tech. regulation</p>								

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Manufacturer		Work				Nationality	Date	Page No..	TÜV-Name /Stamp
Company Name: Shalco Industries Pvt Ltd								2	TÜV Rheinland Industrie Service
Location: B 11, MIDC, Mahad							Rev.:	4	GmbH
Cur-	Materials-term Materials-No.	Material Specification	Delivery Cond. *	Article Type of Product	Dimensions		Weight max 1=t / 2=kg ↓	Technical Specifications Requirements Technical Regulations	Remarks
					Thickness mm fro m to	Ø mm fro m to			
1	2	3	4	5	6a	7a	8a	9	10
<p>The use of the materials according to DGR 97/23/EC is bound to the publication of Harmonized European Standards or to the qualification by a European material approval or to the particular material appraisal. With that the manufacturing reliability for equivalent material grades according to other standards (e.g. BS, AFNOR, ASME) is proved. The requirements and limits of the applicable code respectively the PED must be observed for the use of material grades listed in column 2 to 4.</p>									
4	TP 304/304L/304H/304N/304LN, TP316/316L/316H/316N/316LN/3 16Ti, TP 317/317L, TP 321, TP	ASTM A 688 (S.S.U Tubes)	A	Welded Feed Water Heater Tubes					
5	TP 304/304L/304H/304N/304LN, TP316/316L/316H/316N/316LN/3 16Ti, TP 317/317L, TP 321, TP 347/347H, TP310, 904L (UNS N08904)	ASTM A 269 (S.S.Tubes)	A	Seamless Tubes	0.4	6.0	114. 0		
6	TP 304/304L/304H/304N/304LN, TP316/316L/316H/316N/316LN/3 16Ti, TP 317/317L, TP 321, TP 347/347H, TP310	ASTM A 312 (S.S.Pipes)	A	Seamless Tubes	1.2	10	325		
Remarks		* AT = solution treated N = Normalized or normalizing formed SR = stress relieved M = thermo mechanical treated AR = not treated		QT = quenched and tempered NT = normalized and tempered S = soft annealed		a = material b = delivery condition c = article d = dimensions in tech. regulations e = weight f = No. of tech. regulation			

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Company Name: Shalco Industries Pvt Ltd								3	TÜV Rheinland		
Location: B 11, MIDC, Mahad							Rev.:	4	Industrie Service GmbH		
Cur-	Materials-term Materials-No.	Material Specification	Delivery Cond. *	Article Type of Product	Dimensions		Weight max 1=t / 2=kg ↓ Re sul t	Technical Specifications Requirements Technical Regulations	Remarks		
					Thickness mm	Ø mm					
					fro m	Up to	6a	7a	7b	8a	8b
1	2	3	4	5	6a	7a	7b	8a	8b	9	10
The use of the materials according to DGR 97/23/EC is bound to the publication of Harmonized European Standards or to the qualification by a European material approval or to the particular material appraisal. With that the manufacturing reliability for equivalent material grades according to other standards (e.g. BS, AFNOR, ASME) is proved. The requirements and limits of the applicable code respectively the PED must be observed for the use of material grades listed in column 2 to 4.											
7	TP 304/304L/304H/304N/304LN, TP316/316L/316H/316N/316LN/316Ti, TP 317/317L, TP 321, TP 347/347H, TP310	ASTM A 358 (S.S.Pipes)	A	Welded Pipes	2.5	220	900				
8	TP 304/304L/304H/304N/304LN, TP316/316L/316H/316N/316LN/316Ti, TP 317/317L, TP 321, TP 347/347H, TP310	ASTM A 270 (S.S. Tubes)	A	Welded Tubes	0.4	10	155				
9	S31500, S31803, S32205, S32304, S32750	ASTM A 789 (S.S. Tubes)	A	Seamless Tubes (Duplex & Super Duplex)	1.2	15	114.3				
10	S31500, S31803, S32205, S32304, S32750	ASTM A 789 (S.S. Tubes)	A	Welded Tubes (Duplex & Super Duplex)	1.2	15	114.3				
Remarks	* AT = solution treated N = Normalized or normalizing formed SR = stress relieved M = thermo mechanical treated AR = not treated QT = quenched and tempered NT = normalized and tempered S = soft annealed a = material b = delivery condition c = article d = dimensions in tech. regulations e = weight f = No. of tech. regulation										

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Company Name: Shalco Industries Pvt Ltd						4	TÜV Rheinland Industrie Service	
Location: B 11, MIDC, Mahad					Rev.:	4	GmbH	
Cur-	Materials-term Materials-No.	Material Specification	Delivery Cond. *	Article Type of Product	Dimensions Thickness mm	Weight max 1=t / 2=kg ↓ Re sul t	Technical Specifications Requirements Technical Regulations	Remarks
1	2	3	4	5	6a 6b 7a 7b 8a 8b	9	10	
The use of the materials according to DGR 97/23/EC is bound to the publication of Harmonized European Standards or to the qualification by a European material approval or to the particular material appraisal. With that the manufacturing reliability for equivalent material grades according to other standards (e.g. BS, AFNOR, ASME) is proved. The requirements and limits of the applicable code respectively the PED must be observed for the use of material grades listed in column 2 to 4.								
11	S31500, S31803, S32205, S32304, S32750	ASTM A 790 (S.S.Pipes)	A	Seamless Pipe (Duplex & Super Duplex)	1.5 10 17 220			
12	S31500, S31803, S32205, S32304, S32750	ASTM A 790 (S.S.Pipes)	A	Welded Pipe (Duplex & Super Duplex)	0.7 10 15 220			
13	TP 405 , TP410, TP430, TP439/439L	ASTM A 268 (S.S. Tube)	A	Seamless Ferritic and Martensitic Tubes	0.7 3.5 15 114. 3			
Remarks		* AT = solution treated N = Normalized or normalizing formed SR = stress relieved M = thermo mechanical treated AR = not treated			QT = quenched and tempered NT = normalized and tempered S = soft annealed			a = material b = delivery condition c = article d = dimensions in tech. regulations e = weight f = No. of tech. regulation